HISTORY OF MEALS FOR MILLIONS, SOY,

AND FREEDOM FROM HUNGER (1946-2011):

EXTENSIVELY ANNOTATED

BIBLIOGRAPHY AND SOURCEBOOK

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EXTENSIVELY ANNOTATED

BIBLIOGRAPHY AND SOURCEBOOK

Compiled

by

William Shurtleff & Akiko Aoyagi



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DEDICATION AND ACKNOWLEDGMENTS

This book is dedicated to Clifford E. Clinton and Henry Borsook, PhD of Caltech

Part of the enjoyment of writing a book lies in meeting people from around the world who share a common interest, and in learning from them what is often the knowledge or skills acquired during a lifetime of devoted research or practice. We wish to give deepest thanks...

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Finally our deepest thanks to Tony Cooper of San Ramon, California, who has kept our computers up and running since Sept. 1983. Without Tony, this series of books on the Web would not have been possible.

This book, no doubt and alas, has its share of errors. These, of course, are solely the responsibility of William Shurtleff.

■ This bibliography and sourcebook was written with the hope that someone will write a detailed and well-documented history of this subject.

INTRODUCTION

Brief Chronology of Meals for Millions, Soy and Freedom from Hunger

The Meals for Millions Foundation was a pioneer in introducing the world to the high nutritional value, high protein content, and low cost of soy from 1946 to 1983.

1900 Aug. 3 – Clifford Edmond Clinton is born in Berkeley, California, the third of ten children (nine survived childhood). His parents are both devout Christians and active in the Salvation Army. They live in Berkeley and own (and manage) a restaurant named Dennets in San Francisco.

1905 – Clifford Clinton travels to China (for the first time) with his missionary parents and 2-3 sisters – they are supported by their restaurant. They return to California in 1906 to rebuild the restaurant which was destroyed by the San Francisco earthquake and fire. Clifford was too young to remember much about this trip (Donald Clinton, Dec. 2010).

1910 – With the family restaurant business again profitable, the Clinton family (except for little Anna, who stayed home with Grandma Hall) returns to China, but this time to south China and the area around Canton. The family works at a Christian orphanage for the blind. Clifford, age 10, is now able to understand much more about daily life in China and he is deeply moved by what he sees. His job is to go around each morning to collect the blind baby girls that have been left outdoors to die (girls are considered more expendable than boys) and to bring them back to the orphanage. He also sees the hunger and starvation around him. After the Boxer Rebellion (1898-1900), it was a time of chaos and disorder in China, with banditry and vandalism and all sorts of danger. The family returns to California in 1912. Clifford makes a boyhood vow that if he could ever do anything to help hungry people, he would do it (Donald Clinton, Dec. 2010; Henry Borsook 1979).

1915 – Clifford Clinton leaves high school to work as a storekeeper in one of his family's restaurants in San Francisco; he rose to supervising manager of all six restaurants by 1925. He eventually becomes one of the three partners of the Clinton Cafeteria Co. (Kuzins 1984).

1920 Sept. 7 – Clifford Clinton and Nelda Patterson are married in Berkeley, California. She was his lifelong active partner and a pillar of strength in all his endeavors (Donald Clinton, Dec. 2010).

1931 – Clifford Clinton and with his wife move from San Francisco to Los Angeles to establish a new kind of restaurant. Their three children – Edmond (born in 1921), Jean (1923), and Donald (1926) – follow six months later (Donald Clinton, Dec. 2010).

1931 July – Clifton's Cafeteria: The Cafeteria of the Golden Rule, opens at 618 S. Olive St. in downtown Los Angeles. As a result of his experience in China, he decides to apply a principle of "practical Christianity" and never to refuse a meal to a person who could not afford to pay for it. It soon became a written policy: "No guest need go hungry for lack of funds." Since the Great Depression is beginning to gain momentum, there are many residents of Los Angeles who fall into this category. In the first 90 days, 10,000 free meals are served to those who could not pay (Donald Clinton, Feb. 2011).

1932 Oct. 10 – Clinton opens his Penny Cafeteria in the basement of a building at Third and Hill Streets –in the depths of the Depression. About two million meals were fed there during the two years that it was open (E.M.S. 1946).

1935 – Clifton's Brookdale is opened at 7th and Broadway (over 40,000 square feet, 5 floors, at 648 South Broadway) in Los Angeles. Its interior is reminiscent of the California redwood groves with waterfalls and brooks inside.

1937-1938 – Clifford Clinton is deeply involved in a campaign to clean up Los Angeles politics (*Time* magazine, 27 June 1938; *Clifton's Food for Thot*, 12 March 1970).

1939 – The first Clifton's Cafeteria is remodeled on a tropical island theme and renamed "Clifton's Pacific Seas."

1942 Sept. 14 – Article in *Time* magazine titled "California: Clinton's Big Job." The record number of paid meals served in one day at his two "fantastic cafeterias" is 26,000. He has 600 employees but he calls them associates. A remarkable list of employee benefits is given.

1944 Jan. 1 – Clifford Clinton writes Ernest Chamberlain from Washington D.C. asking him to try find a biochemist who could (and would) develop a food product which would provide complete nutrition (protein, vitamins, and minerals) except for calories / carbohydrates, in a compact form that would be inexpensive [3-5 cents per serving] – and which could be added to normal deficient diets without changing their accustomed flavor, etc. Clinton describes 12 essential characteristics of proposed new food. Chamberlain soon finds Dr. Henry Borsook, a professor of biochemistry at the California Institute of Technology (Caltech) in Pasadena (Chamberlain 1971).

1944 May 22 - Clifford Clinton, his wife Nelda, and Ernest Chamberlain visit Dr. Henry Borsook at Caltech. Nelda begins by apologizing for her husband's "perfectly ridiculous proposal." Clifford Clinton reviews his specifications, adding that a meal should "cost not more than three cents." After making two adjustments (concerning total calories and vitamin C), Dr. Borsook says that he can make such a food for no more than 3 cents a meal. Clifford Clinton signs the agreement with Dr. Henry Borsook and Caltech to develop the new food with the proviso that the formula should be free to the world. Clinton pays \$5,000 of his own money to fund the new research project. Later, the California Dehydrators Assoc. joined in the sponsorship with equal funding. The goal of the project is to develop a new type of low-cost food; its first use would be in Clinton's cafeterias in Los Angeles (Chamberlain 1971. Borsook 1979).

1944 Nov. **28** – *Life* magazine does a major article on Clifton's Pacific Seas cafeteria in Los Angeles. The 5-cent meal includes "Vita-Meal," which contains soybeans (p. 102-05).

1944 Dec. – Two of the new products, based on defatted soy grits, are being dehydrated and mixed by dehydrating companies in Los Angeles. One was a soup mix made by the Boltz Mfg. Co. The other was made by the Gentry Company. Clinton tried both products in his restaurants. He chose the Gentry product because it was more versatile and economical.

1945 April 5 – Results of the election for mayor of Los Angeles are announced. Fletcher Bowron wins. Clifford Clinton finishes a distant second, with 22,181 votes, about 10,000 behind Bowron (Oxnard Press Courier, p. 6).

1945 May 12 – *Business Week* writes that "Vitameal" is on the menu of Clifton's Cafeteria. Dr. Borsook, professor of biochemistry at Caltech, developed the new food and referred to it as "multipurpose meal." George Mardikian, owner of San Francisco's Omar Khayyam Restaurant, is in charge of food arrangements at the United Nations Conference in San Francisco. He makes sure that the new "mystery food" is served each day to delegates at the Opera House – a stew today, a soup tomorrow, and an entree the next day (p. 22-24). **1945 May** – Dr. Henry Borsook describes his new development as "A nutritionally-adequate, low-cost Multi-Purpose Meal" – the first time this term is used.

1945 Sept. – "How to Help Feed Europe's Hungry," by Paul de Kruif, appears in *Reader's Digest*. It discusses "Meals for Millions," founder Clifford E. Clinton, and "multi-purpose meal" (p. 50-52).

1945 Oct. 21 – A short letter to the editor in the *Los Angeles Times* first mentions "multi-purpose food" (p. E13).

1945 Dec. – "To Feed World's Starving Peoples: M.P.M. Five-Cent Soy Meal," published in *Soybean Digest* (p. 14). "M.P.M." stands for "Multi-Purpose Meal."

1946 July 5 – Meals for Millions Foundation (MFM) is incorporated in Los Angeles, California, as a private, nonprofit, nonsectarian organization. The founders are Clifford E. Clinton, Florence Rose, Ernest R. Chamberlain, Edmond J. Clinton, II (Clifford's eldest son), Ransom Callicott, and Dr. Henry Borsook (who is Director of Research). The foundation has no endowment. Its startup capital is \$40,000 pledged by Clifford Clinton. Its goal is to help relieve the severe hunger in many countries after World War II. Its offices are located on the top floor of Clifton's Brookdale at 648 South Broadway; Clifford Clinton donated this space to MFM for about 10 years (1946-1956). MFM's staff immediately hits upon the deceptively simple tactic of offering M.P.M. free to agencies and individuals engaged in relief activities (Roberts 1967, p. 54).

1946 July 17 – "Full Steak Dinner for Only 3 Cents! – Boston Samples M.P.M. Equivalent" published in *Christian Science Monitor*. This is the first article that gives the cost of such a meal as 3 cents.

1946 Aug. 1 – Eleanor Roosevelt, uses her nationwide column "My Day," to praise Clifford Clinton and his new food.

1949 Dec. – "Mr. Clinton stops starvation: By inventing 3cent meal, a Californian spearheads man's fight against hunger," by Pearl Buck is published in *United Nations World* (p. 25-28). It praises Clifford E. Clinton, Meals for Millions, and Multi-purpose Food. Pearl Buck (the first American woman to win the Nobel Prize) so greatly admired Clifford Clinton and his work that in 1951 she wrote a novel titled *God's Men*, in which one of the main characters (Clem) is based on Clifford Clinton.

1954 April 19 – Maurice Abrams, who has flown to Washington, DC, from Brazil, signs an agreement with MFM officials to make soy-based MPF in Brazil to feed hungry and malnourished Brazilians. He starts production in June 1956 (Roberts 1967, p. 223-56).

1954 July 10 – Public Law 480 – The Agricultural Trade and Assistance Act – is signed into law in Washington, DC. Its helps to pay for some of MFM's shipping expenses.

1955 – The Meals for Millions Association of India is formed. India's Minister of Agriculture is its first president. Prime Minister Nehru authorized funds for the initial pilot plant now operating at the Central Food Technological Research Institute (CFTRI) at Mysore (Rose 1958, p. 74-76).

1957 Feb. 22 – Meals for Millions has moved out of Clifton's Brookdale cafeteria (at 648 S. Broadway) and is now at 115 West 7th St. (between Main and Spring), Los Angeles – around the corner, less than 2 blocks away (Los Angeles Times, "Freedoms Foundation...," p. 2, 11).

1959 Dec. 1 – General Mills begins to manufacture and sell Multi-Purpose Food, replacing Gentry Foods. Partially defatted soy grits are replaced by fully defatted soy grits. (*Wall Street Journal*, Oct. 14).

1960 – From Sept. 1946 to June 1960 (13 years and 9 months) 62 million meals of MPF have been distributed worldwide, including 3,429 relief shipments to 127 countries through 210 cooperating agencies. The countries that have received the most MPF are (in descending order of amount), India, Korea, Japan, China, Germany, France, The Philippines, and Haiti (Meals for Millions Foundation. "Friendship Food for a Hungry World: Distribution summary." 29 p.).

1963 May – Meals for Millions compiles a second, updated summary of distribution. 12.8 million pounds comprising 102.6 million meals have been distributed to date.

1964 July to 1965 – A dramatic upheaval in MFM leadership takes place; Florence Rose is ousted as executive director, Ernest Chamberlain resigns as co-director, and Clifford Clinton retires as president. It is soon followed by equally radical changes in the internal and overseas operations of the foundation. Above all, in 1965 MFM switched from being primarily a distributor of relief food to helping others to help themselves in food processing and production, and to technology transfer (Roberts 1967, p. 258).

1967 March – "The Meals for Millions Foundation: a Study of a Non-Governmental Organization," by Hibbert Rice Roberts (288 leaves) is submitted as a PhD thesis in political science at the University of Washington. As of Feb.

2011, it is by far the single best study of the organization and its history.

1967 July 9 – Meals for Millions' headquarters, pilot plant, training center and classroom are now located at 1800 Olympic Boulevard, Santa Monica, California (*Los Angeles Times*, p. WS12)

1969 – The earliest known annual report (for the year 1968) is published. Col. I.F. Saunders is executive director.

1969 Aug. 7 – "A Tribute to Florence Rose," who died on 26 April 1969, is published in *Food for Thot*. The first half of this fine obituary and biography is by Clifford Clinton, the second half, "A Letter to Florence," is by Ernest R. Chamberlain

1969 Nov. 20 – Clifford Clinton dies peacefully at his home in Los Angeles. His life and work have inspired many.

1970 March 13 – "In Memory of Clifford E. Clinton, our Founder" is published in *Food for Thot*. This is the single best biography of this remarkable man.

1973 Feb. – MFM starts its first extrusion cooking project by testing the practicability of texturizing protein in a simple apparatus – later used for many years in Korea.

1974 – Meals for Millions has a new logo – a plant growing out of mounded soil in a bowl which is half of a globe. Below that: "Self-help for a hungry world."

1976 – Peter J. Davies is appointed president of MFM. He has a wealth of experience in economic development and administrative skills having worked in India, Thailand and Brazil. He makes his headquarters at the new MFM office in New York City where many of the board members and related agencies are located, but spends considerable time in California. During his eight years as president, Davies makes many important, basic changes. Also in 1976 MFM begins an applied nutrition program in Wonseong County, Korea.

1978 – MFM's income (from donations and grants) first tops \$1 million. This year MFM starts its 2nd applied nutrition program in Honduras

1979 March – The MFM Board of Trustees approves the organization becoming successor to the American Freedom from Hunger Foundation and changing its name to Meals for Millions / Freedom from Hunger Foundation.

1979 April – Excellent interview titled "Henry Borsook – How It Was: Oral History," is published in *Engineering and Science* (Caltech) (March/April, p. 23-29).

1980 – The last Multi-Purpose Food is made and distributed.

1982 Sept – MFM/FFH moves to Davis, California. On 20 March 1983 its new million-dollar international center is dedicated.

1983 – This is the last year that MFM/FFH has an involvement with soybeans. It is involved in making soymilk in Korea.

1985 April – MFM/FFH completes a \$1.2 million campaign to fund its new international center in Davis, California. This included a \$225,000 Challenge Grant from the Kresge Foundation. Thomas C. Veblen is now chair, board of trustees.

1988 Jan. – MFM/FFH shortens its name to "Freedom from Hunger Foundation." The new name better reflects the organization's commitment to finding permanent solutions to hunger and malnutrition. That same month, Thomas R. McBurney becomes vice chair, board of trustees.

1988 Sept. – Christopher Dunford, Kathleen Stack, and Ellen Vor der Bruegge, upon returning from a trek to a program site in Nepal, recommend that Freedom from Hunger focus on providing microfinance services combined with health, nutrition and education to very poor women. This proves to be a wise and crucial recommendation.

1988 Dec. – Freedom from Hunger makes its first credit association loan in Mali (Annual Report 1991)

1989 – Credit with Education begins. By 1994 Freedom from Hunger has such programs in six countries, serving 10,000 women.

1991 Feb. 1 – Christopher Dunford, PhD, becomes president of the Freedom from Hunger Foundation. Thomas R. McBurney is the new chair, board of trustees. During the long term of these two visionary leaders, Freedom from Hunger will undergo a major, very positive, transformation.

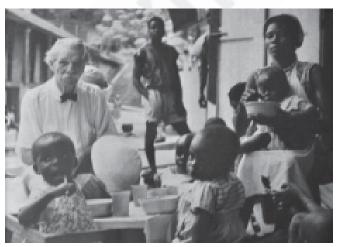
1991 Sept. 20 – The word "Foundation" is officially dropped from the name of the organization.

1999 Nov. – Weldon H. Wasson replaces Thomas R. McBurney ("a modern Renaissance man") as chair, board of trustees. But Thomas remained on as a trustee until Nov. 2005, when his term expired. He returned as a trustee in Nov. 2007 until his death in March 2009 (Annual Report 2000. Chris Dodson, Jan/Feb. 2011).

2005 Nov. 28 – Freedom from Hunger is awarded a grant from the Bill and Melinda Gates Foundation for \$6 million over 4 years. It is the largest single grant Freedom from Hunger has ever received (Chris Dodson, 8 Feb. 2011).

2010 Nov. – Freedom from Hunger, a pioneer in integrating microfinance with nutrition and health education, now has 42 employees and annual operating revenues of about \$7.5 million. Christopher Dunford, PhD, is president and J. Grover Thomas, Jr. is chair, board of trustees and executive committee. "At the close of fiscal 2010 we were reaching more than 2.4 million women plus their families – a total of 14 million people." For more, visit

www.freedomfromhunger.org (Annual Report 2010).



Dr. Albert Schewitzer with patients at his hospital in Lambarene, Gabon (1956)



Dr. Tom Dooley distributing Multi-Purpose Foods at his hospital in Laos (1960)



ABOUT THIS BOOK

This is the most comprehensive book ever published about the history of Meals for Millions or Freedom from Hunger. It has been compiled, one record at a time over a period of 35 years, in an attempt to document the history of soy in this region. It is also the single most current and useful source of information on this subject.

This is one of more than 50 books compiled by William Shurtleff and Akiko Aoyagi, and published by the Soyinfo Center. It is based on historical principles, listing all known documents and commercial products in chronological order. It features detailed information on:

- 35 different document types, both published and unpublished.
- 313 published documents extensively annotated bibliography. Every known publication on the subject in every language.
- 18 original Soyinfo Center interviews and overviews never before published.
- 63 unpublished archival documents
- 5 commercial soy products.

Thus, it is a powerful tool for understanding the development of this subject from its earliest beginnings to the present.

Each bibliographic record in this book contains (in addition to the typical author, date, title, volume and pages information) the author's address, number of references cited, original title of all non-English language publications together with an English translation of the title, month and issue of publication, and the first author's first name (if given). For most books, we state if it is illustrated, whether or not it has an index, and the height in centimeters.

For commercial soy products (CSP), each record includes (if possible) the product name, date of introduction, manufacturer's name, address and phone number, and (in many cases) ingredients, weight, packaging and price, storage requirements, nutritional composition, and a description of the label. Sources of additional information on each product (such as advertisements, articles, patents, etc.) are also given.

A complete subject/geographical index is also included.

ABBREVIATIONS USED IN THIS BOOK

A&M = Agricultural and Mechanical Agric. = Agricultural or Agriculture Agric. Exp. Station = Agricultural Experiment Station ARS = Agricultural Research Service ASA = American Soybean Association Assoc. = Association, Associate Asst. = Assistant Aug. = AugustAve. = Avenue Blvd. = Boulevard bu = bushel(s)ca. = about (circa)cc = cubic centimeter(s)Chap. = Chaptercm = centimeter(s)Co. = companyCorp. = Corporation Dec. = December Dep. or Dept. = Department Depts. = Departments Div. = DivisionDr = Drive $E_{\cdot} = East$ ed. = edition or editor e.g. = for exampleExp. = Experiment Feb. = February fl oz = fluid ounce(s)ft = foot or feetgm = gram(s)ha = hectare(s)i.e. = in other words Inc. = Incorporated incl. = including Illust. = Illustrated or Illustration(s) Inst. = Institute L = Journal J. of the American Oil Chemists' Soc. = Journal of the American Oil Chemists' Society Jan. = January kg = kilogram(s)km = kilometer(s)Lab. = Laboratory Labs. = Laboratories lb = pound(s)Ltd. = Limited mcg = microgram(s)mg = milligram(s)

ml = milliliter(s)mm = millimeter(s) $N_{\cdot} = North$ No. = number or North Nov. = November Oct. = Octoberoz = ounce(s)p. = page(s)P.O. Box = Post Office Box Prof. = Professor psi = pounds per square inch R&D = Research and DevelopmentRd. = RoadRev. = RevisedRPM = revolutions per minute $S_{\cdot} = South$ SANA = Soyfoods Association of North America Sept. = September St. = Street tonnes = metric tons trans. = translator(s)Univ. = University USB = United Soybean Board USDA = United States Department of Agriculture Vol. = volumeV.P. = Vice President vs. = versus $W_{.} = West$ °C = degrees Celsius (Centigrade) °F = degrees Fahrenheit > = greater than, more than < = less than

HOW TO MAKE THE BEST USE OF THIS DIGITAL BOOK

Most Important Thing: The **KEY** to using this book is to **SEARCH IT** using the powerful built-in search engine, as follows:

On the toolbar at the top of every page, on the far right end is a rectangular white box with the word "Find" in it.

Click the down-pointing arrow to the right of that box to get a menu.

Click "Open Full Acrobat Search."

On the left side of your screen a "Search" box will open up.

When asked: "What word or phrase would you like to search for?" type that word or phrase in the box. For example: Brookdale or Pearl Buck. No need to use quotation marks. Then click "Search."

At "Results" click any line that interests you.

Chronological Order: The publications and products in this book are listed with the earliest first and the most recent last. Within each year, references are sorted alphabetically by author. If you are interested in only current information, you might want to start reading at the back, just before the indexes.

A Reference Book: Like an encyclopedia or any other reference book, this work is meant to be searched first - to find exactly the information you are looking for - and then to be read.

How to Use the Index: A subject and country index is located at the back of this book. It will help you to go directly to the specific information that interests you. Browse through it briefly to familiarize yourself with its contents and format.

Each record in the book has been assigned a sequential number, starting with 1 for the first/earliest reference. It is this number, not the page number, to which the indexes refer. A publication will typically be listed in each index in more than one place, and major documents may have 30-40 subject index entries. Thus a publication about the nutritional value of tofu and soymilk in India would be indexed under at least four headings in the subject and country index: Nutrition, Tofu, Soymilk, and Asia, South: India.

Note the extensive use of cross references to help you: e.g. "Bean curd. See Tofu."

Countries and States/Provinces: Every record contains a country keyword. Most USA and Canadian records also contain a state or province keyword, indexed at "U.S. States" or "Canadian Provinces and Territories" respectively. All countries are indexed under their region or continent. Thus for Egypt, look under Africa: Egypt, and not under Egypt. For Brazil, see the entry at Latin America, South America: Brazil. For India, see Asia, South: India. For Australia see Oceania: Australia.

Most Important Documents: Look in the Index under "Important Documents -."

Organizations: Many of the larger, more innovative, or pioneering soy-related companies appear in the subject index – companies like ADM / Archer Daniels Midland Co., AGP, Cargill, Dupont, Kikkoman, Monsanto, Tofutti, etc. Worldwide, we index many major soybean crushers, tofu makers, soymilk and soymilk equipment manufacturers, soyfoods companies with various products, Seventh-day Adventist food companies, soy protein makers (including pioneers), soy sauce manufacturers, soy ice cream, tempeh, soynut, soy flour companies, etc.

Other key organizations include Society for Acclimatization (from 1855 in France), American Soybean Association, National Oilseed/Soybean Processors Association, Research & Development Centers (Peoria, Cornell), Meals for Millions Foundation, and International Soybean Programs (INTSOY, AVRDC, IITA, International Inst. of Agriculture, and United Nations). Pioneer soy protein companies include Borden, Drackett, Glidden, Griffith Labs., Gunther, Laucks, Protein Technologies International, and Rich Products.

Soyfoods: Look under the most common name: Tofu, Miso, Soymilk, Soy Ice Cream, Soy Cheese, Soy Yogurt, Soy Flour, Green Vegetable Soybeans, or Whole Dry Soybeans. But note: Soy Proteins: Isolates, Soy Proteins: Textured Products, etc.

Industrial (Non-Food) Uses of Soybeans: Look under "Industrial Uses ..." for more than 17 subject headings.

Pioneers - Individuals: Laszlo Berczeller, Henry Ford, Friedrich Haberlandt, A.A. Horvath, Englebert Kaempfer, Mildred Lager, William Morse, etc. Soy-Related Movements: Soyfoods Movement, Vegetarianism, Health and Dietary Reform Movements (esp. 1830-1930s), Health Foods Movement (1920s-1960s), Animal Welfare/ Rights. These are indexed under the person's last name or movement name.

Nutrition: All subjects related to soybean nutrition (protein quality, minerals, antinutritional factors, etc.) are indexed under Nutrition, in one or more of 14 subcategories.

Soybean Production: All subjects related to growing, marketing, and trading soybeans are indexed under Soybean Production. e.g. Soybean Production: Nitrogen Fixation, or Soybean Production: Plant Protection, or Soybean Production: Variety Development.

Other Special Index Headings: Browsing through the subject index will show you many more interesting subject headings, such as Industry and Market Statistics, Information (incl. computers, databases, libraries), Standards, Bibliographies (works containing more than 50 references), and History (soy-related).

Commercial Soy Products: All Soyinfo Center sourcebooks that focus on a specific soyfood (tofu, soymilk, tempeh, miso, etc.) or geographical area (Africa, Japan) contain extensive information about every known commercial soyfood product - a unique feature. We list the product name, manufacturer's name, address, and phone number, year and month of introduction, ingredients, weight-packaging-price, how stored, nutritional analysis, and documentation on sources of additional information on that product.

SoyaScan Notes: This is a term we have created exclusively for use with this database. A SoyaScan Notes Interview contains all the important material in short interviews conducted and transcribed by William Shurtleff. This material has not been published in any other source. Longer interviews are designated as such, and listed as unpublished manuscripts. A transcript of each can be ordered from Soyinfo Center Library. A SoyaScan Notes Summary is a summary by William Shurtleff of existing information on one subject.

"**Note**:" When this term is used in a record's summary, it indicates that the information which follows it has been added by the producer of this database.

Asterisks at End of Individual References.

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MEALS FOR MILLIONS, SOY, AND FREEDOM FROM HUNGER

1. Clinton, Clifford E. 1900-1969. Papers (Finding aid to archival collection). Los Angeles, California: Dep. of Special Collections, University of California at Los Angeles (UCLA). 13 boxes (6.5 linear feet). 14 oversize boxes. * • Summary: Collection 2018. Stored off-site. Advance notice required for access. "Collection contains correspondence, manuscripts, publications, scrapbooks, radio scripts, photographs, and memorabilia related to Clinton's personal interests [Meals for Millions Foundation] and business affairs, related to his restaurants as well as Los Angeles politics, government, and social conditions. Includes broadcast scripts from Clinton's mayoral campaign, detailed documents related to the activities of CIVIC, and material from Clifton's Cafeteria and the Brookdale Cafeteria. Also includes manuscript notes of Clinton's childhood experiences in China.

"Bio/History: Clifford E. Clinton was born in 1900; served in World War I; assumed management of father's six restaurants in San Francisco after marrying Nelda Patterson; moved to Los Angeles and founded the "Pacific Seas" Clifton's Cafeteria, 1931; later founded the Brookdale Cafeteria; became involved with Los Angeles politics in 1936 with John Anson Ford; involved with recall of LA mayor Frank Shaw and supported Fletcher Bowron as mayor of LA, 1938; helped organize the Citizen's Independent Vice Investigating Committee (CIVIC) and was active in civic reform movements; published brochure, The clock strikes twelve, 1945; ran unsuccessfully for mayor in 1945; became involved with Community Food Service Centers, the development of multi-purpose food, and the Meals for Millions Foundation during World War II; died, 1969." Address: Los Angeles, California.

2. U.S. Department of the Interior, Census Office. 1910. Fred A. Patterson and family in the 1910 U.S. Census in Oakland, California. Washington, DC.

• *Summary:* Fred A. Patterson. Head of Household. Age 38. Estimated birth year: 1872. Birthplace: Iowa. Father's birth place: USA. Mother's birth place: Iowa. Number of years of permanent marriage: 10 (both Fred and Dora). Occupation: Salesman of building material, working on own account. Renting house.

Spouse's name: Dora B. Patterson, age 37. Birth place: Missouri. Father's birth place: Kentucky. Mother's birth place: Tennessee. Home in 1910: Oakland Ward 2, Alameda Co., California. Marital status: Married. Race: White. Gender: Male.

Other members of household: Nelda M. Patterson, age 9. Stephen E. Patterson, age 3. Walter Le Fleur, boarder, age

38. Nellie M. Burns, boarder, age 42. Beulah W. Tomlin, boarder, age 40.

3. U.S. Department of the Interior, Census Office. 1910. Edmond J. Clinton and family in the 1910 U.S. Census in Berkeley, California. Washington, DC.

• *Summary:* Edmond J. Clinton. Head of Household. Age 37. Estimated birth year: 1873. Birthplace: Missouri. Father's birth place: Kentucky. Mother's birth place: Missouri. Spouse's name: Gertrude Clinton, age 34. Home in 1910: Berkeley, Alameda Co., California. Marital status: Married. Race: White. Gender: Male.

Other members of household: Evangeline Clinton, age 13. Clifford Clinton, age 9. Margaret Clinton, age 8. Catherine Clinton, age 7. Anna Clinton, age 4. Esther Clinton, age 2.

Christina Dyke, age 38. Ingeborg Anderson, age 45. Concerning Gertrude, Clifford Clinton's mother: She was born Gertrude Elmira Hall on 18 Dec. 1873 in Junction City, Kansas. She died 8 Dec. 1918 in Berkeley, California. Note that by 1920 her husband, Edmond, had remarried.

Concerning Gertrude's parents, Clifford Clinton's maternal grandparents: Her father, Luther Hall, was born 30 Sept. 1837 in Whitley, Ontario, Canada. He died on 23 March 1880 (place unknown). Her mother, Fanny Elmira Frost, was born 10 July 1842 in Exeter, Ohio. She died in 1928 in Berkeley, Alameda Co., California.

4. Passport issued. 1911. California.

• *Summary:* Name: Edmond Jackson Clinton. Birth date: 15 June 1872. Birth place: Walker, Vernon Co., Missouri. Gender: Male. Residence: Berkeley, California. Passport issue date: 7 June 1911. Spouse name: Gertrude E. Hall. Passport includes a photo? No.

Source: Passport Applications, January 2, 1906–March 31, 1925 (M1490).

Note: Edmond and Gertrude were the parents of Clifford E. Clinton. They need a passport to return to China where they will continue their work as missionaries.

5. Photograph of Clifford Clinton (on the right) and a buddy as soldiers in France shortly after World War I. 1919.
• *Summary:* Both are in U.S. Army uniforms and the top hats are for celebration, as the Allies had won the war. At age 18-19, during World War I, Clifford Clinton had been a sergeant in the tank crops and a gunner therein.

This photo and date were sent to Soyinfo Center by Donald Clinton, son of Clifford Clinton (Jan. 2011). Note: World War I ended on 11 Nov. 1918 when a formal armistice was signed.



6. U.S. Department of the Interior, Census Office. 1920. Edmond J. Clinton in the 1920 U.S. Census in Berkeley, California. Washington, DC.

• *Summary:* Edmond J. Clinton. Head of Household. Age 47. Estimated birth year: 1873. Birthplace: Missouri. Father's birth place: Kentucky. Mother's birth place: Missouri. Spouse's name: Rose P. Clinton, age 47, born in Pennsylvania. Home in 1920: Berkeley, Alameda Co., California. Marital status: Married. Race: White. Gender: Male.

Other members of household: Clifford Clinton, age 19 (he can read and write). Margurite Clinton [or Marguerite Clinton], age 17. Catherine G. Clinton, age 16. Anna E. Clinton, age 14. Esther R. Clinton, age 12. Grace H. Clinton, age 9. David H. Clinton, age 5. Daniel J. Clinton, age 4.

Lucy F. Chubb, age 44.

Letter (e-mail) from Donald Clinton. 2011. Feb. 7. The children in this family, in order of birth, were: (1) Miriam Evangeline Clinton, born 1 Aug. 1896.

(2) David Hall Sterling, born 17 July 1898, died at age 9 months.

(3) Clifford Edmond Clinton, born 3 Aug. 1900.

(4) Marguerite Alice Clinton, born 12 April 1902.

(5) Gertrude Catherine Clinton, born 29 June 1903.

(6) Anna Elmira Clinton, born 25 Aug. 1905.

(7) Esther Ruth Clinton, born 17 July 1907.

(8) Grace Harriet Shiu Hing Clinton, born 27 Nov. 1910.

(9) David Hall Clinton, born 7 Oct. 1914. (10) Daniel Joseph Clinton, born 5 Nov. 1915.

Donald Clinton recalls (Feb. 2011): All (except Grace) were born in Berkeley, except perhaps one in Oakland. Grace (No. 8) was born during the second trip to China, while at the mission in Shiuhing, in southern China, on the West River, about 50-60 miles west of Canton.

Clifford's mother died about a month after Daniel Joseph was born [1915], due to infections from the birth. His father remarried in 1919 to Rose Potter Crist. Her maiden name was Potter.

Clifford was close to all his brothers and sisters. The two brothers [David and Daniel] both worked for a few years at the cafeteria in Los Angeles and took turns living with us in my growing-up years. We would often visit the Bay Area to see relatives. And we would always visit dad's favorite Chinese restaurant, below street level at Washington and Waverly Place just a block off Grant Ave. in San Francisco. Clifford did help his various brothers and sisters through the years as emergencies arose. Dad and mother were good correspondents and the telephone worked in both directions. None were "famous or well known to the world" but were well loved by their family and friends.

7. U.S. Department of the Interior, Census Office. 1920. Fred A. Patterson and family in the 1920 U.S. Census in Oakland, California. Washington, DC.

• *Summary:* Fred A. Patterson. Head of Household. Age 47. Birth place: Iowa. Spouse's name: Dora B. Patterson, age 48. Birth place: Missouri. Home in 1920: Berkeley, Alameda Co., California. Marital status: Married. Race: White. Gender: Male.

Other members of household: Nelda N. Patterson, age 18. Stephen E. Patterson, age 12. Sarah A. Burns, age 76. Earl Dahuff, age 20. Charles F. Mills, age 68. Reginald M. Mills, age 17.

Note: On 7 Sept. 1920 Nelda Patterson and Clifford E. Clinton were married in Berkeley, California.

8. Rose, Florence. 1920-1969. Papers, bulk 1920-1969 (archival collection). Northampton, Massachusetts: Smith College. 37 boxes (15 linear feet) *

• *Summary:* The bulk of the Florence Rose Papers date from 1921 to 1970 and focus on both her personal and professional life. Major subjects reflected in the collection include the birth control movement in the U.S., the legal and political aspects of American birth control struggles, the history of relations between African-Americans and Planned Parenthood, the politics of American hunger relief and prevention efforts in developing countries, efforts to promote cultural understanding between nations in the immediate post-WWII period, and the life and legacy of birth control pioneer Margaret Sanger. The major birth control organizations are represented including the American Birth Control League, the Birth Control Federation of America, the National Committee for Federal Legislation on Birth Control, and the Birth Control Clinical Research Bureau, all of which merged into the Planned Parenthood Federation of America. Individuals represented in the papers include notable 20th century social reformers, birth control advocates, and public figures such as Margaret Sanger, Pearl S. Buck, Havelock Ellis, Carrie Chapman Catt, Morris Ernst, Clarence Gamble, Charlotte Perkins Gilman, Harriet Pilpel, Emma Goldman, and H.G. Wells (Copied from OCLC archival record). Meals for Millions records are in the Special Collections Department, University of California, Los Angeles. Inventory available in repository/ folder level control.

Note: Florence Rose was a Public relations specialist; Executive secretary; Director, Meals for Millions; Birth control activist; Lobbyist. Address: Northampton, Massachusetts.

9. Chamberlain, Ernest R. 1923-1972. Papers (Finding aid to archival collection). Los Angeles, California: Dep. of Special Collections, University of California at Los Angeles (UCLA). 6 boxes (3 linear feet). 91 cartons (91 linear feet). 2 oversize boxes. *

• *Summary:* Collection 2019. Stored off-site. Advance notice required for access. "Collection consists of correspondence, manuscripts, clippings, notes, publications, and memorabilia relating to Oklahoma, and Los Angeles and California politics, as well as Chamberlain's personal subject files relating to his work with Meals for Millions. Includes materials regarding LA social conditions, government organization, city planning, transportation, and material by and about Mayor Fletcher Bowron.

"Bio/History: Chamberlain's career as a political publicist began in high school, when he worked for William Howard Taft and Senator Charles Curtis; attended Washburn College, then went to Washington DC, where he worked for several government bureaus; AB and LL.B from George Washington Univ.; after World War I, he attended the Univ. of Paris, where he earned a Certificate d'Etudes Superieures; moved to Oklahoma, where he played the flute in movie theaters, wrote reviews, and taught dance; did publicity work for Governor J.C. Walton of OK; moved to Los Angeles where he worked for Clifford E. Clinton, helping him in his clean-up campaigns against L.A. vice and corruption; worked with him for Fletcher Bowron's election after the recall of Mayor Frank Shaw in 1938, and worked for Bowron's first reelection in 1941; he also publicized many of Clinton's other projects, including Meals for Millions, various issues in L.A. politics, and Clinton's own campaign for mayor in the 1945 primary; also worked on publicity for Clinton's Cafeterias; in 1942 he collected

material for a projected Citizen's yearbook about L.A." Worked from 1946 to 1964 as co-director of Meals for Millions Foundation in Los Angeles (established by Clifford Clinton). Address: Los Angeles, California.

10. Photograph of Clifford Clinton with his three children at the beach (Santa Cruz, California). 1928.



• *Summary:* Left to right: Donald (youngest son, with sand pail), Edmond (eldest son, barely visible behind Don), Clifford E. Clinton, Jean (daughter and middle child).

Clifford's father, Edmond J. Clinton, built a cabin at the Mount Herman Christian Conference Center, near Felton and 7 miles inland from Santa Cruz. It was used a lot for recreation from the San Francisco area and later from Los Angeles. Clifford's kids (while still kids) spent most summer vacations there while their parents worked in Los Angeles. The beach was one of the favorite places to go when the parents did join the kids, as were the Santa Cruz boardwalk and roller coaster.

This photo and date were sent to Soyinfo Center by Donald Clinton, son of Clifford Clinton (Jan. 2011).

11. U.S. Department of the Interior, Census Office. 1930. Clifford E. Clinton and family in the 1930 U.S. Census in Berkeley, California. Washington, DC.

• *Summary:* Clifford E. Clinton. Head of Household. Age 29. Estimated birth year: 1901. Birthplace: California. Father's place of birth: Missouri. Mother's place of birth: Kansas. First marriage at age 19. Spouse's name: Nelda M. Clinton, age 28. Birth place: California. Father's place of birth: Iowa. Mother's place of birth: Missouri. First marriage at age 18. Home in 1920: Berkeley, Alameda Co., California. Marital status: Married. Race: White. Gender: Male.

Other members of household: Edmond J. Clinton, age 8. Jean M. Clinton, age 6. Donald H. Clinton, age 3. Joseph D. Clinton, age 14.

Concerning the last named, Joseph D. Clinton, although he is listed on the census as "Mother," he was actually Clifford Clinton's youngest brother. He was born in 1915. He was living with his brother, Clifford, because his mother (who was also Clifford's mother) died a month after he was born from childbirth infection and fever.

David H. Clinton, another of Clifford's brothers, also lived in Clifford's household a lot.

Note: Concerning the grandparents of Clifford E. Clinton: His grandfather was David Harrison Clinton, born 18 Oct. 1843 in Vernon County, Missouri; died 1 April 1927 in San Francisco, California. His grandmother was Anna Elizabeth Terrill, born 25 July 1846 in District 91, Schuyler County, Missouri; died 6 Dec. 1885 in Missouri.

The father of David Harrison Clinton was Bennet J. Clinton, born in 1815.

The parents of Anna Elizabeth Terrill were Henry Terrill, born in about 1818 and Elizabeth Terrill, born in about 1821. In the 1850 U.S. Census the family was living in District 91, Schuyler County, Missouri. Other household members were: Edmund Terrill, age 7. John R. Terrill, age 5. Ann Aliza Terrill [or Anna Elizabeth Terrill (1846-1885)], age 4. Susan T. Terrill, age 2.

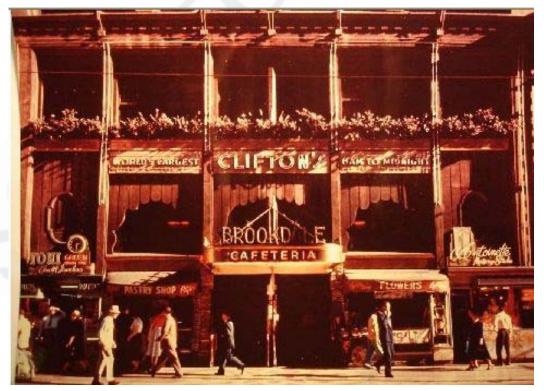
12. *Time*. 1938. California: Restaurant reformers. June 27. • *Summary:* Clifford E. Clinton, youthful, slim and squarejawed is owner of the "World's Largest Cafeteria" in downtown Los Angeles. But his customers brought him so many stories of vice and corruption in Los Angeles politics that last year he began a personal campaign to clean up Los Angeles politics. This story is about his work and its general success. Clinton hired lawyer "Arthur Brigham Rose" and Rose hired the highly regarded private investigator, Harry Raymond, who was once a Los Angeles patrolman and later Police Chief of San Diego.

In January Raymond was nearly killed by a pipe bomb wired under the hood of his car.

When asked when the Los Angeles Times, which had been part of the Los Angeles corruption that Clinton was investigating, started to report events more fairly and objectively, Donald Clinton (Clifford's son) replied (Jan. 2011): "The LA Times came around to better reporting the facts of the political campaign 2-3 months after our home was bombed, on 29 Oct. 1937. Then on 14 Jan. 1938 dad's private investigator, Harry Raymond, stepped on his starter and was blown sky high... but lived to tell the tale in court and brought down the LAPD [Los Angeles Police Department] Captain Earle Kynette, who set the bombs in both instances. The wall of cover-up and corruption then came tumbling down and the pieces were laid bare for the city to see. The court sent the captain to jail for 10 yrs, the Chief of Police soon fell and the Mayor was recalled that fall... The Times couldn't hold back the truth any longer ... Even today, the paper is very slanted in its biases."

13. Photograph of Clifton's Brookdale taken from street level about five years after it opened. 1940.

• *Summary:* On the first floor, at street level, is the main dining room, serving counters, and main kitchen. On the 2nd floor are the mezzanine dining rooms where *simulated* wood boards arch over three windows facing the street. The cement facade was made to look like rough-sawn redwood lumber. Above the windows is written: "World's Largest.



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Clifton's. 6 AM to Midnight." On the 3rd floor, above the mezzanine, is another dining room, small group rooms, and a storage area. The 4th and 5th floors are not visible in this photo.

From 1946 to about 1956 the Meals for Millions offices were at the front half of the 5th floor, facing the street.

This photo and date (1940-41) were sent to Soyinfo Center by Donald Clinton, son of Clifford Clinton (Feb. 2011).

14. Borsook, Henry. 1942. Industrial nutrition and national emergency. *American J. of Public Health* 32(5):523-28. May 1. [1 ref]

• *Summary:* "In mechanized warfare, from 6 to 18 men must work at home for every man stationed on the first line of defense." So it is very important that these domestic workers in war industries are well nourished—in fact optimally nourished. Studies show that many are not. One of the easiest and least expensive ways to improve their diet is to add mined minerals and synthetic vitamins to their foods. Address: California Inst. of Technology, Pasadena, California.

15. *Time*.1942. California: Clinton's big job. Sept. 14. • *Summary:* Last week Clifford Clinton of Los Angeles went off to war. He left the management of "his two fantastic cafeterias to eleven assistants." His credo: "We pray our humble service be measured not by gold but by the Golden Rule." He headed for Fort Benning, Georgia, a 2nd lieutenant, age 42.

In the early days, he fed 10,000 hungry and broke people at his Brookdale Cafeteria–all in a period of 90 days. However the number of paid meals jumped from 800 a day to 16,000 a day–a 20-fold increase. Mr. Clinton now owns two cafeterias and the record number of paid meals in one day is over 26,000.

Today Mr. Clinton has 600 employees, but he calls them "Associates." They have a list of benefits such as a sharing in the profits, paid vacations, medical service, bargaining rights, music lessons, inspirational literature–and little interest in joining unions.

Customers' checks average 35 cents, of which only ¹/₂ cent is profit. They join the waiters in community singing.

In 1934 Clifford Clinton got into public affairs when he began investigating waste in Los Angeles' big county hospital.

16. Photograph of Clifford Clinton in a U.S. army uniform with a machine gun and tank. 1942.

• *Summary:* Clifford Clinton reenlisted six weeks after Pearl Harbor (having already served in World War I). He visited an exhibit of a vintage World War I tank and .30 caliber machine gun-then someone took this photo. During World War I, he had been a sergeant in the tank crops and a



gunner therein. The location is unknown. Since he is wearing a World War II uniform, Donald Clinton estimates the date at 1942 or 1943.

This photo and date were sent to Soyinfo Center by Donald Clinton, son of Clifford Clinton (Jan. 2011).

17. Portrait photograph of Clifford Clinton in a U.S. army uniform. 1942.



• *Summary:* This photo and date were sent to Soyinfo Center by Donald Clinton, son of Clifford Clinton (Jan. 2011).

18. *Los Angeles Times*. 1943. Clifford Clinton to leave army. Aug. 11. p. A.

• *Summary:* In Feb. 1942 Clifford Clinton enlisted as a private in the U.S. Army. He soon became a sergeant and now he is a First Lieutenant. Clinton is presently attached to the Quartermaster Corps and in charge of food conservation at Ft. Benning, Georgia. Yesterday he was in Chicago, Illinois, attending a mess officers' conference.

Mrs. Clinton disclosed here yesterday that her husband, the former Los Angeles cafe proprietor, intends to resign from the Army on Sept. 5. He is basing his decision on his desire to put his experience in food distribution to use.

19. Clinton, Clifford E. 1944. Re: Essential characteristics for proposed new food. Letter to Ernest R. Chamberlain, Los Angeles, California, Jan. 1. 1 p. [Eng]

• *Summary:* "1. Be basically available in the U.S. in abundant quantity.

"2. It must not deprive Americans of foods needed here.

"3. It must be high in protein of good quality and satisfy all basic nutritional requirements.

"4. Nutritional food elements include particularly minerals and vitamins.

"5. Must not violate any religious or dietary precepts of any people.

"6. Must have good taste, look appetizing and be inexpensive.

"7. Must be a base food with which local foods can blend without loss of taste.

"8. Must by itself be equivalent of a 'regular meal' with only addition of a small amount of fat and water.

"9. Must keep indefinitely without refrigeration under all climatic conditions.

"10. Must be easily prepared for mass feeding or as a single meal.

"11. Must be readily cooked over a small amount of heat in any vessel or be suitable for eating without further preparation.

"12. Must not require more than 15 minutes in cooking."

Note: This is the earliest document seen (Jan. 2011) related to what would become Multi-Purpose Food, developed by Dr. Henry Borsook at Caltech. Address: Washington, DC.

20. Certificate of death for Edmond Jackson Clinton. 1944. Los Angeles, California. 1 p.

• *Summary:* Name: Edmond Jackson Clinton. Social Security No.: 573033702. Sex: Male. Birth date: 15 June 1872. Birth place: Missouri. Death date: 19 Nov. 1944. Death place: Los Angeles. Mother's maiden name: Terrell. Father's surname: Clinton. Source: California death index 1940-1997. Note: Edmond was the father of Clifford E. Clinton. He was probably living near or with his son in Los Angeles when he died. Edmond's parents were David Harrison Clinton and Ann Eliza Terrell. Address: Los Angeles, California.

21. *Life*. 1944. Life visits Clifton's cafeteria: Customers at the Pacific Seas in Los Angeles get tropical surroundings and music with low-cost meals. Nov. 28. p. 102-05. • *Summary:* Gertrude Lawrence (holding a cigarette and in women's military dress) is on the cover of this issue of *Life*, famous for its photojournalism. In Los Angeles, the dining room of Clifton's Pacific Seas restaurant is replete with man-made rain-storms and waterfalls, thatched huts and huge neon-lighted flowers, aquariums and aviaries–all with meal that costs 30ϕ or less. Organs play and birds sing. If the guest (customer) is unable to afford the regular price, he can pay what he can afford, or he can pay nothing. Yet today, only about 7 of the 8,000 daily guests at this cafeteria pay less than the regular price–that's less than 1 in a thousand!

Yet a great many of the guests avail themselves of other Clifton's services, which include free advice on diet and nutrition problems, free birthday cakes on customers' birthdays, and free directories of apartments and jobs. Each evening four lucky diners are awarded free leis of gardenias by a master of ceremonies (shown in photo 1) with a microphone.

The man who has created this unique spectacle with affordable food is Clifford E. Clinton, age 44, who conducts his cafeteria business with deep respect for both the golden rule and for the principles of good business. On slim margins and high volumes he makes a good profit. Yet his ideal is the desire to be of service. Clearly the people of Los Angeles have appreciated his creativity, his food, and his ideals, for in the past 13 years he has served more than 50 million guests. Public records show that last year he paid \$120,000 in income tax.

Clifford Clinton has also been an effective crusader for government reform in Los Angeles. After the war, "Mr. Clinton plans a string of restaurants across the country" which will feed 15 million people a day and further help to spread the Golden Rule.

Photos show: (1) An aerial view of the main dining room at Clifton's cafeteria (Pacific Seas). Gigantic flowers with neon lights appear to bloom overhead. (2) A front view of Clifton's Pacific Seas cafeteria. In large letters, across the entire front above the doorway, is written: Pay what you wish. Clifton's. Visitors welcome. On the roof, above the front door, "a rippling waterfall glows with blue, yellow, pink and green lights after dark. Neon flowers also burst into bloom." (3) Many people seated on benches along the mosaic walk. The unique ceiling is decorated with neon flowers and growing plants. (4) People eating at individual tables on the terraces at Clifton's Brookdale. Singing birds are in cages. (5) Two plates of food on a table, with salt and pepper shakers: " 25ϕ plate includes meat, potatoes, carrots, bran muffin and butter. Even cheaper is 5ϕ *Vita-Meal;* soybeans, rice, meat and vegetables cooked together, plus cookie."

Note 1. This is the earliest document seen (Jan. 2011) that mentions "Vita-Meal" in connection with Clifford Clinton or his cafeterias in Los Angeles. Vita-Meal was a forerunner of Multi-Purpose Meal and Multi-Purpose Food (MPF). (6) Dinner at the Clinton family home. Clifford is standing, apparently serving. Many people are seated around the large dining table, including business associates and his wife's parents. (7) Two plates of food on a table, with salt and pepper shakers plus a glass or milk. "30¢ plate offers four choices of entree, adds salad, milk, pie. Until the war, Clinton's meals included portions of free sherbet, free limeade and free lollipops for children. (8) The swimming pool at the Clinton's home; it is open to employees. Clifford Clinton is in the pool, resting by the edge. Esther Orrin, a cafeteria checker, rides joyfully on a swing, high above the pool. One of the 16 rooms in the Clinton home is an employee hospital.

Note 2. What happened to the string of restaurants that Clifford Clinton planned to open across America? Donald Clinton, his son says (21 Jan. 2011): "Dad tried one of his small community center prototypes. It did not work, so he threw himself into Meals for Millions." Address: Los Angeles, California.

22. Photograph of Clifford Clinton at the "peep hole" in the front door of the family's residence in Los Angeles. 1944.



• *Summary:* The plaque below the "peep hole" reads: "Our door's unlatched for every guest. Let he who enters find peace and rest."

Donald Clinton explains: "We did find a street person on the living room couch one morning, when we came down to breakfast. We never locked the doors. They were kinder and gentler times then."

This photo and date were sent to Soyinfo Center by Donald Clinton, son of Clifford Clinton (Jan. 2011).

23. Photograph of Clifford Clinton in U.S. army uniform on a balcony overlooking Clifton's Pacific Seas cafeteria in Los Angeles. 1944.



• *Summary:* This photo and date were sent to Soyinfo Center by Donald Clinton, son of Clifford Clinton (Jan. 2011).

24. Product Name: Multi-Purpose Meal (MPM). Renamed Multi-Purpose Food (MPF) by Nov. 1947.
Manufacturer's Name: Meals for Millions Foundation, Inc.; F.W. Boltz Corp.; C.B. Gentry Co.
Manufacturer's Address: 648 South Broadway, Los Angeles 14, California.
Date of Introduction: 1945. January.

Ingredients: Soy grits (68.0%; low fat, expeller process, precooked and dehydrated, 50% protein), dehydrated vegetables (23.4%; combinations as desired of onions, potatoes, green pepper, cabbage, tomatoes, celery, parsley, leeks, garlic and chili peppers), seasonings (8.6%; each manufacturer has his own seasoning blend).

Wt/Vol., Packaging, Price: 2.25 oz or bulk. How Stored: Shelf stable.

New Product–Documentation: Paul de Kruif. 1945. Reader's Digest. Sept. p. 50-52. "How we can help feed Europe's Hungry; *Soybean Digest*. 1945. Dec. p. 14. "To feed world's starving peoples: M.P.M. Five-cent soy meal." "The result, late in 1944, was the 'multi-purpose meal.' Its tasty formula is dominated by 68 percent of soybean grits, FOUNDATION, INCORPORATED (Non-Profit) 648 South Broadway By

(Net Weight 11/4 Pounds-10 or More Servings) Packed for

GENTRY, Inc.

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Two ounces dry weight of MPF provide 1/3 of the minimum daily requirements for an adult man as established by the Food and Nutrition Board of the National Research Council and the U. S. Pure Food and Drug Administration, for Protein, Calcium, Iron, Vitamins A, B-1, Riboflavin (B-2), Niacinamide and D. It approximates the nutritional value of a meal of beef, green peas, milk and potatoes.

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low in fat and high in protein... The multi-purpose meal, or MPM, is simple to prepare. All that's needed is a kettle, water and the fire to boil it..."

"Two firms now manufacturing MPM are F.W. Boltz Corp., 3614 Council St., Los Angeles, California, and C.B. Gentry Co., 837 N. Spring St., Los Angeles. Note: Neither of these first two articles mention Meals for Millions Foundation (the developer and marketer of MPM) which was established in 1946.

Three photos show three different sides of an early 1¹/₄ lb. can. The front panel reads: "Ten or more servings. Two ounces dry weight of MPF provide 1/3 of the minimum daily requirements for an adult man as established by the Food and Nutrition Board of the National Research Council and the U.S. Pure Food and Drug Administration, for Protein, Calcium, Iron, Vitamins A, B-1, Riboflavin (B-2), Niacinamide and D. It approximates the nutritional value of a meal of beef, green peas, milk and potatoes.

"Keep tightly covered in a cool dry place."

A second panel, "To cook MPF," gives recipes for using it as a Meal, a Soup, a Food Extender (for stew, casserole or baked dishes, leaves or patties), a Stuffing. "The Meals for Millions Foundation invites recipes or suggestions for other uses of MPF."

A third panel explains briefly the advantages of Multi-Purpose Food: Nutritious. Fortified. Satisfying. Concentrated. Convenient, Adaptable. Acceptable. Versatile. Inexpensive. "Multi-Purpose Food, based on a formula developed by the California Institute of Technology, is made available by the Meals for Millions Foundation, a non-profit corporation for the prevention of starvation. The Foundation cooperates with relief agencies in making MPF widely available. It is the gift of friends in America eager to help their fellow-men wherever there is need to supplement inadequate diets. It is partial payment on the debt which men owe to one another and to God."

25. *Age (The) (Melbourne, Australia)*. 1945. Pay what you wish: Golden Rule business a remarkable restaurant. Feb. 3. p. 4. [1 ref]

• *Summary:* "From our Special Correspondent in Los Angeles. 'Pay what you wish' is the slogan of Clifton's Pacific Seas Cafeteria in Los Angeles, California, one of the most remarkable restaurants in the world. Designed to give a South Sea Island Effect, the exterior is constructed of imitation boulders, palms and waterfalls."

The food here "is sensationally cheap. Whatever amount your meal check says, however, you may pay exactly what you think the food is worth–or pay nothing at all. On every check the statement appears. 'Regardless of the amount of this check our cashier will cheerfully accept whatever you wish to pay–or you may dine free.' It is merely an estimate based on experience, designed to produce the lowest margin of profit on which the cafeteria can be continued."

"If you have a birthday, a free birthday cake and a decorated table await you... Last year 11,000 birthday cakes were presented."

"Benefits to employees include recreation, shower, rest and game rooms, group insurance, medical examinations, complete medical or surgical service [insurance] and prescribed medicines without cost; a schedule of sick pay; hospitalization and convalescence at the Hollywood home of the owner, bonus participation and exceptional bonuses in cases of unusual necessity; co-operation in athletic, social and choral activities. Mr. Clinton's home with its fine swimming pool, his cabins at Lake Arrowhead and Santa Cruz are at the disposal of employees for parties, weddings, vacations and illness. There is also a civic centre at Pacific Seas, the head quarters of the Civic Committee, of which Mr. Clinton is chairman." The committee keeps an eye out for corruption and waste in Los Angeles' government.

A large photo shows Australian and American servicemen in Clinton's Pacific Seas Cafeteria.

26. United Press. 1945. Mayor Bowron is re-elected. Oxnard Press-Courier (Southern California). April 5. p. 6.
Summary: Los Angeles-Mayor Fletcher Bowron won another 4 years in office today. "A slow second was cafeteria owner Clifford Clinton, at one time the mayor's chief political backer who conceded his defeat in a message pledging 'to continue to help make Los Angeles a finer city." Late returns gave Clinton 22,181 votes," about 10,000 behind Bowron.

27. *Business Week*. 1945. Meal in one: United Nations delegates try precooked, dehydrated dish that may be widely used to feed liberated peoples of Europe. May 12. p. 22, 24.

• *Summary:* Vitameal [Vita-Meal] is on the menu of Clinton's Cafeteria in Los Angeles, and (starting last week) on the menu of the United Nations Conference cafeteria located in the Opera House in San Francisco, where it is a sort of mystery food–a stew today, a soup tomorrow, and an entree the next day.

Dr. Henry Borsook, professor of biochemistry at the California Institute of Technology, developed the new food, and referred to it as a "multipurpose meal." He considers it to be far superior to other dehydrated foods in palatability, nutritional value, ease of preparation, and versatility. It can be used as a food extender, a food supplement, and in many other ways.

To prepare it: Add enough water and cook for half an hour. You can add a bit of fat for taste plus some calories [such as rice] to make a real meal. Dr. Borsook realized that if it passed the taste test with the U.N. representatives of the liberated countries, it would be accepted for their people. The meal contains the following mixed ingredients: Lima beans (flaked and dehydrated), soy grits (tunneldehydrated), potatoes, cabbage, parsley, tomatoes, onions, and leeks plus a skillful blend of 17 flavoring ingredients such as paprika, onion powder, sweet basil and bay leaf. It is fortified with vitamins A, B-1, B-2 and niacin, and with calcium and iron.

This new food cannot be sold–except at Clinton's Cafeteria. A year ago, Clinton asked Dr. Borsook, a leading food technologist, to help him improve the quality of the 5ϕ meal he served at this cafeteria. The result of Dr. Borsook's research was this multipurpose meal, now served at the cafeteria (with bread and a cookie) for 5ϕ .

George Mardikian, owner of San Francisco's famous Omar Khayyam Restaurant, is in charge of food arrangements for Conference delegates and their advisers at the Opera House. He liked the taste of the new food, as did the women who helped him, so he was selected to introduce it to the Conference. It is now served daily in various forms.

American Relief for France, Inc. has already sent an order to F.W. Boltz Corp., Los Angeles (the manufacturer) for the use of tuberculous children in France.

Note 1. This is the earliest document seen (Jan. 2011) that mentions Dr. Henry Borsook in connection with "multipurpose meal" or Multi-Purpose Food–which he developed.

Note 2. This is the earliest document seen (Dec. 2001) concerning the United Nations (or any of its organizations, such as FAO) in connection with soy.

28. Borsook, Henry. 1945. A nutritionally adequate, low-cost Multi-Purpose Meal. Unpublished typescript. * *Summary:* "A combination of legumes and cereal and other vegetable proteins can provide the protein equivalent to meat or eggs. By adding to this mixture calcium, iron salts and certain synthetic vitamins, a vegetable mixture can be made which is the nutritional equivalent of meat and dairy products at far less cost. The food engineer thus can do more than contrive substitutes for certain natural (i.e. unprocessed) foods. He can make low cost foods as nutritious as expensive foods." Address: PhD, M.D., Prof. of Biochemistry, California Inst. of Technology, Pasadena, California.

29. Clinton, Clifford E. 1945. Subsistence feeding. Los Angeles, California: Clifton's. 5 p. Unpublished typescript. June 1. 28 cm.

• *Summary:* "In response to many inquiries regarding 'Vita-Meal' (Multi-Purpose)–the 5¢ meal served at Clifton's–the following information has been prepared.

"History: Since 1931, in accord with the policy of not turning any person away hungry regardless of funds, Clifton's has been serving a subsistence meal, given free to those without means of payment. At first this was provided in conventional foods at 1ϕ per portion. Later a complete 5ϕ meal was offered consisting of entree (Spanish rice, stew, maccaroni dish, etc.), potatoes, vegetable, drink and dessert. This was supplemented by a 1ϕ meal consisting of rice with hot soup and vegetables poured over it. Those without funds were given this meal free.

"In 1943, in line with an expansion program, Clifton's sought the advice of Dr. Henry Borsook, professor of Biochemistry at California Institute of Technology, in standardizing a formula for a multi-purpose meal which should meet the following requirements.

"1. It must be really palatable, whether served hot or cold.

"2. It should be packageable and keep well over long periods without refrigeration.

"3. It should be practicable for preparation and handling.

"4. It should provide adequate subsistence for one person for one-third of a day with essential vitamin and mineral constituents.

"5. While designed primarily for service from restaurant facilities, it should be adaptable to dispensation where facilities are primitive; for use in relief and rehabilitation work without reliance on special equipment.

"6. The cost, including packaging, must be 5ϕ or less.

"7. To avoid monotony in frequent use it should be adaptable to combination with small amounts of other food and assume the dominant flavor of added items.

"8. It must cook easily and quickly.

"9. It must be readily acceptable to both large and small scale cooking.

"10. It should incur no drain on scarce civilian food supplies of the United States if used for overseas relief feeding.

"Dr. Borsook undertook to meet these requirements and Clifton's initially sponsored the research, assisting financially and in the establishment of an Experimental Kitchen at the Institute presided over by a skilled French cook, Madame Soulange [Berczeller].

"It was concluded that the requirements set up could only be met by the use of dehydrated foods, fortified with vitamin and mineral concentrates.

"After the constituents had been generally agreed upon and it was placed in service at Clifton's as 'Vita-Meal,' the California Dehydrator's Association joined in the sponsorship of the research, broadening its scope to other problems of dehydrated foods.

"The multi-purpose meal formula was thereupon stated in terms of dehydrated components and soy-beans. Manufacture was undertaken by F.W. Boltz, Los Angeles dehydrator. Mr. Boltz and his staff spent considerable time, effort and money in further experimentation improving the pre-cooking, processing and combination of the various items, developing manufacturing methods and introducing the product to prospective large-scale users, public agencies. He also was instrumental in making available a plan for large scale production through facilities of other dehydrators and food processors throughout the United States.

"A 20,000 pound trial order was placed by the French relief agency in April 1945. It was through Mr. Boltz that the meal, prepared by the famous chef of the Omar Khayyam restaurant, George Mardikian, was served to delegates to the United Nations Conference on International Organization at San Francisco.

"Character of the Multi-Purpose Meal:" Thirteen characteristics are listed; they are somewhat different from the 10 requirements that Mr. Clinton presented to Dr. Borsook. For example: "2. It violates no dietary rule of any religious faith." "7. The food cost is approximately 4ϕ per meal. 8. Protein base is supplied by soy-bean grits, to which are added dehydrated potatoes, cabbage, tomatoes, onions, leek, parsley, herbs, salt and pepper." 12. There is no patent on the formula..."

Preparation. Availability ("F.W. Boltz Corporation, 3614 Council Street, Los Angeles, California, is the present source of the basic product–Multi-Purpose Meal"). Percentage composition of Multi-Purpose Meal (Soy grits 68.0%. Potatoes 9.0%. Vegetable seasoning and salt 8.6%. Cabbage 4.5%. Onions 4.5%).

"Statement from article entitled: 'A Nutritionally-Adequate, Low-Cost Multi-Purpose Meal,' by Dr. Henry Borsook, California Institute of Technology, May, 1945."

"A combination of legumes and cereal and other vegetable proteins can provide the protein equivalent to meat or eggs. By adding to this mixture calcium, iron salts and certain synthetic vitamins, a vegetable mixture can be made which is the nutritional equivalent of meat and dairy products at far less cost. The food engineer thus can do more than contrive substitutes for certain natural (i.e. unprocessed) foods. He can make low cost foods as nutritious as expensive foods."

"Vita-Meal: As served daily at Clifton's 'Vita-Meal' (with Multi-Purpose Meal as its main constituent) contains two items:-1. Multi-Purpose Meal, prepared to take out in a small carton with a wooden spoon. 2. A dessert wafer. This is a chocolate sandwich-type cookie, the filling of which contains vitamin C, the fugitive vitamin found in leafy green vegetables and orange juice, but which is destroyed in cooking. This wafer is prepared by a Los Angeles firm specializing in vitamin preparations.

"At Clifton's the dehydrated Multi-Purpose Meal is enriched and varied by the addition of vegetable fats, meat, fish, nuts, cheese and other ingredients. These improve the flavor and give the meal a daily variety as well as raising the caloric value.

"More than 3 million subsistence meals of various types have been served at Clifton's. During the past year of

service, Multi-Purpose Meal has proven its claim to a place in any program for emergency or subsistence feeding."

Note: This is the earliest document seen (Dec. 2010) concerning Clifford Clinton and his work with Dr. Henry Borsook and the development of a highly nutritious, low-cost food. It is also the earliest document seen (Dec. 2010) that lists the ten requirements of the multi-purpose meal Dr. Borsook was asked to develop, or that gives its name as "Vita-Meal" or "Multi-Purpose Meal." Address: 618 So. Olive St.–648 So. Broadway, Los Angeles, California.

30. de Kruif, Paul. 1945. How we can help feed Europe's hungry. *Reader's Digest*. Sept. p. 50-52.

• *Summary:* The author, a skillful writer on popular science, discusses Meals for Millions and their multi-purpose meal. With Europe on the brink of starvation, scientists "have converted soybeans into powerful protein food that is *palatable*. Plentiful soya plus abundant wheat can change Europe's famine ration into a diet meaning the difference between life and death for millions...

"For the past four years Europe's people have been living on rations dangerously low in protein–and protein starvation breeds pestilence...

"The hopeful fact is that modern famine-fighters no longer think of food in terms of meat, milk, butter, eggs and vegetables, but rather in nutritive essentials–calories, proteins, minerals and vitamins...

"Viewers-with-alarm have reckoned without the soybean, a powerful newcomer among America's major food crops... But this versatile vegetable has had one failing: Western people, in general, haven't liked its taste and have refused to eat it.

"Luckily for Europe's threatened millions, chemists have now licked this one lack in the soybean. They've debittered its protein so that it takes on the taste of any food with which it is blended. Last spring's famine in Greece was checked with the help of soya in our War Food Administration's stew. But now the threat of starvation has spread all over Europe. Will it be possible to make soybeans so tasty that they can be made a major part of Europe's diet, along with wheat?

"The positive answer has come from California. In 1943, Clifford E. Clinton, who owns and manages two large cafeterias in Los Angeles, was serving as consultant on food to the War Department and UNRRA [United Nations Relief and Rehabilitation Administration]. He foresaw today's menace of European hunger and asked scientists of the California Institute of Technology to fight it. For their experiments he provided a money grant.

"Caltech's Dr. Henry Borsook turned nutritional practice topsy-turvy by beginning in the kitchen instead of the test tube. He hired a skilled French cook, Mme. Soulange Berzceller [sic, probably Berczeller], and in her Caltech kitchen palatability became boss of the experiment. The result, late in 1944, was the 'multi-purpose meal.'

"Its tasty formula is dominated by 68 percent of soybean grits, low in fat and high in protein. To this are added dehydrated potatoes, cabbage, tomatoes, onions, leeks, parsley and spices. It is fortified with calcium, concentrated Vitamins A and D, and the major B synthetic vitamins. It is a satisfying, sustaining food; it has eye appeal, bite appeal and taste appeal. I've eaten it, and can testify that it's good.

"The multi-purpose meal, or MPM, is simple to prepare. All that's needed is a kettle, water and the fire to boil it for 30 minutes. Two-and-a-quarter ounces of MPM, dry weight, furnishes the major portion of a highly palatable, nutritious meal for one person. It becomes a casserole dish, a stew or a soup, depending upon whether you add five, eight or 14 ounces of water. One ounce of any kind of fat brings the caloric value of MPM up to one third of a day's life-sustaining ration. If no fat is to be had, then two slices of bread make up the necessary calories...

"The new meal is well within the economy of the liberated nations. For five cents per serving, MPM can give Europe's hungry the nutritional equivalent of a meal consisting of one-quarter pound each of beef, peas and potatoes, and one-half pint of milk. Because it is dehydrated, MPM is compact and easy to ship.

"Of course the proof of this life-saving pudding is in its eating, and it has come triumphantly through its field trials. It is being served regularly to 7,000 children in the Burbank, California, schools and in more than 200 other schools in southern California, with high acceptance by pupils and teachers. In varied entrée combinations, it is being served at a rate of 400 meals a day in Clinton's Los Angeles cafeterias. MPM passed the exacting palatability tests of George Mardikian, famed owner-chef of the Omar Khayyam Restaurant in San Francisco, and under his supervision it was served regularly to the delegates at the United Nations Conference. No element in it violates the dietary customs and laws of any nation; and delegates from all parts of the world spoke highly of its palatability.

"Caltech's scientists, Clifford Clinton and the California dehydrators who developed MPM have taken out no patents. Its formula and know-how are free to anyone requesting it from the California Institute of Technology, Pasadena, Calif."

Note 1. This is earliest document seen (Jan. 2011) that mentions "Meals for Millions" of Los Angeles, or that mentions their "multi-purpose meal." It is also the earliest published document seen concerning Clifford E. Clinton in connection with this organization (which he founded) or this food (which he conceived of and paid to have developed).

Note 2. Victory in Europe Day was 8 May 1945. On that date the World War II Allies formally accepted the

unconditional surrender of the armed forces of Nazi Germany and the end of Adolf Hitler's Third Reich.

31. Los Angeles Times. 1945. Quiz 'em. Oct. 21. p. E13.Summary: 2. Hungry Europe: What is the multi-purpose food that we are making to alleviate hunger in Europe?

Answer: It's a dehydrated mixture. A pound of it will make 5 pounds of stew, or a 5-gallon can of it will make 1,000 bowls of soup.–I.D.W., Taunton, Massachusetts.

Note 1. This is the earliest document seen (and the earliest item seen in the *Los Angeles Times*) (Jan. 2011) that mentions "multi-purpose food." It is not a real article but a very brief letter to the editor. The *Times* has not yet mentioned the "Meals for Millions Foundation" or Clifford Clinton's work with famine relief. One soon gets the strong impression that the *Los Angeles Times* was deliberately not covering Clinton's work with Meals for Millions and multi-purpose food.

Before 1960 the *Los Angeles Times* had been part of the power structure in Los Angeles. Harry Chandler (Otis Chandler's son; 2nd generation) ran the paper from 1917 to 1944. He was ruthless and a real estate speculator. When Clifford Clinton and the CIVIC committee (see *Food for Thot*, March 12, 1970) worked to clean up waste and corruption in Los Angeles from about 1936-1941, the *Times* strongly opposed their efforts and either gave their reform work scant coverage or covered it with critical, one-sided articles.

In 1944 Norman Chandler (Harry's son and 3rd generation) took charge of the paper, and with his wife Dorothy Buffum, tried to make the paper more respectable, but their work was opposed by other branches of the powerful Chandler family.

In 1960, Otis Chandler (4th generation) took charge of the newspaper. He transformed the *Times* from a journalistic outcast to one of the most respected papers in the USA, and made excellent money at the same time. "Let's Be the Best" was his motto, and he won 12-14 Pulitzer Prizes. The right wing faction of the Chandler family hated his new policy of fair and balanced reporting, and manipulated behind the scenes.

Therefore any articles about Clifford Clinton or his work published in the *Los Angeles Times* before 1960 must be viewed with caution and in light of the views of the newspaper. Source: "Inventing L.A.: The Chandlers and Their Times," documentary on PBS-TV, Oct. 2009.

Note 2. This short article also appeared in the Chicago *Sun* on this same date.

32. *Soybean Digest*.1945. To feed world's starving peoples: M.P.M. Five-cent soy meal. Dec. p. 14.

• *Summary:* Based on an article by Paul de Kruif in *Reader's Digest,* this one adds some details. "A food consisting of 68 percent soy grits combined with dehydrated

vegetables and seasoning and costing only 3½ cents per portion will save the lives of millions of starving people in coming months if the 15-year-old dream of a Los Angeles cafeteria owner to 'put a floor under hunger' is realized.

"This one dish Multi-Purpose Meal (MPM for short) was served regularly to delegates at the United Nations Conference...

"For years Clinton had been experimenting with emergency meals selling for as low as 5 cents to low income people in his cafeterias...

"The basic formula for the Multi-Purpose Meal, as submitted by Dr. Borsook, follows: Soy grits (68.0%; low fat, expeller process, precooked and dehydrated, 50% protein), dehydrated vegetables (23.4%; combinations as desired of onions, potatoes, green pepper, cabbage, tomatoes, celery, parsley, leeks, garlic and chili peppers), seasonings (8.6%; each manufacturer has his own seasoning blend).

"Two firms now manufacturing MPM are F.W. Bolz [sic, Boltz] Corp., 3614 Council St., Los Angeles, California, and C.B. Gentry Co., 837 N. Spring St., Los Angeles."

A photo shows the gaudy outside of one of Clifton's cafeterias in Los Angeles, with a waterfall flowing down the roof above the front door.

33. Photograph of Clifford Clinton (Los Angeles, California). 1945.



• *Summary:* Clifford Clinton, a Los Angeles restaurateur, was the key person behind the development of Multi-Purpose Food.

This photo and date were sent to Soyinfo Center by Chris Dodson of Freedom from Hunger Foundation, Davis, California (Oct. 2010). The original of this photo hangs in the conference room at Freedom from Hunger.

34. Photograph of Clifford Clinton shaking hands with Dr. William Graves. 1945.



• *Summary:* Taken in Clifford Clinton's den / office at home, 5470 Los Feliz Blvd., Los Angeles. Dr. Graves was a personal friend and naturopathic, DC [Doctor of Chiropractic]. Clifford was the only person in the Clinton family that Dr. Graves treated. Dr. Graves was also a fisherman and High Sierra camper, which Clifford Clinton was not. Donald Clinton recalls: "Dad put me in the doctor's care for several outings to the golden trout country of the High Sierras, when I was 16 and 17. His family of wife and 2 boys would often come to the house for a swim and a visit."

This photo and date were sent to Soyinfo Center by Donald Clinton, son of Clifford Clinton (Jan. 2011).

35. *Los Angeles Times*.1946. Eugene Williams appointed to prosecute Tojo. April 13. p. 1.

• *Summary:* A photo shows Eugene D. Williams, who has been named as prosecutor for the Japanese war trials. Known as one of the most effective U.S. criminal prosecutors, he is presently head of the lands division in the U.S. Department of Justice in Los Angeles. He has been "appointed as a special prosecutor by the War Department to try Premier Tojo and 19 other major Jap war criminals."

"Won Clinton action: The veteran prosecutor was involved in many Los Angeles legal fights, including a bitterly contested suit he instituted against Clifford Clinton and his son, Edmund [sic, Edmond] Clinton. The Clintons had accused Williams of paying \$15,000 to Peter Del Gado to leave the city in the Fitts-Dockweiler campaign.

[Note: In the Nov. 1940 election for district attorney, John Dockweiler was a Los Angeles lawyer, age 45, and a Democrat. In sharp contrast, Fitts, the Republican, was backed by the powerful *Los Angeles Times*, his steadfast ally through the years. According to a book by John Christgau, Fitts "was from the common folk, a war hero, a homely but brave man of action who was credited with having run hoodlums and spies out of Los Angeles. He had dared to defy the gangsters who had twice tried to assassinate him." Clifford Clinton supported Dockweiler, and his regular radio attacks on Fitts were described as "mean spirited and strident." Source: The Gambler and the Bug Boy, by John Christgau (2007, p. 162); Christgau strongly favored Fitts].

Williams brought a libel suit against Clinton "and was awarded nominal damages of \$1 in 1941 after he had returned to private practice."

Note: This article helps to explain the relatively scant and superficial coverage given by the *Los Angeles Times* to Meals for Millions and its founder, Clifford Clinton.

36. Associated Press. 1946. Multi-Purpose Food made in California for Hungry China. *Spokane Daily Chronicle (Washington)*. April 29. p. 2.

• *Summary:* Los Angeles, April 20. Two California food makers announced today that they have started to ship 16 million pounds of scientifically prepared food to provide 512 million bowls of soup.

"The food, made primarily from soy beans, was ordered by the United Nations relief and rehabilitation administration."

The formula for the food was developed, after two years of research, by Dr. Henry Borsook, professor of biochemistry at the California Institute of Technology and a widely respected authority on nutrition. "The preparation is similar to Borsook's 'multi-purpose meal' which was sampled by delegates to the San Francisco conference."

Note: At this conference, held April 25 to June 6, 1945, the idea of a United Nations and its organization was discussed and debated. The United Nations Charter was signed three weeks later on 26 June 1945 in San Francisco.

Miss Josephine Williams, a nutritionist who worked with Dr. Borsook on his research, said the new food–which was designed to give a maximum of protein–is 50% soya grits, with the balance composed of split peas, wheat flour, and a small percentage of peanut meal, salt, onion powder, and a flavoring of fish oil to please the Asian palate.

37. E.M.S. 1946. Good 5-cent meals for U.S. in plan for world's hungry *Christian Science Monitor*. June 4. p. 5. *Summary:* Clifford Clinton, the well-known restaurateur of Los Angeles, California, has just outlined a plan for the

establishment of 20,000 nation-wide community centers, where one can get a low-cost nutritious meal.

He believes that such meals are the answer to the problem of feeding the millions who are hungry in war-torn Europe and Asia–without depriving Americans of food they need.

Mr. Clinton has established a reputation for the price policy of his restaurants: "Pay what you wish–dine free unless delighted." He will not turn away a single hungry person. Yet his restaurants have thrived on this policy and today they serve 16,000 meals a day.

During the depression years of the 1930s, Mr. Clinton started in Los Angeles what he called the "penny restaurant," at which he recorded more than a million meals served. In one 90-day period, 10,000 free meals were served to those who could not pay.

Clinton started his first restaurant in 1931. He has also served as a food consultant to the Quartermaster Corps of the army, as well as to the United Nations Relief and Rehabilitation Administration (UNRRA).

His long experience with food enabled him to foresee that there would be famine in Europe and Asia after the recent war. So he began to focus on a solution to the problem before it actually happened. He obtained the interest and help of Dr. Henry Borsook, Chief Biochemist at the California Institute of Technology and a member of the prestigious National Research Council. Mr. Clinton provided a grant to Dr. Borsook to fund his research in developing a nutritious, low-cost meal.

"Today he is serving thousands of his M.P.M.–Multi-Purpose Meals–at his Los Angeles Restaurants for five cents each." This "complete meal" is attractively served in a paper container with a paper spoon and a paper napkin plus a chocolate wafer for dessert. And the whole meal costs only five cents!

Note: This is the earliest document seen (Dec. 2010) that mentions "M.P.M." or "Multi-Purpose Meals." Apparently the M.P.M. were originally designed specifically for use in Clinton's Los Angeles restaurants.

Mr. Clinton explains that the actual food in the meal costs only 2¹/₂ cents. At a demonstration for the writer and a group of distinguished guests at a private home in Los Angeles, Mr. Clinton shows how quickly and easily one meal in a 2-ounce package could be prepared. The contents was simply boiled in water for about 7 minutes.

"When served, the M.P.M. resembled a cooked cereal, but was delightfully palatable." A list of the ingredients is given-the main one being soy grits [which are left over after the soybean is crushed to make oil and meal].

The eleven basic criteria (as presented to Dr. Borsook) that each meal has to meet are listed. For example. "1. It has to be basically available for shipment from America in huge quantities, yet not rob the American consumer of any natural or raw food such as would be lost in the shipment abroad of vast quantities of meat, fish, poultry, vegetables, or such other common food;"

In short, M.P.M. offers a practical, workable solution to the immediate problem: How can we feed the hungry people of Europe and Asia without going hungry ourselves.

The proof of this life-saving pudding is in the eating, of course. Not only is it served and enjoyed in Mr. Clinton's restaurants and cafeterias, "it has been served to thousands of California school children, and during the United Nations Conference [1945] it was served to the delegates regularly by George Mardikian, owner-chef of the noted Omar Khayyam restaurant in San Francisco."

A photo titled "A complete meal–five cents" shows Clifford E. Clinton operator of Los Angeles, California, restaurants which serve 16,000 meals daily, preparing one of his M.P.M.–Multi-Purpose Meals.

38. *Christian Science Monitor*. 1946. Full steak dinner for only 3 cents!–Boston samples M.P.M. equivalent. July 17. p. 4.

• *Summary:* "As food prices soared to new highs today, members of the Christian Businessmen's Committee of Greater Boston gathered at the City Club this noon for the equivalent of a complete beefsteak dinner–at a cost of only three cents!"

They enjoyed the new M.P.M.–Multi-Purpose Meal– sponsored by the nonprofit Meals for Millions Foundation, Inc., under the leadership of Los Angeles restaurateur Clifford E. Clinton. The meal was developed as a relief food for those left hungry after the recent war.

The Foundation is arranging for the distribution of M.P.M.'s to the hungry via authorized U.S. agencies. The food is not yet made or sold commercially–but it may be if domestic food prices continue to rise.

Yesterday the M.P.M. was served to a group of social welfare workers at a private home in Boston, and to another group at Thompson's Spa in Newspaper Row.

Eight different companies presently manufacture the relief food at the rate of 100,000 meals a day. Mr. Clinton says this can soon be increased to 3 million meals a day. The goal set by the Meals for Millions Foundation is 125 million meals a day and Mr. Clinton says it is entirely practical and possible to make that number in 1947.

Note: This is the earliest document seen (Feb. 2011) that gives "3 cents" (or 3ϕ) as the cost of one of Mr. Clinton's new meals.

39. Ellensburg Daily Record (Ellensburg,

Washington).1946. Three cent meal fills all needs. Aug. 1. p. 8.

• *Summary:* "'M.P.M.'–is the Multi-Purpose Meal that offers at three cents a food comparable to a meal of beef, potatoes, green peas and milk..." It is backed by "Meals for

Millions Foundation, Inc., a citizens voluntary non-profit effort to prevent starvation organized recently in California.

"The California foundation, advised by notable personalities such as Pearl Buck, Clarence Dykstra, and E. Stanley Jones, proposes to feed the world's hungry with Multi-Purpose Meal evolved [developed] some months ago by Dr. Henry Borsook, chief biochemist at the California Institute of Technology. This low-cost food has already been used extensively in relief work.

The new food is described in an article by Paul de Kruif in *Reader's Digest* (Sept. 1945).

"Los Angeles is at present engaged in a fund-raising campaign to purchase M.P.M. and conserve food to give to authorized relief agencies."

40. Roosevelt, Eleanor. 1946. My day. *Toldeo Blade* (*Toledo, Ohio*). Aug. 1. p. 19.

• *Summary:* Campobello Island [New Brunswick, Canada], Wednesday.–Not long ago I was visited by a business man who has used his business not only for personal success but also as a means to achieve something for the good of mankind. He is in the restaurant business in Los Angeles.

"He comes from a family of missionaries who spent many years in China. They were, therefore, familiar with famine before the war made famine a word familiar in an ever-increasing area.

"Mr. Clinton developed a food which can be quickly prepared and is palatable. In famine areas, each little package would furnish a person with enough to sustain him for a third of a day. Mr. Clinton's son prepared a small quantity of this food for me and explained that it could have a variety of flavors. Preparation takes about 5 minutes. This food is good and I think it might serve as a basis for a satisfactory diet and be a great benefit in areas where it is difficult to ship and distribute supplies.

"Mr. Clinton started his business in the early depression years and made up his mind that no one, even if he could not pay, would be turned away hungry. So he developed a 5cent meal, and anyone who did not have the 5 cents could obtain the meal free. In his laboratory, this food product has undergone many changes since those days.

"He is hoping to collaborate with relief agencies everywhere. I can see that this might come to be a basic food used to great advantage for such things as our schoollunch program. He has formed a corporation called Meals for Millions Foundation. It is organized for humanitarian purposes and will not be operated for profit."

Mr. Clinton "seems to be one of those rare business men who, having a successful business, are willing to put time and money into benefitting mankind." A small portrait photo shows Eleanor Roosevelt.

Note: This column is widely syndicated. This article appeared in the St. Petersburg Times (Florida) (2 Aug. 1946, p. 25).

41. Soybean Digest. 1946. Grits and flakes... from the world of soy: Clifton's Cafeterias, Los Angeles... Dec. p. 30. • Summary: "... plans to offer its patrons a drink which is 95 percent whole milk, 5 percent soya milk, with vitamin C enrichment, to be called 'Mil C.' Clifton's objects, however, to labeling the product 'imitation milk' as required by California's law."

42. Meals for Millions Foundation. 1946-1967. Meals for Millions Foundation Records, 1946-1967 (Finding aid for archival collection). Los Angeles, California: University of California at Los Angeles (UCLA). 48 boxes (24 linear feet). 1 oversize box.

• *Summary:* Collection No. 1107. Repository: UCLA Library, Dep. of Special Collections, Los Angeles. Physical location: Stored off-site at SRLF (Southern Regional Library Facility). Please contact UCLA for paging information.

"The Meals for Millions Foundation of Los Angeles was a non-profit organization dedicated to the eradication of hunger in the world through 'three-cent meals.' The plan for such a program was formulated by Clifford Clinton (of Clifton cafeterias in Los Angeles, California), who, with the assistance of Dr. Henry Borsook of Caltech organized the foundation in 1946. The basic product of the foundation, known as Multi-purpose Food, was a tasteless additive that could be mixed with virtually anything. Developed by Dr. Borsook, MPF was said to provide one-third of the daily vitamins, minerals, and protein needed by the average adult.

"Shortly after setting up the Foundation, Clinton brought in Florence Rose and Ernest Chamberlain to be codirectors and take over the day-to-day management. This collection or archive consists primarily of the office and personal files of Miss Rose, most of which she rescued from destruction when Meals for Millions began to change course in 1965. Florence Rose left the Foundation at that time and was then associated with Investors Overseas Services until her death in 1969.

"The collection came to UCLA indirectly (via Smith College [although Florence Rose's personal papers are still at Smith College]) from Ernest Chamberlain, close friend and confident of Miss Rose. The files have been alphabetically listed and their arrangement retained as originally filed. Consequently, a great deal of duplication exists throughout and the interrelationships of materials are often cloudy at best" (Quoted from the Biographical narrative on the website, July 2007). Organization: Arranged in the following series: 1. Alphabetical files of the Meals for Millions (MFM) Foundation (boxes 1-21); 2. Miscellaneous unsorted correspondence and ephemera (boxes 22-26); 3. Miscellaneous printed material (boxes 31-37); 5. MFM projects in foreign countries (boxes 38-47); 6. Miscellaneous files re soybeans, MFM staff and financial information, newspapers (box 48); 7. Two records by Peggy Lee produced for MFM, photographs, People to people film (oversize box).

Boxes 38 to 47 are MFM projects in foreign countries or regions, listed alphabetically: Africa, Alaska, Argentina, Bolivia, Brazil, Ceylon, Chile, Finland, Germany, Haiti, Honduras, Hong Kong, Hungary, Iceland, India (5), Indonesia, Israel, Japan, Korea, Lebanon, Mexico, Pakistan, Paraguay, Peru, Philippines, South Vietnam, Taiwan, Tanzania, Thailand, Uruguay, Vietnam. Box 48 is oversize materials.

URL: http:// www.library.ucla.edu/ libraries/special/ scweb/. Address: Los Angeles, California.

43. Hornaday, Mary. 1947. 5-cent meals for millions: Red tape still tangles mass relief. *Christian Science Monitor*. April 25. p. 11.

• *Summary:* This is a story of a Los Angeles man who is becoming a world benefactor through 'Meals for Millions,' an organization that he founded, yet is not a hero in his own city.

Of course he is well known as the owner of the two most talked about restaurants in Los Angeles, where anyone can get a meal for free if he can't pay.

But this story really started back in 1943 when Mr. Clinton paid \$5,000 of his own money to fund a new research project by Dr. Henry Borsook at the California Institute of Technology in Pasadena. One of America's leading biochemists, he was challenged to develop a dehydrated, nutritious meal that could be sold for 5 cents. Dr. Borsook finally developed the meal that met all of the criteria that Mr. Clinton had given him. It was based on protein-rich soya bean grits, which few Americans have learned to eat or appreciate.

To find out if people liked the new food, he first tried it out in his own cafeterias as a "stretcher." Then he began to serve (or sell) it to church groups and others engaged in international relief.

Today approximately 2 million tons of the new food have been shipped abroad. The Meals for Millions Foundation paid for about 25% of this from money it had collected as donations, mostly from California but also from other states. The other 75% was "bought out of the purchasing pool the foundation maintains for various relief groups such as the American Friends Service and the World Church Service."

A list of countries in Europe and Asia which have received sizeable shipments is given. With the termination of UNRRA, Meals for Millions expects to become more prominent in the world food relief picture.

For some reason, Mr. Clinton has never been able to enlist the support of his home town, Los Angeles, in his humanitarian venture. He has never been able to launch a drive for funds in this thriving business city.

First he was told to wait until after the Community Chest drive (to meet local welfare needs) was over. Then he was told to delay the drive so it would not interfere with Christmas shopping. Then someone quoted President Truman's Famine Emergency Relief Committee as saying that the danger of post-war starvation was past.

"In the past, Mr. Clinton has had some political ambitions in this city. There are those who hint that a drive" to relieve overseas famine "might have enhanced his local political position unduly."

But that sort of thinking would not make much sense to the masses now reported to be starving in war-torn countries abroad–such as Moldavia (in northern Romania), Austria, Greece, Italy, Poland, and Yugoslavia. Address: CSM Pacific News Bureau.

44. *Lodi News-Sentinel (California)*. 1947. Dehydrated food to be introduced: Church to back local "Meals for Millions" plan. Sept. 26. p. 1.

• *Summary:* "'Meals for Millions,' a new food manufactured especially to save Europe's starving millions, will be introduced to the Lodi public for the first time Friday evening, October 3, at the First Congregational Church.

"Some 1,500 meals of the 'wonder' food will be served to the public," prepared in various ways, by members of the Pilgrim Fellowship, the church's youth organization. A green salad will also be served.

"Formerly known as Multi-Purpose Food, 'Meals for Millions' were created only a year ago by Clifford E. Clinton, owner of the Clinton Cafes in Los Angeles.

"Assigned job: Clinton was asked by the government to prepare some type of dehydrated food that was tasty, economical, easy to prepare, and easy to preserve. 'Meals for Millions' was the result.

"The food, when cooked alone, is said to have the flavor of tamale pie, but it rapidly takes the flavor of any food with which it is cooked. It costs but 3 cents per meal and is not made of materials valuable to the United States.

"One million meals can be transported in one airplane at a time in the vacuum tight tins in which it is stored. In appearance it resembles corn meal and will not spoil. Three million meals of the food have already been served to Europe's starving.

"The food may be sent to foreign countries only through reputable organizations which include churches, war relief agencies, Save the Children Federation, and others listed in the pamphlet available to interested persons.

"Not for profit: Clinton, who has formed a corporation called 'Meals for Millions Foundation,' declares that the organization is organized for humanitarian purposes and is not operated for a profit. Persons wishing to contribute to the Foundation may do so at Friday's dinner meeting.

Note: Was the food really called "Meals for Millions" at this time? Did the government ask Clifford Clinton to develop it?

45. *Lodi News-Sentinel (California)*.1947. Low cost food now on view. Sept. 30. p. 8.

• *Summary:* "Meals for Millions,' a new dehydrated food which will be introduced to the Lodi community for the first time Friday night in the First Congregational Church, may now be seen on display in the Lodi Public Library.

"Especially arranged to explain the food's caloric value, the exhibit consists of a variety of foods common to use in the United States which are equal in caloric value to the displayed can of meal. Miss Amy Boynton, head librarian, arranged the display.

"Some 1,500 meals of the new food will be prepared in various ways and served with a green salad to interested persons, regardless of denomination, Friday night. The meal is entirely free of charge, but a collection will be taken up to help the church's youth organization send some of the food to Europe. Movies concerning the food and Europe's starving will be shown during the meal and records will be played to help promote the drive.

"Instructions will be given Friday night as to how the public may help finance the transporting of the food to Europe."

46. Stuart, Roger. 1947. Substitute food may go to Europe: Shortage at home may compel it. *Pittsburg Press* (*Pennsylvania*). Oct. 10. p. 12.

• *Summary:* Washington, DC–The food shortage is forcing government relief agencies to consider shipment of low-cost food substitutes to feed Europe's starving millions.

"One substitute under consideration is a by-product of the soybean called "multi-purpose food." Its cost is about three cents a meal. Its backers–Meals for Millions Foundation, Inc., of Los Angeles–say that though it makes no use of meat or cereals other than soybean, it is both tasty and high in nutritive value."

"W.J. Garvin, assistant chief of the Civil Affairs Division, said the Foundation has been asked for quotations on lots of 3,000 and 5,000 tons of 'multi-purpose food' per month. Five thousand tons would provide 90 million meals.

"The food was developed by Dr. Henry Borsook with the aid of grants from Clifford E. Clinton, now president of Meals for Millions, and the California Dehydrators Assn.

"Two ounces for one meal: Two ounces (dry weight) of the food, according to Foundation officials, when cooked for 10 minutes, provide an eight-ounce serving. This is said to contain one-third of the normal requirements of a person for one day, with the exception of Vitamin C. Vitamin C does not survive cooking. It can be supplied by any available leafy vegetable or fruit as well as in synthetic form.

"Last year, according to Ernest R. Chamberlain, Foundation secretary, four million multi-purpose meals were sent to 21 countries through 32 relief organizations."

"The soybean food, which was recommended by Eleanor Roosevelt for use in the national school lunch program, is a 'real food, not a fad or medicine,' according to the Foundation.

Note: This is the earliest document seen (Dec. 2010) that mentions Ernest R. Chamberlain in connection with Meals for Millions, or multi-purpose food or Clifford Clinton. Address: Scripps-Howard Staff Writer.

47. Pearson, Drew. 1947. The Washington merry-go-round. *Free Lance-Star (The) (Fredericksburg, Virginia).* Nov. 8. p. 4.

• *Summary:* The train of freight cars that pulled out of Los Angeles last night, headed for New York and Europe, "represents something basic and important in the American system. It's a symbol of the participation of the average American in the foreign policy of his country."

But now that food has become an instrument of foreign policy, the generosity of Mr. and Mrs. America can help the "Friendship Train" on its way.

In Los Angeles, Meals for Millions donated one carload of multi-purpose food.

48. *Newspaper PM, Sunday Picture News (New York)*.1947. Will MPF, lowly soybean's child, banish starvation from the earth? Nov. 9. p. M2. Magazine section.

• *Summary:* MPF looks a little like granulated brown sugar. It is precooked and requires little fuel for preparation. "Two ounces of MPF, when cooked with water for 10 minutes, provide an eight-ounce serving. This contains one-third of the normal day's nutritional requirements (as established by the Food and Nutrition Board of the National Research Council and the U.S. Pure Food and Drug Administration) for protein, calcium, iron, vitamins A, B-1, B-2, niacinamide and D. (Only notable omission is Vitamin C.)"

The author of the article liked the flavor of dishes (such as fish cakes) made with MPF, prepared and served by Ruth and David Kirk. MPF is distributed by Meals for Millions Foundation Inc., 648 So. Broadway, Los Angeles 14, California. MFM can be ordered by mail from MFM's New York office, 119 East 19th St., New York 3, NY. Price is \$0.45 for one 10-meal can, including postage, and \$1.50 for a 36-meal can, in New York and surrounding Eastern seaboard states.

Note: This is the earliest document seen (Jan. 2011) that uses the term MPF (which stands for "Multi-Purpose Food"); the former name was MPM (Multi-Purpose Meal). Address: New York. 49. Hendrick, Kimmis. 1947. 3-cent meal, it's soy! New food for hungry. *Christian Science Monitor*. Nov. 12. p. 3. • *Summary:* In this hour of world emergency, multipurpose food (MPF) is looking for an opportunity to meet the world's large-scale nutrition needs. The researchers who developed it say that America could be sending abroad 180 million MPF meals a day at a cost of only 3 cents each to the sender.

Last year 4 million MPF meals were send abroad. "Dr. Henry Borsook, Professor of Biochemistry at the California Institute of Technology, outlined the story of what his researchers have done in a summary presented here before a subcommittee of the Congressional Joint Committee for the Economic Report."

The soybean is the main ingredient in MPF; it looks like coarse corn meal and smells something like turkey stuffing. It combines easily with other foods and can be served in about as many forms as there are national tastes.

"Clifford Clinton-for years one of Los Angeles' most interesting and controversial civic figures-put drive behind the quest for something like MPF by offering Cal Tech a research grant of \$5,000." The California Dehydrators Association matched it. Then Mr. Clinton founded the Meals for Millions Foundation, Inc. to make the results of the research available to relief agencies and to hungry people in countries devastated by World War II. Dr. Borsook is now research director for the Foundation, in addition to his work at Cal Tech. For experience, Clinton drew on his long career as a restaurant owner "but also on his experience as a civilian consultant on food to the Quartermaster General of the United States Army."

Relief agencies distributing MPF include the American Friends Service Committee, Brethren Service Committee, Licensed Agencies for Relief in Asia, Salvation Army of Los Angeles, United Service to Holland, Central European Rehabilitation Committee, plus many other secular and religious groups.

So far, the main obstacle to shipping more MPF overseas is that wheat can be shipped for 6 cents a lb. compared with 13 cents a lb. for MPF. But Meals for Millions says that MPF has two advantages: (1) It is more nutritious and a pound contains 14 times as much protein; (2) Its use does not put pressure on food supplies for Americans.

For those Americans who would like to try MPF for themselves, the Foundation has arranged to ship small demonstration tins by parcel post in two sizes. A 10-meal tin, postage prepaid, to any address in the USA for 45-75 cents, depending on the zone; or a 36-meal tin for \$1.50 to \$2.00. Sent overseas, the 10-meal tin costs \$1; the 36-meal tin, \$2.25. For more information contact: Meals for Millions, 648 South Broadway, Los Angeles 14, California, or 119 East 19th Street, New York 3, N.Y. Address: Head, Pacific News Bureau of The CSM. 50. Watts, Pat. 1947. Bowlful of soya bean food equals lunch; 500,000 meals on way abroad. *Oswosso Argus-Press* (*Oswosso, Michigan*). Nov. 28. p. 3.

• *Summary:* Los Angeles–About multi-purpose food, which is being donated by the Meals for Millions Foundation of Los Angeles to feed hungry persons in Europe. MPF is still served in Clinton's restaurant in Los Angeles, and when the writer visited the cafe to see who was ordering it, she found "the customers were not indigent people who needed a cheap meal, but persons from many economic brackets who ate the soya bean preparation because they enjoyed its taste."

Last year soya bean grits were used mostly as cattle feed, and for plastics and fertilizer, "but within a year the nation could produce 180,000 meals of 'MPF' daily. Many nutrition experts claim it is a starving world's salvation."

Photos show: (1) Peggy Nance eats a typical meal of roast beef, baked potato, peas and milk, while brother Rex tries "MPF," soya bean food that equals Peggy's lunch in nutritional value. (2) Dr. Henry Borsook, Cal Tech biochemist, who developed multi-purpose food. Address: NEA [Newspaper Enterprise Association] staff correspondent.

51. Associated Press. 1947. Three-cent meal developed from soybeans by biochemist. *Reading Eagle (Reading, Pennsylvania)*. Nov. 30. p. 28.

• *Summary:* Los Angeles–A complete meal for three cents? At a time when inflation has reduced many American families' standard of living to near depression levels, a full meal for three cents sounds like a good deal. Dr. Henry Borsook, a California Institute of Technology biochemist, developed the food primarily to feed the hungry millions of Europe and Asia. "But an increasing number of Americans is clamoring for the product, too.

"That's embarrassing because the only distributing agency for Borsook's Multi-Purpose Food is a non-profit organization. 'Meals for Millions,' headed by exrestaurateur Clifford Clinton, is not set up to handle small individual orders. But orders keep coming in, from people who have tasted the stuff at church benefits and other places, at the rate of 50 to 60 a day.

"Although not anticipated, these requests are not turned down. Spokesmen for the agency are beginning to speak of MPF as 'a weapon against inflation at home and starvation abroad.""

52. Photo of Henry Borsook, PhD, lead scientist and nutritionist in the development of Multi-Purpose Food, late 1940s, California Institute of Technology. 1947. *Summary:* This photo, which first appeared in a newspaper article in Nov. 1947, was sent to Soyinfo Center by Chris Dodson of Freedom from Hunger Foundation,

Davis, California (Oct. 2010). The original of this photo hangs in the conference room at Freedom from Hunger.

53. *Los Angeles Times*. 1947. Council gets Indian plea: Food and clothing needed at once, spokesman reports. Dec. 5. p. A1.

• *Summary:* The Los Angeles City Council and welfare agencies heard pleas for impoverished Navajo and Hopi Indians living in New Mexico and Arizona. Investigations have reported conditions among the Indian tribes to be "deplorable."

A.W. Barnes, publisher of the Gallup Daily Independent (Gallup, New Mexico) and president of Navajo Assistance, Inc., a nonprofit organization established to distribute assistance to 60,000 Navajos, said that one shipment of "multipurpose food is being readied for transport to the Navajo reservation but far more is needed for the undernourished."

54. *Time*.1947. 3¢ meals. Dec. 8. p. 82, 85. Science. • *Summary:* "The soybean product in the news last week was something called "Multi-Purpose Food, developed in Los Angeles by Dr. Henry Borsook, Caltech nutritionist." The basic ingredients are soybean grits, minerals, synthetic vitamins, flavoring materials, and hydrolyzed yeast. It looks like speckled, beige cornmeal. It contains more high-quality protein than beef, and more vitamins. Boiled for 10 minutes in water, then combined with a little bread or potatoes, it makes a full, balanced meal. The cost: 3 cents per 2-oz portion.

U.S. nutritionists have long praised the soybean, and known that its protein is equal in quality to that of meat; it contains all the amino acids that the human body needs. Last year American farmers harvested 169.7 million bushels of soybeans "and fed nearly all of them to livestock, which returned only a fraction of the precious protein as meat or eggs or milk."

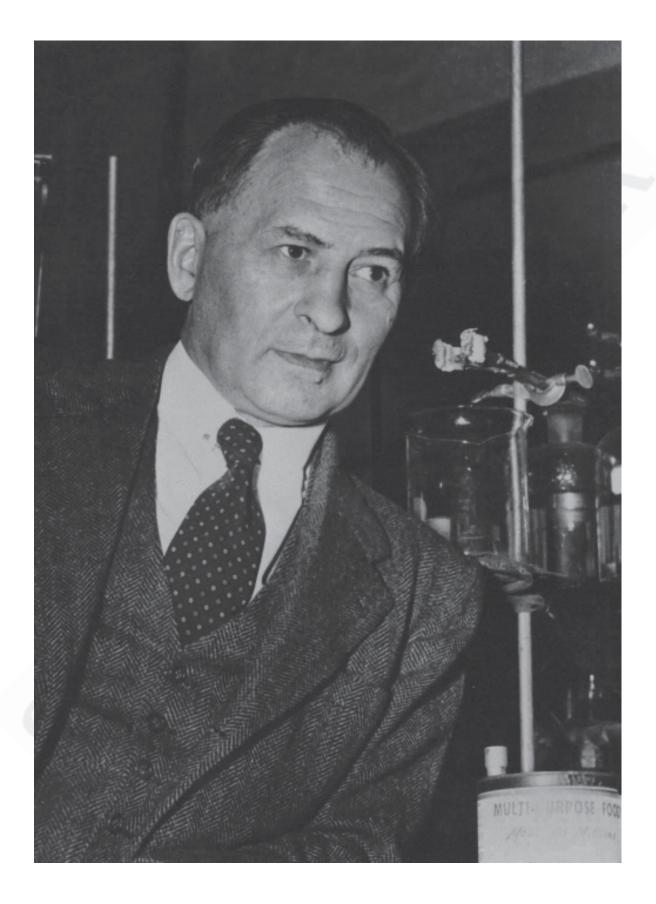
A photo shows Dr. Borsook, seated at a desk and looking at a glass laboratory apparatus.

55. *Los Angeles Times*. 1947. Pictures tell Indians how to prepare food. Dec. 12. p. A1.

• *Summary:* The article begins: "Soybean flour, eaten dry, is pretty terrible stuff.

"Even the hungry Navajos of New Mexico discovered that when they tried to eat the powdery 'multi-purpose food' supplied them by Meals-For-Millions of Los Angeles, a nonprofit foundation."

So pictographs, painted in the Navajo's own sacred blue, were developed. The first shows a Navajo woman receiving a can of the soybean substance from an Indian deity. Each step in the process is depicted.



56. Photograph of Clifford Clinton at his desk, in the office in his home at 5470 Los Feliz Blvd., Los Angeles. 1947. *Summary:* This photo and date were sent to Soyinfo Center by Donald Clinton, son of Clifford Clinton (Jan. 2011).

57. *New Yorker*:1948. MPF [Multi-Purpose Food]. Jan. 17. p. 19-20.

• *Summary:* In 1944, MPF was developed by Dr. Henry Borsook, a professor of biochemistry at the California Institute of Technology. It "is a soybean derivative, and it seems to us to taste fine." Its great, indeed revolutionary value lies in the fact that three cents' worth of MPF has about the same nutritional value as a meal of beef, green peas, a small potato, and milk. Borsook used research grants from a philanthropic California restaurateur named Clifford Clinton, and fromthe California Dehydrators' Association.

As soon as its development was complete, Clinton established the Meals for Millions Foundation in Los Angeles. A non-profit organization, it has an office at 119 East 19th St. Since July 1946, the Foundation has distributed some five million meals of MPF to 32 relief agencies and these, in turn, have sent them to 21 foreign countries.

58. Windsor Daily Star (Essex County, Ontario,

Canada). 1948. Provides nourishing meals costing three cents each: Versatile source of shortening and industrial oils makes good Ontario cash crop. Jan. 20. p. 5-6. • *Summary:* Robert H. Peck of River Canard, Ontario, has grown soy beans for 22 of his 33 years. "It is his confident faith that the soy bean will have more to do with Canada's future health and wealth than most people suspect... He raised his first soy beans for a school fair in 1925. Since then he has planted more and more each year until in the middle 1930s, he began devoting a considerable acreage to registered seed production. Last fall his beans took first prize at the Royal Winter Fair at Toronto but, to his chagrin, only placed second in the International Grain and Feed Show at Chicago [Illinois].

In October 1947 "he was made a director of the American Soy Bean Association, becoming the first Canadian to be chosen for the governing body of that organization since, in 1929, G.I. Christie of Guelph served as president.

"In 1947 Bob Peck raised about 800 bushels of highgrade seed soy beans on 50 of his 180 acres of farmland at River Canard, seven miles south of Windsor, as well as running a test plot for the Harrow Experimental Farm, where new varieties are developed... In all Canada nearly 200,000 acres of farmland were devoted to soybeans last year, as compared with 10,000 acres in 1941." About 88% of Canadian soy beans are produced in Western Ontario, chiefly in Essex and Kent Counties. Some are grown in Middlesex, Elgin, and Lambton Counties. Soybean oil is now widely used in making shortening, while the meal is used to feed dairy cattle and poultry. Soybean oil can also be used to make more than 4,000 industrial products, such as paints, plastics, and linoleums. In the USA it serves as a basic ingredient in oleomargarine. "New uses are constantly being sought by such firms as Victory Mills, Limited, which recently announced the establishment of a \$300,000 research project directed by Dr. W.D. McFarland, former head of the chemistry department of MacDonald [sic, Macdonald] College in Quebec."

A large photo shows Mr. Robert H. Peck with a sack of soybean seeds. Also discusses the work of Meals for Millions in using soybeans to develop a 3-cent meal to feed the hungry in Europe.

59. *New York Times*. 1948. News of food; Styron boxes... Jan. 31.

• *Summary:* "Another new product that is creating a stir among consumers is Multi-Purpose Food. We tasted some of this all-vegetable substance recently at a luncheon..."

60. *Soybean Digest*. 1948. Multi-Purpose Food on friendship train. Feb. p. 22.

• *Summary:* The low-cost Multi-Purpose Food that is 86 percent soy grits, which was first called to the attention of our readers over 2 years ago, is at last attracting international attention.

"MPF is on shipment to more than a score of countries in Europe and Asia. A box car of half a million meals was on the original Friendship Train when it left Los Angeles [ca. 1947] for its transcontinental and ocean journey to Europe. Three tons were dispatched to the Vatican to be distributed by the Pope to hungry children. Fifty thousand meals were sent to the starving Navajo Indians recently [in the United States, at the four corners of Arizona, New Mexico, Utah and Colorado].

"So far 32 relief agencies have distributed more than 5 million MPF meals to hungry people in distress areas. Cost of this food runs about 3 cents a meal."

61. *Soybean Digest*. 1948. Grits and flakes... from the world of soy: Multi-Purpose Food. Feb. p. 26.

• *Summary:* "A lunch dish in the cafeteria of the City College of New York recently was 'Multi-Purpose Food,' a low cost completely balanced food processed from soy products. The food is being shipped by relief agencies to hunger areas in Europe."

"Recent newspaper pictures featured the relief feeding of Navajo Indians with Multi-Purpose Food, which includes soy products. The Navajos have been reported to be facing starvation on their reservation." 62. *Los Angeles Times*. 1948. Multi-Purpose Food sent farm workers. April 17. p. A1.

• *Summary:* Multi-Purpose Food, a 3-cent meal developed by the California Institute of Technology, was made available yesterday to hard-hit, migratory agricultural workers in California. Clifford E. Clinton, president of the nonprofit Meals for Millions Foundation, announced yesterday that 50,000 meals have been received by distribution centers at Tulare and Bakersfield.

63. *Soybean Digest*. 1948. MPF [Multi-Purpose Food] use spreads. May. p. 19.

• *Summary:* "Over 10 million meals of Multi-Purpose Food have been shipped to the hungry in this country and abroad, reports Meals for Millions Foundation, Inc., 648 S. Broadway, Los Angeles 14, California, which is in charge of distribution."

"Distribution is worldwide, and has included, according to the Foundation, 'The Arctic to the Congo, from the bombed out East End of London to fareastern Korea, from the Navajo hogans of New Mexico and Arizona to the Villages of India.

"A boxcar of a half-million meals of MPF rode the Friendship Train to Italy and France; 200,000 meals sailed on the California 'mercy ship,' the Golden Bear, to the Mediterranean;...'"

64. *Soybean Digest*. 1948. Grits and flakes... from the world of soy: Foreign technicians study manufacture of Multi-Purpose Food. May. p. 44.

• *Summary:* "Several foreign governments, including India, Belgium and the Philippines, have sent technicians to the U.S. to study manufacture of Multi-Purpose Food, low-cost meal now being produced in Los Angeles, reports *Pathfinder.*"

65. *Soybean Digest*.1948. Meals for Millions solicits members. July. p. 25.

• *Summary:* In June 1948 Clifford E. Clinton, president of the Meals for Millions Foundation, Inc. in Los Angeles, wrote a letter that was sent out to all members of the American Soybean Assoc. It contained an appeal that they take memberships in the Foundation, which is distributing Multi-Purpose Food (86% soy grits) for famine relief all over the world. "'In less than 2 years, more than 12 million of these 3-cent meals of MPF have been distributed in 21 countries through 32 leading relief agencies, many of which now regard MPF as the most valuable and acceptable single food available for economical relief feeding,' stated Clinton in his letter...

"The Foundation finances its educational, publicity and research program through memberships, available at from \$3 to \$500 a year. Life memberships are \$1,000." 66. *Los Angeles Times*. 1948. Multi-Purpose Food signed up in housewives' battle of budget. Aug. 11. p. B1.

• *Summary:* As food prices continue to soar and threats of meat boycotts are heard, more and more people are paying attention "to the soybean by-product known as Multi-Purpose Food or MPF. Recent national notice given the highly nutritious food is bringing a tremendous response from all over the country to the offices of Meals for Millions Foundation here in Los Angeles."

Americans like to use MPF as an extender for more costly foods, especially meat. Homemakers will find MPF available at some health food stores. It may also be purchased at the office of the Meals for Millions Foundation, 618 S. Broadway, Los Angeles. Directions for cooking it are on the container.

Recipes are given for: (1) Stuffed cabbage rolls. (2) Meat loaf. A photo shows the cabbage rolls being made.

67. Hochstrasser, Lewis B. 1948. Overseas relief food, MPF, gets new role: Relieving U.S. budgets. Desperate housewives flood agency with orders for soybean meal supplement. *Wall Street Journal*. Aug. 13. p. 1, 4. *Summary:* Los Angeles–Thousands of housewives, harassed by high meat prices, are clamoring for Multi-Purpose Food, an inexpensive, nutritious, and tasty diet supplement. Developed by a California scientist, it contains mostly soybean grits, with vitamins, iron and calcium added to increase the food value, and onion powder and other seasonings added to improve the flavor.

MPF is made by the Meals for Millions Foundation, Inc., whose main interest is in alleviating hunger worldwide after World War II. The charitable organization "has sent out about 1.5 million pounds or 13 million meals of MPF to foreign countries during the past two years.

Interest among American housewives started with an article in the *Ladies' Home Journal* [Aug. 1948, p. 36-37, 139], in which a New Jersey housewife reported saving \$8 in food bills after using the soy food for a month."

During the past ten days more than 5,000 American housewives and their husbands have contacted the Foundation asking for the low-cost food.

The Foundation, while not mainly interested in domestic demand, has decided it will mail six 1¹/₄-pound cans of the food, providing 60 meals, to U.S. consumers for \$4 or 53 cents a pound, postage included. The product is manufactured by Gentry, Inc. of Los Angeles.

Many of the enquiries are about wholesale quantities and distributorships in the USA. The Foundation, which is not set up to start a big advertising campaign, has decided to start selling the "soybean food" at wholesale prices "through the nation's 1,200 health food stores and food specialty shops in department stores.

The story of Clifford Clinton and Dr. Henry Borsook is told. MPF was launched by a fund of \$10,000 from Mr.

Clinton and the California Dehydrators' Association.

In 1946, Mr. Clinton established the "Meals for Millions Foundation which has sent \$390,000 of MPF relief shipments to every part of the world, financed by itself and other relief agencies."

68. Faherty, Eleanor. 1948. I saved \$8 on my monthly food bill. *Ladies' Home Journal*. Aug. p. 36-37, 139. *Summary:* "This is the diary of a housewife of Hopewell, New Jersey, and her adventures last March with MPF [Multi-Purpose Food]–a soybean food base now primarily used to fight hunger and disease abroad by the Quakers, by LARA, other relief agencies and by the United States Government. Because it can be cooked over a candle flame, because it keeps indefinitely, because of its low cost and satisfying flavor, Paul de Kruif has nicknamed it 'the modern manna.'" It is produced by the nonprofit Meals for Millions Foundation.

"Diary: March 2. An editor of the *Journal* visited me today and asked me to try a new food called Multi-Purpose Food. It is a protein 'base' food or food extender, fortified with vitamins and minerals, is supposed to be pleasanttasting, inexpensive and can be kept without refrigeration. It is made chiefly of soybeans, onions and spices, and millions of meals of it have been sent abroad to feed the hungry."

The author, who used MPF largely in hamburgers, fish cakes, and soup, called it a "super-stretcher." The diary describes each recipe in which MPF was used, and how the family liked it. The family food bill was \$80/month before MPF was used. A month's supply of MPF cost \$3.10. "If you want any MPF write direct to Meals for Millions Foundation, 648 South Broadway, Los Angeles 14, California. Trial package, 25 cents; six 20-ounce cans, \$4.00. Postage prepaid."

69. Halferty, Guy. 1948. Three-cent meal eludes grasp of U.S. housewife. *Christian Science Monitor*. Sept. 2. p. 5. • *Summary:* Multi-Purpose Food was developed to combat hunger and famine after World War II, but now American housewives have pounced on it as a way of easing the high cost of food.

During the past 3 years the nonprofit Meals for Millions Foundation has quietly sent 10 million MPF meals to hungry people overseas. Each meal costs donors 3 cents– "a cost which has barely enabled the foundation to keep its books in black ink."

Very little of the relief food has been used in the United States. But recently a large national woman's magazine *[Ladies Home Journal, Aug. p. 36-37, 139]* published a detailed story by a housewife who had used MPF to beat the high cost of food. The magazine devoted a two-page spread to MPF, with recipes.

The response was immediate, and astonishing. A flood of orders suddenly inundated the small Meals for Millions

staff" at its headquarters at 648 South Broadway, Los Angeles.

This was all very nice said Florence Rose, Executive Secretary of the foundation. However MPF was never intended to be sold commercially in the USA. The foundation is supported by what it calls "memberships." Miss Rose encouraged people to contribute to MFM, as this money provides for the continuation of their work.

Note: This is the earliest document seen (Dec. 2010) that mentions Florence Rose in connection with Meals for Millions, or multi-purpose food or Clifford Clinton. Address: Staff correspondent.

70. Photograph of Clifford Clinton (left) explaining Multi-Purpose Food to Wilmer Burk (center) and an unknown person at the California State Fair. after World War I. 1948. • *Summary:* Wilmer Burk was Clifton's manager who was drafted to assist and coordinate the booth's activities, promoting Meals for Millions and Multi-Purpose Food, and answering questions. MFM had a booth at the state fair for several years.

This photo and date were sent to Soyinfo Center by Donald Clinton, son of Clifford Clinton (Jan. 2011).

71. Soybean Digest. 1948. U.S. women buy MPF. Sept. p. 100.

• *Summary:* "Thousands of American housewives are turning to Multi-Purpose Food, the highly publicized ' 3ϕ meal' in the domestic 'Battle of the Budget,' reports Meals for Millions Foundation, Los Angeles. MPF was developed by Dr. Henry Borsook of the California Institute of Technology, primarily for use overseas. It is now being extensively used for this purpose by welfare agencies active in famine relief in Europe and Asia.

"The announcement of the unexpected domestic demand for the new soy-based food was made by Clifford E. Clinton, president of the non-profit Foundation. More than 5,000 mail orders from all over the nation were received less than a week after the August *Ladies Home Journal* published an article in which a housewife records how, by using MPF, she saved \$8 on her monthly food bill.

"The Foundation, which provides the food in bulk shipment at 3ϕ a meal to relief agencies and donates such agencies one meal for each 3ϕ public contribution, has hitched the domestic demand to its foreign relief program by offering a two-meal, postage-prepaid sample to Americans for 25ϕ or 'free with a \$1 contribution to the famine relief program.'

"The Foundation reports that nearly 13 million meals of MPF have been distributed in 21 countries in the 2 years following introduction of the new food."

72. Borsook, Henry. 1948. We could feed the world. *Engineering and Science (California Inst. of Technology).*



Dec. p. 7-9. Also in: Edward Hutchings, Jr., ed. Frontiers in Science, a Survey. California Inst. of Technology. p. 80-87. • *Summary:* "We have the tools and the technology to feed everyone in the world with our present resources. And yet it's been estimated that 80 per cent of the world population normally suffers from under-nutrition or malnutrition.

"One hears any number of explanations for this ironic situation-but at the bottom of them all is the simple fact that we still think of food in terms of the nineteenth century.

"As long as we persist in thinking of food in terms of bushels of wheat, we'll never have enough to go around. As soon as we learn to consider food as a conveyor of essential nutrients-and look for the cheapest and best way to get these nutrients-we'll find we have enough for all." Discusses the development of Multi-Purpose Food. A photo shows Borsook. Address: California Inst. of Technology.

73. Photograph of Clifford Clinton (in about 1948) with his wife Nelda. 1948.



• *Summary:* Not sure where this was taken; maybe at home in Los Angeles.

This photo and date were sent to Soyinfo Center by Donald Clinton, son of Clifford Clinton (Jan. 2011).

74. Kirk, Ruth. 1948? Culinary Adventures with MPF. Los Angeles, California: Meals for Millions Foundation, Inc. 8 p. Undated. 22 x 10 cm. [1 ref]

• *Summary:* Contents: A foreword, by MFM Foundation, Inc. Suggested MPF recipes: Introductory note, by Ruth Kirk. Recently a newspaper (New York's "PM," magazine section, 9 Nov. 1947) "featured the human interest story of David and Ruth Kirk who, through using MPF–Multi-Purpose Food–cut \$10.00 each month off their food bills, and yet continued to live as well as formerly.

"Nor was that all! Each month David and Ruth contributed this saving to the Meals for Millions Foundation, to buy 333 meals of MPF to be donated by us to accredited relief agencies to feed the hungry abroad. Since this article appeared, many requests have come for MPF recipes..."

All of the recipes specify cooked MPF. "By this I mean, 3 parts water to 1 part MPF, boiled together for 10 minutes." Recipes include: MPF tomato soup. MPF onion soup. MPF fish cakes. Chinese style MPF. MPF stuffed green peppers. MPF potato pancakes. MPF luncheon meat loaf. MPF sandwich spreads (with cheese, liver, or peanut butter). MPF stuffed eggplant.

"Extra copies of this folder may be had at 10 cents each." Address: 648 South Broadway, Los Angeles 14, California. Or: 119 East 19t Street, New York 3, New York.

75. Vegetarian News Digest (Los Angeles).1949. Newsy notes... [Clifton's cafeterias in Los Angeles]. 1(4):19. Jan.
Summary: "I recently wrote to Clifford E. Clinton of Clifton's cafeterias telling him that beautiful as they are there is one thing that mars the delightful atmosphere-the serving and consumption of the decaying flesh of murdered animals..."

76. Chamberlain, Ernest R. 1949. Values of MPF (Letter to the editor). *Soybean Digest*. Nov. p. 66. *Summary:* Discusses some of the benefits of Multi-Purpose Food as reported by users. "Sometimes I think MPF is better than we think it is." Address: Secretary, Meals for Millions Foundation, Inc., 648 S. Broadway, Los Angeles 14, California.

77. Buck, Pearl S. 1949. Mr. Clinton stops starvation: By inventing a 3-cent meal, a Californian spearheads man's fight against hunger. *United Nations World* 3(12):25-28. Dec.

• Summary: About Clifford E. Clinton, Meals for Millions, and Multi-Purpose Food. "It was H.G. Wells, I think, who said that all the world's progress, throughout human history, has come from the work done by strangely few persons." Clifford Clinton was born in Berkeley, California, in 1900, the eldest of 9 children. His parents were both devout Christians and active in the Salvation Army. They went to China and set up their personal mission there. Clifford went too and saw abundance and starvation. In the middle of his high school life in America his mother died; he left school and went into the restaurant business with his father. At age 25 he was manager of all six of his father's flourishing cafeterias. Two years later, with two of his relatives, he bought his father out and set up his own company, the Clinton Co., Inc. Today he has become a successful businessman. "The marvel is that all this success has been achieved in the most impractical and even preposterous fashion. Clinton believes in the Golden Rule to such an extent that he actually practices it ...

"In 1931 when he opened his Pacific Seas Cafeteria, *Clifton's*, in Los Angeles, a motto was printed on each meal

check. It read: 'Regardless of the amount of this check our cashier will cheerfully accept whatever you wish to pay or you may dine free.' In spite of prophesies of failure, the cafeteria prospered. More than 100,000,000 meals have been served under this policy and more than 4,000,000 guests have paid what they could or dined free. Approximately 1% of the guests 'pay what they wish,' that is less or more (usually less) than their check. Those who 'dine free unless delighted'-that is, pay nothing at all constitute about 1/10th of 1%.

One of Clinton's dreams is to see that everyone in the world is well fed and well nourished. Not satisfied with his 5-cent meal, he set out to develop a 3-cent meal. "He enlisted the interest of a first-rate scientist, Dr. Henry Borsook, of the California Institute of Technology, who volunteered his services, to help. Dr. Borsook took the soybean, that prime source of protein for so many millions in Asia, and from it he developed by very simple means a food which when produced in quantity costs only three cents for a hearty and nourishing meal... He engaged the interest of an expert, Madame Soulange Berczeller, to season his three-cent meal."

"To extend its values to a hungry world, Clifford Clinton set up, in 1946, the non-profit Meals for Millions Foundation, 'dedicated to the prevention of starvation.' He and a few of his business associates each pledged \$10,000 to launch the Foundation. Headquarters were donated at 648 South Broadway in Los Angeles."

"Gifts and membership fees have made it possible to distribute more than 15,000,000 meals of Multi-Purpose Food through relief agencies operating in more than 60 countries."

78. Borsook, Henry. 1950. We could feed the world. *Soybean Digest*. Feb. p. 26.

• *Summary:* Condensed from *Engineering and Science*. The originator of Multi-Purpose Food describes the scientific approach toward solving world food problems, and gives details on MPF. Address: MFM.

79. Photograph of Ernest Chamberlain, co-director of Meals for Millions Foundation. 1950? Undated.

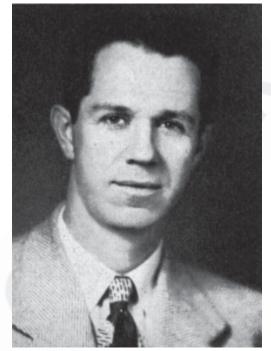
• *Summary:* This photo (see next page) and date were sent to Soyinfo Center by Chris Dodson of Freedom from Hunger, Davis, California (Oct. 2010). The original of this photo hangs in the conference room at Freedom from Hunger.

80. *Los Angeles Times*.1951. Famine sufferers to get L.A. food: Kashmir to receive 5,000-pound shipment of enough special ration to feed 40,000. Feb. 19. p. 2.

• *Summary:* Five thousand pounds of Multi-Purpose Food will be sent from Los Angeles to people suffering from famine in Kashmir.

Note: Kashmir is a hotly disputed region, divided between India and Pakistan during 1947-48. It is not clear to which country this food will go to.

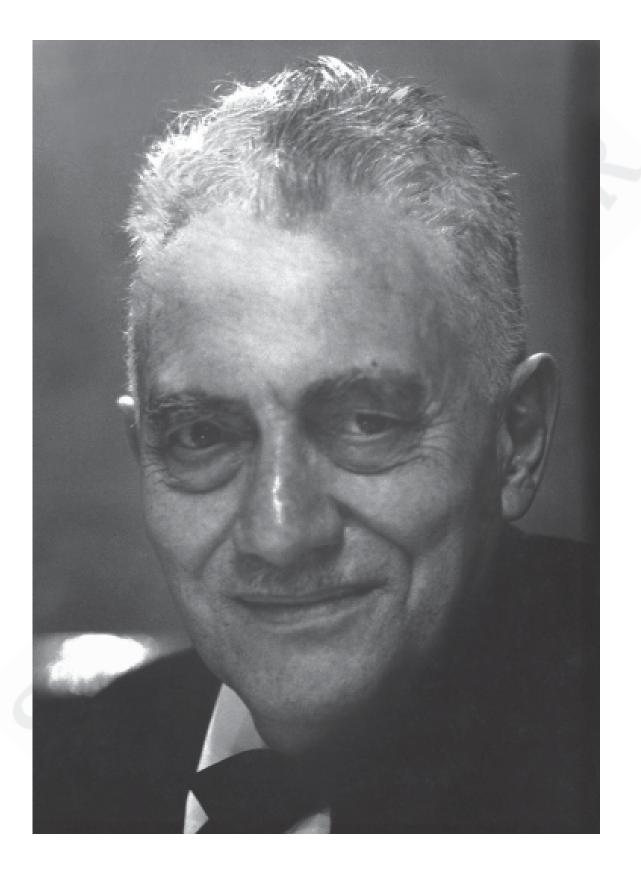
81. Soybean Digest. 1951. Hafner promoted. Feb. p. 38.



• *Summary:* Fred H. Hafner's appointment as a vice president of the chemical division of General Mills was announced by Whitney H. Eastman, division president. Hafner joined General Mills in new products commercial research in 1946. "In his present position he directs the purchase of soybeans and sale of soybean oil meal for General Mills processing plant at Belmond, Iowa. He will direct similar activities for a new soybean plant to be erected at Rossford, Ohio." A photo shows Fred Hafner.

82. Cooper, Lenna F.; Bryan, Mary deGarmo. 1951. Supplementing the school lunch. *J. of Home Economics* 43(5):355-56. May.

• *Summary:* The regular Type A lunch was supplemented by a soybean product, expeller-pressed Multi-Purpose Food, distributed by Meals for Millions Foundation of Los Angeles, California. The nutritive value of these fortified/ enriched soybean grits is given. "It will be seen that 1 ounce of the soybean grits has a protein value of 12 grams, the equivalent in protein value of 1 3/4 cups of whole milk or two ounces of lean meat. The cost for expeller-processed and fortified soybean grits is about 2½ cents per ounce as compared with 8 cents for the equivalent in milk and 9 cents for the equivalent in raw beef. It will be noted also that by enrichment it contributes approximately one-sixth of the day's needs in calcium, iron, and important vitamins for a 12-year-old child.



"The product was used as an extender in meat loaves, hamburgers, soups, hot breads, and desserts." Address: 1. Consultant dietitian; 2. Prof. of Home Economics and Supervisor of Food Services, Teachers College, Columbia Univ., New York City.

83. Buck, Pearl S. 1951. God's men. New York, NY: The John Day Co. 375 p. 22 cm.

• *Summary:* In this fictional work (novel), one of the main characters (Clem) is based on Clifford Clinton, founder of the Meals for Millions Foundation. Clem was raised in China, his father was a missionary, and he had a deep lifelong interest in helping to relieve human hunger and starvation. See p. 83, 92, 151, etc.

Pearl Sydenstricker Buck (1892-1973) was the third American writer (and the first American woman) to win the Nobel Prize in Literature; she won in 1938 for *The Good Earth*.

Her parents, Southern Presbyterian missionaries, traveled to China soon after their marriage on July 8, 1880. Pearl was born in West Virginia but raised in China; she grew up bilingual. In 1911, she left China to attend Randolph-Macon Woman's College in Virginia, graduating (Phi Beta Kappa) in 1914. In 1914, Pearl returned to China. She married an agricultural economist missionary, John Lossing Buck, on May 13, 1917. From 1920 to 1933, Pearl and John made their home in Nanking (Nanjing), on the campus of Nanjing University, where both had teaching positions. From 1914 to 1933, she served as a Presbyterian missionary.

84. Meals for Millions Foundation. 1951. The 3¢ challenge to world hunger: A 5-year progress report. Los Angeles, California: Meals for Millions Foundation. 1 vol. (various pagings totaling 75 pages). 29 cm. *

• *Summary:* A report in the files of the Meals for Millions Foundation, Los Angeles. Includes many early reports of the benefits to malnourished people of consuming MPF.

"Although MFM concentrated upon overseas relief needs, American Indians in New Mexico, Arizona, Utah, and California, blizzard victims in South Dakota, Tennessee school children, migrant workers and indigents in California, and Los Angeles County tuberculosis patients were among the Americans who benefitted from MPF fortified meals during the first five years of the Foundation's activities" (Roberts 1967, p. 55-57). Address: Los Angeles, California.

85. Nasich, Pinchas. 1952. [Letter about vegetarianism in Israel and the Meals for Millions organization in Los Angeles]. *Vegetarian News Digest (Los Angeles)* 2(7):19. Winter.

• *Summary:* "There are about 8,000 vegetarians in Israel and their number is steadily increasing. On the 17th of

October the Vegetarians of Israel had a meeting in Jerusalem. There is already a vegetarian settlement in Mishmar Hashivah. The founding of a new vegetarian village has begun, also a Vegetarian Home for Children; also every effort will be made to open vegetarian restaurants in Jerusalem, Tel-Aviv and Haifa.

"Dear editor, could you kindly induce Meals for Millions, the Los Angeles organization which produces the most famous Multi-Purpose Foods, to do their best to sell their MPF in Israel? There is a great protein scarcity here, and we vegetarians would like very much to enjoy this food which is now almost unobtainable in Israel." Address: Rishon, LeZion, Israel.

86. *Changing Times: The Kiplinger Magazine*.1952. Meals for the hungry, 3 cents each. 6(10):28. Oct. *Summary:* "When you see pictures of miserable little waifs in Korea, or of the bare-boned hungry in India, you get a little twinge. You wish there were something you could do to help, something you could afford.

"There is, indeed-thanks to the efforts of a nonprofit organization called Meals for Millions, which has devised a wonderful and inexpensive way for you to provide a person with a meal. Three cents buys a packet of Multi-Purpose Food-MPF-a dry soybean meal product that has been enriched with vitamins. It provides all the nutritive and bulk requirements of a full meal (excluding vitamin C, which is unstable when cooked).

"MPF can be cooked with water in 10 minutes and eaten plain, or added as a nutritious food stretcher to stews, soup, meat loaf, and other dishes.

"More than 20 million meals have been distributed throughout the world since Meals for Millions was set up six years ago by Clifford E. Clinton, Los Angeles restaurant man, as a 'practical challenge to world hunger.'

"The address of Meals for Millions Foundation, Inc., is 648 Broadway, Los Angeles 14, California."

87. Allen, Ida Bailey. 1952. Solving the cost of high eating: A cookbook to live by. New York, NY: Farrar, Straus & Young, Inc. viii + 545 p. Index. 22 cm.

• *Summary:* Chapter 10, "Good bread is good food," discusses enriched white bread, and Cornell Bread (developed by Dr. Clive McCay of Cornell Univ., New York; it contains soy flour and no adulterating chemicals, p. 94), and gives recipes for: Soy yeast bread (with soy flour, p. 99-100). Soy muffins (p. 100). Also: Gravy thickened with soy flour (p. 352).

Chapter 31, titled "Legumes, nuts and brewers' yeast" contains a section on "Soybeans" (p. 386-92) with the following contents: Introduction. Plain-cooked soybeans (boiled, or pressure cooked if possible). Soybean entrees (from home-cooked soybeans): Baked soybeans, Savory soybeans, Baked vegetables stuffed with soybeans, green

peppers, tomatoes, turban squash. Soybean salads. Soy grits. Soybean curry (glamor dish). Soy products: Soy flour, Corn Soya cereal, soy macaroni, soy egg noodles (plain or containing carrots, tomato, or spinach), soy spaghetti, "canned meat alternatives based on soybeans," soy cookies, soybean milk powder, soybean curd or cheese, suggestions for using soybean curd or cheese. Soybean sprouts. Soy flour and how to use it. To use soy flour instead of wheat flour: In baking, as thickening, in meat and fish loaves, in spoon bread. Multi-Purpose Food: Pioneer in nutrition ("a spectacular and inexpensive pioneer food containing soy, developed at California Institute of Technology to be used in mass feeding in war stricken countries. It is also on sale in this country at health stores. It is 100 percent vegetable, violates no religious or dietary precept, comes in dry form, and keeps indefinitely"). The Introduction to soybeans (p. 386) begins: "This legume really deserves to be called a 'miracle' food. Soybeans are the only perfect vegetable alternate for meat." Also contains a section on peanuts and peanut butter (p. 392-96).

Note 1. This is the earliest English-language document seen (Nov. 2003) that contains the term "meat alternatives" (or "meat alternative"–with any combination of quotation marks).

Note 2. The author is well known for her 40+ books on food, cooking and the home that have sold 14 million copies, and her syndicated daily food column which is followed by 35 million readers. This book contains "1,300 taste-tested recipes–With glamour foods at budget prices for everyone." A photo on the inside rear dust jacket shows Ida Bailey Allen.

88. *Soybean Digest*.1953. 23 million meals of Multipurpose food. March. p. 19.

• *Summary:* "Nearly 23 million 3-cent meals of the 'Multi-Purpose' food have been distributed on the hunger fronts of the world, according to a report issued by the non-profit Meals for Millions Foundation, Los Angeles...

"More than 1¼ million meals, the report states, have gone to feed Korean refugees (813,000 meals since last June). Shipments to India total 3,880,000 meals of which nearly a million have been shipped since June. Popularity of the food has been enhanced by development of special native recipes printed in the Korean and Tamil languages.

"Significant shipments have gone to the Middle East, Hong Kong, Formosa, Burma, Africa, Arabia, Japan, Philippines, Latin America, Europe, and Caribbean and South Pacific Islands.

"World-wide distribution has been through 133 American relief and religious agencies and health departments of foreign governments...

"For further information or to make contributions contact Meals for Millions Foundation, 648 South Broadway, Los Angeles 14, California." Note: This is the earliest document seen (Dec. 2007) concerning soybean products (soy flour) in Arabia [this term usually refers to the Arabian Peninsula, but in this case it may well refer to Saudi Arabia]; soybeans as such have not yet been reported. This document contains the earliest date seen for soybean products in Arabia (March 1953); soybeans as such had not yet been reported by that date.

89. Costello, Michael. 1953. Meals for Millions. *Christian Century* 70:602-04. May 20. Reprinted in Reader's Digest 63:126-28 July 1953.

• *Summary:* Today at age 52, Clifford Clinton proudly points to the fact that a nonprofit foundation that he organized and directs has served 24 million meals to people all over the world.

90. Castello, Michael. 1953. Meals for Millions. *Reader's Digest*. July. p. 126-28. *

• *Summary:* A glowing account of the Meals for Millions Foundation of Los Angeles, California, and the Multi-Purpose Food-based on soy grits.

91. Costello, Michael. 1953. Meals for Millions: This crusading Californian is showing how the problem of world hunger can be licked. *Reader's Digest* 63:126-28. July. Condensed from *The Christian Century*, 70:602-04, May 20,1953.

• *Summary:* The colorful story of Clifford Clinton (an illustration shows his portrait), Henry Borsook, Multi-Purpose Food (based on soybean grits), and Meals for Millions Foundation, Inc. To aid the Foundation and its humanitarian work, "Clinton donates office space in one of his Los Angeles cafeteria buildings (located at 648 S. Broadway, Los Angeles 14, California). To reach it one passes through a dim 'landscaped' dining room with pools, grottos, singing birds and organ music, then up innumerable stairs, through a bakery and a carpentershop, and arrives finally in a bustling, crowded office. Here orders come from individuals, churches, social and governmental agencies. The Multi-Purpose Food business is handled by a small staff headed by a bouncy, enthusiastic woman named Florence Rose."

"Four million Multi-Purpose meals have gone to India, three million each to China and Japan, two million each to Germany and Korea, one million to France." Some 333,000 people in Lebanon, 250,000 people in the Philippines, and several hundred thousand in Austria and Greece have been saved from hunger by Multi-Purpose meals. Shipments have gone to the Vatican for distribution to Italian poor, to migrant labor camps in California and Arizona, to the Navajo and Hopi Indian reservations. The largest buyer and distributor is the Roman Catholic Church, followed by the Friends Service Committee. Note: This is the earliest document seen (Feb. 2001) concerning soybean products (Multi-Purpose Food containing soy grits) in the Vatican; soybeans as such have not yet been reported.

92. Delvaux, Edgar. 1953. Les protéines de coton et de soya dans l'alimentation humaine au Congo Belge et au Ruanda Urundi: Relation d'une enquête aux E.U. [The proteins of cottonseed and soya in human foods in the Belgian Congo and in Ruanda Urundi: Report of an investigation in the USA]. Louvain: U.S. Foreign Operations Administration. Operations Mission to Belgium and Luxembourg. 26 p. No. TA 32-101. Aug/Sept. 53. [68* ref. Fre] *Summary:* Contents: 1. Current state of food and nutrition of the indigenous people of the Belgian Congo and of Ruanda Urundi–Results of an investigation by FAO, OMS, and UNICEF. 2. Vegetable protein and animal protein in human nutrition. 3. Vegetable material rich in protein and available in the Belgian Congo–Cotton and soya. 4.

Acceptability of a food. Conclusions. Substituting vegetable protein for animal protein could help alleviate the shortage of animal protein that exists for certain categories of infants and adults, and that can lead to kwashiorkor. Cassava, the main food of these countries, is rich in carbohydrates but low in protein. The use of soy flour or cottonseed flour could add valuable protein to the diet. The soy flour could be used, as it has been elsewhere, to make soymilk for infants, tempeh, tofu, breads (add 35), or Multi-Purpose Food (Meals for Millions). Address: U.S. Foreign Operations Administration. Operations Mission to Belgium and Lexembourg.

93. Clifton's. 1953? You need not go hungry. They need not go hungry! (Leaflet). Los Angeles, California. 1 p. Undated. Front and back. Each panel 22 x 14 cm.

• *Summary:* "Dine free unless delighted." "You can be well fed even though you do not have the price of a postage stamp. In the service room of Clifton's Brookdale, you may get, at any hour of the day, Multi-Purpose Food ("MPF"–a hot, palatable, filling meal). This meal is served in a little packet you can take out. It fits into the palm of your hand, yet it contains a meal the nutritive equivalent of steak, potatoes, peas and milk. Its price is 5¢, or nothing at all if need be." Address: 648 South Broadway, Los Angeles 14, California.

94. Meals for Millions Foundation, Inc. 1953? Multi-Purpose Food–Suggested recipes. How to give a dinner of Multi-Purpose Food (Leaflet). Los Angeles, California. 1 p. Undated. Front and back. Each panel 28 cm.

• *Summary:* Side 1 gives recipes "supplementing those appearing on the label of each can of Multi-Purpose Food." Soups. Stew. Meat loaf. Fish loaf. Hamburgers. Vegetable casserole. Stuffing.

Side 2 describes how to host a demonstration dinner: "The proof of the pudding is in the eating." Address: 648 South Broadway, Los Angeles 14, California.

95. Clinton, Clifford E. 1954. A tra-ful for a tri-ful. *Clifton's Food for Thot (Los Angeles, California).* No. 1155. April 15. 4 p. *

• *Summary:* This little periodical circular is 6 panels printed back to back on one sheet of paper (8¹/₂ x 11 inches). Each panel is 22 x 9.5 cm. Contents: Out of the dark / Esther Baldwin York. An Easter reverie / Shaw's price list. Addressed to Mrs. Von / CPL, W.B., Camp Pendleton. Resurrection / Lynn Hamilton, in "American bard." Easter / Shaw's price list, England. The water beetle / Cecil B. De Mille [untitled selections from Thomas Blackburn, Henry Ward Beecher, and Percy Bysshe Shelley]. Solomon's temple.

Contains poetry and short prose pieces. "FFT by mail: 50¢ yearly–Mrs. Von, 648 S. Broadway, Los Angeles 14. An extra \$1.00 sends 33 meals to the hungry thru Meals for Millions." Distributed through Clifton's cafeteria in Los Angeles.

Note: Clifford E. Clinton lived 1900-1969. Clifton's cafeteria was both a restaurant and a soup kitchen. Almost all these circulars, published from 1931 to 1995, are in: Collection of Clifton's cafeteria circulars (Collection 1827). Department of Special Collections, Charles E. Young Research Library, UCLA. 7 boxes (3.5 linear feet).

96. Ebright, Donald Fossett. 1954. Free India: The first five years. An account of the 1947 riots, refugees, relief, and rehabilitation. Nashville, Tennessee: Parthenon Press. 223 p. See p. 79, 80-81, 208, etc. Illust. 20 cm. [54 + 93 footnotes]
• *Summary:* This very interesting well written and carefully documented book suffers from lack of an index.

Contents: 1. Carving the Indian Union and Pakistan out of an old continent (1947). 2. The greatest mass migration in history (1947). 3. Meeting human need (1948). 4. Voluntary relief agencies. 5. Distinguished leadership (incl. the inspiring influence of Mohandas K. Gandhi, Dr. Rajendra Prasad, Jawaharlal Nehru {the first, and to date longest serving}, prime minister of India, 1947-1964, Rajkumari Amrit Kaur, etc.). 6. From refugee to famine relief (1950; the NCC Refugee Relief Committee). 7. Indo-American Relief Agreement (1951). 8. Kazakh-Turki flight to freedom. 9. India, the United States, and the United Nations. 10. Will India go Communist? 11. There yet remains (1953).

Multi-Purpose Food is mentioned on 8 pages in this book. Donald Ebright was born in 1910 and later joined the Meals for Millions Foundation.

Chapter 4, "Voluntary relief agencies," contains a section titled "Meals for Millions" (p. 79-81), located at 648 South Broadway, Los Angeles, California, U.S.A. (See

footnote 47, p. 216). This section contains a good overview and brief history of MFM and its Multi-Purpose Food (MPF) based on "expeller-processed presscake of the soybean–a by-product of soy oil production, available in abundance and at present little used for human food. The soy cake is reduced to the consistency of corn meal and then fortified with minerals and vitamins." "Soy protein is probably the most complete of the vegetable proteins. It contains the ten essential amines [amino acids].

"Multi-Purpose Food also has the advantage of being pre-cooked. The expeller process of production consists of pressing the soybean in a steam-jacketed pipe at 250 to 275 degrees (F) temperature for 30-40 minutes. This reduces the time required for cooking to about ten minutes–a factor of convenience as well as fuel economy–when one considers its use in refugee camps and famine areas.

"We rejoiced at the large shipment of MPF and discovered that while it was unpopular eaten straight, it could be added to any soup, curry, stew, goulash, dough or batter–and made the batter better! Thank you, Florence Rose, for the lives you have saved in India through MPF Food."

When the British arrived in India 200 years ago, the population of India was 70 million. When they left in 1947, there were 360 million–a more than 5-fold increase. The population was once held in check by famine, disease, and internal warfare (p. 96).

Agricultural progress in India was retarded during British colonial rule "because the British kept India as a producer of raw materials for British factories and a market for its manufactured goods" (p. 103).

In Chapter 6 the section titled "Famine relief" notes: "Ralston cereal, wheat, milk-powder, sugar, vitamin tablets, beans, barley, corn oil, prunes, raisins, rice and Multi-Purpose Food formed the bulk of our imports." Multi-Purpose Food is also mentioned (p. 106) as an important import. Meals for Millions is mentioned (p. 153) as a voluntary agency aiding India.

"India has had three terrific budgetary drains which have prevented the construction of new roads, bridges or schools. These are: (1) the annual cost of rehabilitating 7½ million people uprooted from their homes in Pakistan; (2) The food shortage of five million tons which plus a deficit in cotton cost the Indian government \$700 million in foreign currencies last year; and (3) the budget for defense, i.e., the army, navy and air force" [which accounts for 45-50% of the total national budget] (p. 186).

"India has dealt a death blow to feudalism by enacting the Zamindari Abolition and Land Reform Act of July 1, 1952, in Uttar Pradesh in North India of which Lucknow is the capital." "The Zamindari system arose at the time of the old British East India Company. The British found *zamindars* already collecting taxes and converted these tax gatherers into landowners. The *zamindars* became intermediaries between the peasant and the government" (p. 198).

Note: Donald Ebright earned his PhD at the University of Chicago where he was on the faculty. He was in India for 22 years during the Hindu / Muslim conflicts. He has more than 2,000 lectures, TV and radio programs to his credit. Address: PhD, Director, Refugees and Famine Relief (1949-1952) of the National Christian Council of India.

97. Thrapp, Dan L. 1955. Chaplain returns from Korean duty: Year at Taego gives priest vivid impression of ill and underfed hordes of refugees. *Los Angeles Times*. March 13. p. A10.

• *Summary:* In Taegu 14 out of 15 people are refugees, fleeing the advancing Communist armies.

"Among the most effective charity programs available to Koreans, the priest said, was the Meals for Millions Foundation, Inc., 648 G. Broadway, which prepared and ships a concentrate that may be mixed with any available food—without altering its taste—or used separately as a nourishing, strength-producing and stomach-filling substance."

This food is especially helpful because it enables individuals to eat the foods they are accustomed to, but it stretches scant supplies. Special recipes are available for most parts of the world.

Americans can help by making donations to Meals for Millions and other similar organizations.

98. Hills, Gladwin. 1955. 3-cent 'meals' aid in famine areas: 40 million portions of food made from soy beans distributed in 9 years. *New York Times*. Aug. 21. p. 67. *Summary:* "Los Angeles–A campaign to end world hunger with multi-purpose is making slow but steady progress," according to Miss Florence Rose, who used to be a social worker in New York. She is now executive secretary of the Meals for Millions Foundation in Los Angeles.

99. Soybean Digest. 1955. Multi-purpose food [in India]. Aug. p. 24.

• *Summary:* "A mixture of peanut, sesame and soybean cakes is the basis for a multipurpose human food developed by the Indian Institute of Science, Bangalore, according to the American consulate general at Madras."

100. *New York Times*.1955. Defeat of hunger seen in new food. Oct. 3.

• *Summary:* "Miss Florence Rose, executive secretary of the Meals for Millions Foundation, returned from a trip to the world's famine areas yesterday with the conviction" that the end of hunger in our time is possible.

101. Hendrick, Kimmis. 1955. 'Meals for Millions' grows. *Christian Science Monitor*. Nov. 4. p. 4. *

• *Summary:* Mentions Florence Rose of the Meals for Millions Foundation. Address: Head, Pacific News Bureau of The CSM.

102. Abrahams, Maurice Martin. 1955. Sees Brazil, U.S. market for soy. *Soybean Digest*. Dec. p. 24. *Summary:* "As a licensee for Brazil of the Meals for Millions Foundation-the prime mover in many food research programs throughout the world-we have developed here a really superlative Multi-Purpose Food consisting almost exclusively of defatted soja, vitamins and minerals...

"The importance of our program down here is that our product will serve two basic interests of governmental authorities: 1. Promote soybean cultivation. 2. Promote the consumption of soybean products by humans so that these humans can receive far better nourishment at lower cost." Address: Sao Paulo, Brazil.

103. Marshall, Eleanor M. 1955. Meals fMr millions. *American Mercury* 81:83-85. Dec.

• *Summary:* This is the story of Multi-Purpose Food, which can be sold for only 3 cents a meal. "Clifford Clinton is the man responsible for getting MPF experiments underway. He is the son of a missionary who worked in China... His work for the last eight years has been that of carrying out his boyhood dream of supplying cheap meals for hungry millions. His two Los Angeles cafeterias were the starting points in his battle.

"During the depression he contrived a meal costing five cents. It consisted of soup, meat, potatoes, and green vegetable and a pudding. This served to allay hunger for thousands of the jobless.

"Yet Mr. Clinton was not content. His next venture was to enlist the help of other suppliers in the area and to serve meals at a penny a portion. These consisted of a bowl of rice with a ladle of soup poured over it. He had rolls of tickets printed and sold them indiscriminately for one cent each.

"As soon as the government relief programs began operating, this penny restaurant was discontinued but the five-cent meal (without the ticket idea) continued to be served at Clinton's during afternoon hours. These meals were hash or beans, two vegetables, bread and butter, a beverage and a dessert.

"Although Mr. Clinton was running in the red with all such meals, he was just as determined as ever to find a way of supplying an adequate diet at a low cost. He knew much more about the problem now, for he had served nearly a million bowls of soup in less than six months! By the end of World War II he was ready to give \$5,000 to California Institute of Technology in 1947 to start a project with these stipulations: 'I want a cheap food that is high in nutrition, can be easily shipped and will not spoil if stored for long periods. And it must not violate any religious or social food taboos.'

"Dr. Henry Borsook, one of the Institute's biochemists, agreed to undertake the work. He was able to cut the cost from the five-cent limit to three cents a meal.

"Borsook knew that soybeans are plentiful and contain much protein. He knew also that there is no scarcity of the solid vegetable matter called 'grits' that is left over from firms using soybeans to make margarine fats and cooking oils. So he used 90 percent soy grits and added minerals and vitamins to produce the formula now known as Multi-Purpose Food...

"Norris E. Dodd, Director-General of Food and Agriculture Organizations of the United Nations, has said: 'I don't believe you can build a just or lasting peace in a hungry world.'

"One answer is the Meals for Millions Foundation, which in six and one-half years has had a total of \$800,650.36 from contributions by individuals and purchases made by relief agencies. They have supplied from this: 250,000 meals to the Philippines; 330,000 to Lebanon; several hundred thousand to Austria and Greece; and many more thousand meals for the poor in Italy as well as for the Navajo and Hopi Indian reservations and the migrant labor camps in California and Arizona."

Note: This is an early record of soyfoods in Lebanon.

104. Photograph of Nelda and Clifford Clinton, mid-1950s (Los Angeles, California). 1955.



• *Summary:* Nelda played an important role in helping her husband, Clifford, with the development of Multi-Purpose Food. Her son, Don, recalls that Nelda was in charge of the cafeterias when Clifford went into the army in early 1942. She played a supportive role to his Meals for Millions involvement and often spoke to groups in that connection, i.e., churches, women's groups, etc. Florence Rose was the dominant female figure in those days and Ernie Chamberlain right beside her. Nelda quit working at the cafeterias in 1946 when Don returned from the navy and entered the business with his elder brother (Edmond) and sister (Jean). Robert (Don's son) was born in 1954 and went to work full-time in the cafeterias at age 18.

This photo and date were sent to Soyinfo Center by Chris Dodson of Freedom from Hunger Foundation, Davis, California (Oct. 2010). The original of this photo is owned by Freedom from Hunger.

105. Cousins, Norman. 1956. Food for a better world. *Saturday Review* 39:20. July 21.

• *Summary:* The story of the establishment of the Meals for Millions, Inc. (MFM), a non-profit foundation born in 1946, and the development of Multi-Purpose Food (MPF) using defatted soybean meal. Discusses the work of Clifford Clinton, Dr. Henry Borsook, and Miss Florence Rose. Address: Editor.

106. Chen, Philip S.; Chen, Helen D. 1956. Soybeans for health, longevity, and economy. South Lancaster, Massachusetts: The Chemical Elements. xii + 241 p. Illust. Index. 21 cm. 2nd ed. Jan., 1962, 242 p. [24 ref] *Summary:* A comprehensive review of the subject. Contents: Preface, by the author (South Lancaster, Massachusetts, July 1956). Foreword, by Geo. M. Strayer, Vice-President and Secretary-Treasurer, American Soybean Association. Introduction. Part I: Nutritive value of the soybean. 1. Protein (incl. Dr. Wolfgang Tiling of Hamburg, Germany; Dr. Harry Miller). 2. Fat (incl. phosphatides, sterols and hormones). 3. Carbohydrates and caloric value.
4. Minerals. 5. Vitamins. 6. Soybeans and world population. 7. Soybeans and disease (incl. Dr. Wolfgang Tiling of Germany).

Part II: Soy products. 8. Soybean oil: Composition and properties, processing and refining, reversion, uses, phosphatides, margarine, mellorine (vegetable frozen dessert). 9. Soybean oil meal: Heat treatment, Gelsoy, Multi-purpose Food. 10. Soy flour: Uses, soy bread vs. enriched white bread. 11. Soy milk. 12. Soy cheese (or soybean curd, "aptly described by the Chinese as 'the meat without bones'"). 13. Soy sauce: Preparation of kojis, brine fermentation, production yields, microorganisms are available. 14. Soybean sprouts.

Part III: Soybean culture and preservation. 15. Soybean culture: Two types of soybeans (commercial field vs. edible or vegetable varieties), inoculation, fertilizer, cultivation, harvest. 16. Preservation of soybeans: Shelling, canning, freezing, dehydration, harvesting dry mature soybeans.

Part IV: Recipes. 17. Soybeans and soybean pulp: Green or fresh soybeans, dry soybeans, soybean pulp ("prepared by pressing cooked soybeans through a coarse sieve or by grinding them in a food grinder"), recipes (incl. Soyburger, Scalloped green soybeans, and Roasted soybeans-dry roasted or deep-fried. Describes how to make wheat gluten at home and praises monosodium glutamate for its ability to improve the flavor of recipes-though its use is called for only in the recipe for Soyburger). 18. Soy flour: Breads, cakes, cookies, pies, soups, other recipes. 19. Soy grits and soy flakes. 20. Soy milk. 21. Soy cheese. 22. Soybean sprouts.

Appendices: A. Soybean utilization (chart). B. Manufacturers and handlers of soy foods (Source: 1956 Soybean Blue Book). C. References.

Chapter 1, "Protein," begins: "The soybean is best known for its high protein content (p. 7). It then discusses the work of Dr. Harry Miller (p. 14-15).

Chapter 15, "Soybean Culture," describes how to grow soybeans in a garden. Pages 126-27 discuss the two types of soybeans: the commercial field type and the edible vegetable type. Five major differences between the two types are discussed (p. 126). The edible varieties are larger in size, do not yield as heavily (though they yield more heavily than snap beans or lima beans), are more prone to shatter as they near maturity in the field, are superior in flavor, texture, and ease of cooking, and some edible varieties are also superior in the manufacture of soybean flour, soybean milk, roasted beans and other products. Table 31 (p. 130) lists eleven varieties of edible soybeans: Very early–Giant Green. Early–Bansei, Fuji. Midseason– Hokkaido, Jogun, Willomi. Late: Illington, Imperial, Funk Delicious, Emperor, Higan. Commercial–Illini.

Chapter 16, "Preservation of Soybeans," describes how to preserve "green soybeans" by canning, freezing, and dehydration.

Photos show: (1) A sack of Lincoln soybeans (facing p. 1). (2) Soybean plants, showing pods and leaves (p. 3 and 4). (3) A beam balance with a small amount of soy flour balancing many animal products. "The protein value of soy flour: 1 lb. of soy flour contains protein values equal to 2 lbs. beef, or 34 eggs, or 6 quarts milk." Source: Health and Character Education Institute (p. 6). A similar photo (p. 24) states: "1 lb of soy flour contains food calories equal to 31/2 lbs beef, or 3 quarts milk, or 29 eggs. (4) Two views of a child. Left, suffering from marasmus. Right, after six months on a soy milk diet. Courtesy Dr. Wolfgang Tiling (p. 62). (5) A machine at the Northern Utilization Research Branch of USDA treating soybean oil with alkali (p. 72). (6) The distribution of MPF [Multi-Purpose Food] to starving Indian children (p. 91; Courtesy Meals for Millions Foundation). (7) Quaker City No. F4 grinding mill (p. 102; Courtesy Straub Co., 4059 Ridge Ave., Philadelphia, Pennsylvania). (8) Early soy cheese (tofu) production in the United States (p. 108; perhaps at Madison Foods). (9) The Northern Utilization Research Branch, Agricultural Research Service, USDA-shows outside of the huge building (p. 113). (10). How to grow soy sprouts in a glass jar at home (p. 119). (11) Well nodulated soybean roots (p.

129; Courtesy The Nitragin Co.). (12) Baked soybeans in a crock (p. 144). (13) Soy flour used in numerous baked products (p. 159; Courtesy ADM). (14) Griddle cakes [pancakes] made with soy flour brown quickly (p. 173). (15) Soy peanut butter cookies (incl. peanut butter and soy flour; p. 185). (16) Soy grits in a glass jar (p. 198). (17) Freshly-cooked crisp soybean sprouts in a raw vegetable salad (p. 219).

Note 1. The first printing of this book (1956) was dedicated "To Li Yu Ying and William J. Morse, *The Soybean Champions of the Eastern and Western Hemispheres*," but by the third printing (June 1959) the dedication had changed "To William J. Morse and Harry W. Miller, *The Soybean and Soy Milk Champions of Our Time*."

The publisher of this third printing was unable to sell all the books printed, so Chen apparently arranged for a company named "Outdoor Pictures" (Box 1326, Escondido, California) to sell them. On the title page, Outdoor Pictures pasted their name and address over that of "The Chemical Elements."

Note 2. According to the National Union Catalog, Philip Stanley Chen was born in 1903. The rear cover states that he was born in China and is now a naturalized U.S. citizen. He is a graduate of Emmanuel Missionary College [in Berrien Springs, Michigan] and Michigan State University. Before writing this, his first book on diet, health, or soybeans, he wrote several books on chemistry: (1) The Chloro Derivatives of m-cresol. 1933. Easton, Pennsylvania: Mack Printing Co. 7 p. (Abstract of his PhD thesis, Michigan State College of Agriculture and Applied Science); (2) The Chemical Elements, Rev. ed. 1948. South Lancaster, Massachusetts: Chemical Elements (fold chart). (3) 500 Syntan Patent Abstracts, 1911-1950. 1950. South Lancaster, Massachusetts: Chemical Elements. 125 leaves. (4) Syntans and Newer Methods of Tanning. 1950. South Lancaster, Massachusetts: Chemical Elements. 128 p.

In 1962 Chen wrote *A New Look at God*, published by Chemical Elements (288 p.). Address: 1. Prof. of Chemistry, Atlantic Union College, South Lancaster, Massachusetts; 2. National Science Foundation Fellow, Cornell Univ.

107. Photograph of Dr. Albert Schweitzer with patients at his hospital in Lambarene, Gabon. 1956.

• *Summary:* Note 1. In 1961, in an article in *Soybean Digest* titled "Multi-Purpose Food: Valuable aid to improved nutrition" (June p. 20-21), Fred Hafner of General Mills wrote: "Such eminent men as Dr. Albert Schweitzer (Gabon), Dr. Glen Tuttle (Congo), and the late Dr. Tom Dooley (Laos) praised MPF for its value in treating severe cases of protein starvation (kwashiorkor) and in meeting dietary needs of the malnourished which were treated at their hospitals."

Note 2. "Albert Schweitzer (14 January 1875–4 September 1965) was a Franco-German (Alsatian) theologian, organist, philosopher, and physician." "Since the mid-1890s Schweitzer had formed the inner resolve that it was needful for him as a Christian to repay to the world something for the happiness which it had given to him, and he determined that he would pursue his younger interests until the age of thirty and then give himself to serving humanity, with Jesus serving as his example" (Source: Wikipedia, Oct. 2010).

At age 30, he gave up a promising academic and musical life in Europe to earn a medical degree (7 years) then opened a hospital at Lambarene to pursue a ministry of healing. He grew up fluent in both French and German.

"Dr. Schweitzer has been called one of the foremost prophets of our century. In him exists the Renaissance ideal of excellence in all things and a vigorous combination of the contemplation and the life of action. He is the unprecedented holder of four doctoral degrees in Theology, Philosophy, Music, and Medicine. His books *Quest of the Historical Jesus, The Philosophy of Civilization,* and [The Life of] J. S. Bach, while only a part of his extensive writings, have made important contributions to western thought. He is a world-famous organist and the winner of the Nobel Peace Prize in 1954" (Shurtleff 1966). He is also widely known for his universal ethical concept, "Reverence for Life."

This photo and date were sent to Soyinfo Center by Chris Dodson of Freedom from Hunger Foundation, Davis, California (Oct. 2010).

108. *Los Angeles Times*. 1957. Freedoms Foundation honors Bruce Russell. Feb. 22. p. 2, 11.

• *Summary:* Other winners included (p. 11): "Meals for Millions Foundation. Inc., 115 W 7th St., George Washington Honor Medal Award;..." Note: Meals for Millions is now at a new address.

109. Kuppuswamy, S.; Joseph, K.; Narayana Rao, M.; et al. 1957. Supplementary value of Indian multipurpose food to poor vegetarian diets based on different cereals and millets. *Food Science (Mysore, India)* 6(4):84-86. April. [7 ref] • *Summary:* Four formulations of Indian multipurpose food are given; they contain different proportions of low fat groundnut meal (75-80%), low fat sesame meal (10-20%), Bengalgram dhal, and black gram dhal. When any one of these formulations was used at the 12.5% level to fortify the poor rice diet of India, a marked improvement in the growth promoting value of the diet (in rats) was observed. Address: Central Food Technological Research Inst. (CFTRI), Mysore, India.

110. *Soybean Digest*.1957. [Multi-Purpose Food helps flood victims in Japan]. Sept. p. 31.

• Summary: A large photo shows the Freedoms Foundation medal and three American children presenting cans of MPF to Fumiko Miyagi. The caption reads: "Fumiko Miyagi of Japan, guest of the American Soybean Association at its Minneapolis [Minnesota] convention, expresses gratitude to Minneapolis children whose penny-wisdom and pennypower sent 3¢ meals of Multi-Purpose Food (MPF) to flood victims in Japan. Also expressing interest in this new role of American soybeans as a liberator of malnourished people is Albert Dimond, president of the American Soybean Association. Displayed at the convention exhibit of the nonprofit Meals for Millions Foundation is the Freedoms Foundation medal it was awarded for 'outstanding achievement in bringing about a better understanding of the American way of life' by distribution of MPF free in distressed areas of the world. Miss Miyagi, a Tokyo art teacher and women's club leader, is president of the Japanese Meals for Millions affiliate." Note: This is the earliest English-language document seen (Nov. 2002) that uses the word "malnourished."

111. Walley, Ersel. 1957. Soybeans around the world. It would take 400 million bushels of soybeans to meet minimum needs of babies and growing children alone in the Orient. *Soybean Digest.* Sept. p. 30-32.

• *Summary:* The author made a world tour studying soybeans, including visits to Hawaii, Japan and other parts of Asia, and Italy. He studied production of soy milk in Taiwan, Hong Kong, and Bangkok (Thailand). In Taiwan he visited a soya milk plant which was established "by our good friend and American Soybean Association pioneer, Dr. H.W. Miller. In Hong Kong, the 'peek hole' and gap in the Bamboo Curtain, we found many small soya food producers and no doubt the largest and most successful soya milk plant to be found anywhere [Hong Kong Soya Bean Products Co. Ltd., makers of Vitasoy]." Hong Kong is the place where competition between soybeans from Red China and the USA is said to meet head-on. "May I voice my conclusion that Red China needs in its domestic economy more soybeans than it can possibly produce.

"A trip to southeastern and south Asia included good and sufficient visits to Thailand (Siam), Burma, India, and Pakistan. Of these countries, Pakistan is the only one that has soybean production of mention and here the total production is less than 1 million bushels per year."

A photo shows Walley. Address: Part president and chairman of Market Development Committee, American Soybean Assoc.

112. Abrahams, Maurice. 1957. Re: Failure of UNICEF report on nutrition in Brazil to even mention the large production of soybeans in Brazil. Letter to Ernest R. Chamberlain, Meals for Millions Foundation, Los Angeles, California, Oct. 21. 1-2 p. • *Summary:* "Mr. Abrahams, in a self-described 'fine frenzy,' told Mr. Chamberlain that a March 1957 UNICEF report (E/ICEF/ 1.1028) authored by Dr. Charles Glen King and entitled *Recommendations for Further Development of UNICEF-Aided Nutrition Programmes in Central America, Panama, Peru, and Brazil,* contained 'not a word' about the 100,000 metric tons of soybeans per year grown in Brazil that could be used for human nutrition. In Mr. Abrahams' opinion the failure to mention soybeans was not the result of a 'mere carelessness,' but rather because Dr. King 'is one of those who still do not believe in soya and, consequently, are reluctant to believe in M-P-F'" [MPF] (H. Roberts 1967, p. 177).

Note: More than 3 years later, on 22 Jan. 1961, after an insightful and explosive speech that Dr. Henry Borsook had delivered to the Second Annual Inter-American Food Congress, Miami Beach, Florida (9 June 1959, which criticized UNICEF), Mr. Chamberlain brought up the same subject in a letter to Maurice Abrahams: "Personally I fail to see how UNICEF could be so self-righteous when they published a survey that did not even acknowledge the existence of soybeans in Brazil, much less their nutritive value–in a study that was supposed to be thorough and to lay the groundwork for upgrading nutrition" (quoted by H. Roberts 1967, p. 190). Address: Brazil.

113. Parpia, H.A.B.; Swaminathan, M.; Subrahmanyan, V. 1957. Plan for the manufacture of Indian multipurpose food. *Food Science (Mysore, India)* 6:96-99.

• *Summary:* The article begins: "Almost all of the dietary surveys carried out in India have shown that the overwhelming majority of the people are malnourished." International organizations such as F.A.O. and W.H.O. recommend that people consume 2,600 calories of food per day and 65 gm of protein, yet the average Indian consumes only 1,600 to 1,900 calories per day and 45 gm of protein.

"Almost 90% of the protein in the Indian diet is of vegetable origin, and therefore, not of high biological value as the animal proteins." The cause of this lack of "protective foods" is India's "extremely low per capita income."

All of these facts indicate the need for India to develop an inexpensive, well balanced, protein-rich food to supplement the Indian diet. "Work was started in this direction at the Central Food Technological Research Institute, Mysore, and a cheap food of vegetable origin fortified with essential vitamins and minerals has been developed using the indigenous raw materials, *viz.*, specially prepared groundnut flour and Bengalgram flour. This is similar in almost all respects to the multi-purpose food which was developed by Borsook using the soyabean grits." Address: Central Food Technological Research Inst. (CFTRI), Mysore, India. 114. Subrahmanyan, V.; Rama Rao, G.; Kuppuswamy, S.; Narayana Rao, M.; Swaminathan, M. 1957. Standardization of conditions for the production of Indian multi-purpose food. *Food Science (Mysore, India)* 6:76-80. [17 ref] *Summary:* This experimental multipurpose food was prepared in three different forms: (1) Unseasoned, made of a blend of 75 parts groundnut meal and 25 parts roasted Bengalgram grits, fortified with vitamins (thiamine, riboflavin, and vitamins A and D) plus calcium phosphate.
(2) Seasoned with seasonings and salt. (3) Unseasoned with 20 parts skim milk powder. All were highly acceptable.

The original multipurpose food, developed in the USA by Borsook, consisted of expeller soya grits fortified with vitamins and minerals. Harris et al. (1943) developed a highly nutritious soup powder by incorporating low-fat groundnut flour with low-fat soya flour, cooked pea flour, skim milk powder, with added flavours and condiments, and fortified with essential amino acids and minerals. "Although soyabean is not being grown at present in any appreciable quantity in India, yet fortunately enough, fairly large amounts of protein-rich foods of vegetable origin, especially the oil seed residues and pulses, are available in India..." Address: Central Food Technological Research Inst. (CFTRI), Mysore, India.

115. Photograph of a Japanese contingent visiting the Meals for Millions' test kitchen at Clifton's in Los Angeles. 1957.



• *Summary:* Ernest Chamberlain is on the far left. Lucille Brown (Food Supervisor) is 3rd from left, in the background. Jean Clinton Davis (daughter of Clifford Clinton) is 6th from left, in the background. They are reviewing Multi-Purpose Food.

This photo was taken in the test kitchen of Clifton's at 648 South Broadway, Los Angeles. The MFM offices were on the top floor of this 5-story building and the test kitchen was on the 4th floor. MFM used this space free of charge for about 10 years (1946-1956), then they moved to Seventh Street for a few years, and then to Santa Monica. The source of the photo is from an internal MFM newsletter.

This photo and date were sent to Soyinfo Center by Donald Clinton, son of Clifford Clinton (Jan. 2011).

116. Photograph of Ernest Chamberlain (right) with chefs and restaurateurs Harry Vickman (left) and son. 1957.



• *Summary:* In 1957 the Vickmans were celebrating their 25th anniversary in business. Over the years, they were very helpful to the Meals for Millions Foundation.

This photo and date were sent to Soyinfo Center by Donald Clinton, son of Clifford Clinton (Jan. 2011).

117. Photograph of Ernest Chamberlain talking about Multi-Purpose Food to three people at the Meals for Millions headquarters in Los Angeles. 1957.



• *Summary:* Seated in the center is Hamid Kalal, public relations officer of the Pakistan Planning Board. He is visiting to study MPF for possible use in Pakistan.

This photo and date were sent to Soyinfo Center by Donald Clinton, son of Clifford Clinton (Jan. 2011).



118. Photograph of Ernest Chamberlain holding a scrapbook of MFM clippings and internal literature, which he is showing to someone at Meals for Millions' headquarters in Los Angeles. 1957? Undated. *Summary:* This photo and date were sent to Soyinfo Center by Donald Clinton, son of Clifford Clinton (Jan. 2011).

119. Los Angeles Times. 1958. Freedoms Foundation honors two Timesmen: Cartoonist Bruce Russell and political editor Kyle Palmer receive citations. Feb. 23. p. A, 26.
Summary: Other winners included (p. 26): "Meals for Millions Foundation. Inc., 115 W 7th St., George Washington Honor Medal in general category for Books III and IV of 'People to People.""

Note: A photo shows Dr. Kenneth D. Wells, president of the Freedoms Foundation, congratulating Gen. Curtis LeMay upon presentation of freedom leadership award. Also shown are Cecil B. De Mille, Lewis B. Hershey (the director of Selective Service), and Charles Stewart Mott (a Flint, Michigan, philanthropist). The awards were presented at Valley Forge, Pennsylvania. (AP Wirephoto).

120. *Los Angeles Times*. 1958. Nurses to give theater benefit. April 27. p. C10.

• *Summary:* "Los Angeles County nurses will sponsor a theatrical benefit at 8:30 p.m. Thursday for the Meals for Millions Foundation, 115 W 7th St., at the Wilshire Ebell Theater. A movie title "Spotlight on Viet-Nam" will be shown.

Last week, with the help of the U.S. Air Force, the foundation sent 40,000 meals to Sioux Indians in South Dakota.

121. Abrahams, Maurice M. 1958. Soy food (MPF) offers challenge to world hunger: Meals for Millions Foundation proposes international conference to review the problem of world hunger. *Soybean Digest*. May. p. 20, 22. *Summary:* Meals for Millions Foundation offers a scientifically developed dietary soybean product, Multi-Purpose Food (MPF), to help relieve malnutrition and hunger. "But this is merely a part of a much larger purpose that has animated the Foundation's 11-year efforts, efforts that are completely unendowed and without government

aid, but supported by the penny-power contributions of thousands of free Americans. "The larger aims of the Foundation's program and

product such as creating good will for the United States and relieving starvation were recognized in the two awards the Foundation received in 1956 and 1957 from Freedoms Foundation. These aims are evidenced by the collaboration now being accorded by such agencies such as USIA, ICA, FAO, UNICEF and the President's People-to-People program."

Meals for Millions Foundation was incorporated in 1946. More than 95% of the bulk of MPF is soybean grits. The scientific explanation for the way this dietary supplement works is "synergistic action." "This means that MPF provides not only its own concentrated protein, vitamin and mineral values but, in addition, increases substantially the biological value of the food to which it is added, even in very small quantities."

Photos show: (1) "Before: These six malnourished babies were admitted to the American hospital, Pago Pago, Samoa, by Dr. James R. Dean, public health officer. (2) After: Same babies as in first picture after 6 months diet of Multi-Purpose Foods. All showed gains of weight into the normal range. All showed improvement in motor response and bodily tone."

Example #1: A trial with two groups of 20 workmen in a factory in Sao Paulo, Brazil, showed that the group receiving MPF increased its relative production rate 10% above the control group. The men in the group also gained on average more than 2.5 pounds per man.

Example #2: Miss Gladys Oberlin, the American nutritionist–directress of Instituto Ana Gonzaga, a Methodist missionary school in Rio de Janeiro used MPF to supplement the diet of 200 girls in her boarding school. Their usual meals were the standard but simple rice and beans for both lunch and dinner. At the end of 3 months Miss Oberlin reported that it actually cost less to feed the girls with MPF than without it. Moreover, the infirmary has been vacant for much of this test period. Yet the average daily amount of MPF that each girl received was only a little more than $\frac{1}{4}$ ounce.

Another photo shows: "Approval to Meals for Millions affiliate program in his state is given by Governor Janio Quadros of the state of Sao Paulo, Brazil." At right is Maurice M. Abrahams of the Meals for Millions Foundation. Address: Brazilian representative for Meals for Millions Foundation.

122. Subrahmanyan, V.; Bhagavan, R.K.; Swaminathan, M. 1958. The place of processed foods in the treatment and prevention of protein malnutrition in children. Indian J. of Pediatrics 25(123):216-27. May. [57 ref] • Summary: Contents: Introduction. Treatment of kwashiorkor: Vitamin therapy, the use of dried stomach preparations (e.g., hog's stomach), the use of protein hydrolysate, human serum, plasma and blood, treatment with skim milk powder and proprietary casein foods, treatment with plant protein diets, soybean-banana mixture (Dean 1952), Bengal gram and banana diet mixture, low-fat groundnut flour-Bengal gram-skim milk diet mixture, possible sources of processed protein rich foods for the prevention of protein malnutrition, better utilization of soya and groundnut products, soya and groundnut milks (7 studies are summarized briefly), low-fat oilseed flours, balanced malt food containing soya flour and groundnut flour, Multipurpose food based on low-fat soya flour and groundnut flour, predigested foods, fish flour. Conclusion.

"Introduction: It is now well recognized that protein malnutrition is widely prevalent among children in many tropical and subtropical countries (Trowell et al. 1954) (p. 216).

"The foods that have been most extensively used in the treatment of kwashiorkor, are skimmed milk powder and calcium caseinate" (p. 217).

"Treatment with plant protein diets: Of late it is being increasingly recognised that skim milk powder, though the cheapest protein food available so far for the treatment of protein malnutrition, cannot provide the basis for a large scale solution of the problem in underdeveloped countries, where skim milk powder is not available in sufficient quantities and has to be imported" (p. 218).

"Better utilization of soya and groundnut products:... Both these foods are by themselves highly concentrated and difficult to be cooked properly. Consequently children may experience difficulty in digesting cooked [whole] soyabean or roasted groundnut (Aykroyd and Krishnan 1937). Recent investigations carried out in India and other countries have shown that both soyabean and groundnut could be suitably processed into milk which is highly nutritious and can be readily digested by young children (Dean 1953; Indian Council of Medical Research 1955). Low-fat flours obtained from soyabean and groundnut are also highly nutritious and can be incorporated in various ways in the diet of children (Autret and Van Veen 1955).

"Predigested foods" [fermented]: Mentions soy sauce, and tempeh in Southern Rhodesia.

"Conclusion: It is evident from the foregoing account that besides cereals and pulses which form important sources of protein in the diet of the low income groups in tropical countries, oilseeds and oilseed meals represent an abundant and a most important source of proteins which have not been fully utilised so far for supplementing human diet." Address: Central Food Technological Research Inst. (CFTRI), Mysore, India.

123. *Soybean Digest*. 1958. Nationwide cycle trip on soy diet: Will attend convention. Aug. p. 9.

• *Summary:* Carl Urban, age 40, plans to cycle across the USA in the summer heat on a 40-day diet costing only \$10. His "only food on the bicycle ride from Los Angeles to New York will be Multi-Purpose Food (95% soy grits) filling for soy bread sandwiches. Margarine from soybean oil will provide the needed extra calories. In case he needs added low-cost energy he may drink some soybean milk." He plans to supplement his diet with vitamin C.

His wife and two children plan to pace him in the family car "and have family reunions each night in friendly motels and motor courts. Urban plans to do 100 miles a day." He left Los Angeles on July 26. He plans to attend the ASA convention (of which he is a member) at Des Moines, Iowa, on Aug. 19.

"Urban thinks many Americans, as well as restaurants and food service institutions, could provide better nutrition at lower cost by proper use of soy products."

124. Rose, Florence. 1958. Plan international nutrition conference: Propose a working conference of officials from interested countries to tackle world nutrition problems. Soybeans can play a big part. *Soybean Digest*. Sept. p. 74-76.

• *Summary:* This is the text of a speech made by Florence Rose of MFM at the American Soybean Association's 38th annual meeting (On Aug. 20). Her actual mimeographed speech was titled "Soybeans Lead Bread–Through the World's Hunger Fronts."

During the past 12 years, the Meals for Millions Foundation, Inc. has sent over 54 million of these " 3ϕ meals based on soy grits to over 100 countries around the world.

ASA's 38th annual convention in Memphis, Tennessee, was the site of the second stage of the Multi-Purpose Food (MPF) idea "which is to assist other countries to produce their own counterpart Multi-Purpose Food, from their own resources." Today, in India, there is a MPF that utilizes peanuts as the protein source. "The Minister of Agriculture of India became president of our Indian Meals for Millions Association formed in 1955 to make the Indian people aware of this new approach to their age-old problem. Prime Minister Nehru authorized funds for the initial pilot plant now operating at the Central Food Technological Research Institute at Mysore." MFM has aided the take-off of the pilot plant by purchasing over 100,000 pounds of the Indian product—"in addition to the 10 million meals of soy-based MPF shipped to India prior to 1956.

"The great United Nations agency, UNICEF, is prepared to assist the government of India in setting up large-scale production, after certain preliminaries are completed." A "grant of \$25,000 has been made to our nongovernmental Indian affiliate to help it popularize and publicize the existence of this new food."

There is also a soy-based Multi-Purpose Food in Brazil now. In the Philippines and Japan, Meals for Millions is working to develop local production of MPF. In Japan, in "cooperation with Mr. Shizuka Hayashi and your Japanese-American Soybean Institute, we hope there will soon be a Japanese MPF utilizing American soybeans as the protein base."

With its small budget and staff, MFM began looking for a short-cut that might cut the time between a good idea and concrete action.

"Trial balloon: This is the background that led us to send up a trial balloon in the May issue [article, p. 20-22] of the Soybean Digest proposing the idea of an International Conference to which would be invited principally officials on the ministerial levels from interested countries..."

Recently Florence Rose and Ernest Chamberlain (MFM secretary) presented the idea at the recent World Health Organization (WHO) assembly that met in Minneapolis, Minnesota, from May 22 to June 24. They personally discussed the conference with the ministers of health or their deputies from 27 of the 85 countries represented. "All expressed enthusiasm in participating in such a conference if the means could be developed to bring them to the conference location." Such a conference might be sponsored by the California Institute of Technology or one of the United Nations agencies such as WHO, FAO, and/or UNICEF. Best of all would be the American Soybean Association. Specific commitments to initiate MFM programs were given by ministers from Ceylon, Indonesia, and Liberia.

"Yesterday, Dwayne Andreas of Honeymead Products Co. gave us an inspiring example of what interest can mean, by offering Meals for Millions a [rail] carload of soy grits, a gift that will help provide an additional half-million meals of soybased MPF that can tremendously accelerate our programs in Japan and Spain and Italy." Address: Executive Secretary, MFM Foundation, Inc.

125. Soybean Digest. 1958. Dr. Borsook is food man of year. Oct. p. 19.

• *Summary:* Dr. Henry Borsook, professor of biochemistry at California Institute of Technology, famous for his work with American soybeans, was awarded this Certificate of Recognition in September at the meeting of the Southern California Institute of Food Technologists.

The citation was given for his 14 years of work in the development and promotion of Multi-Purpose Food (MPF) as research director of the nonprofit Meals for Millions Foundation–whose goal is to conquer world hunger.

In 1944 Clifford Clinton, Los Angeles restaurateur, asked Dr. Borsook to develop a food high in nutrition, low in cost, compact, stable in all climates, easy to cook, and inoffensive to religious principles of any people. The result was MPF, based on defatted soybean meal [sic, grits].

126. Chamberlain, Ernest R. 1958. Re: U.S. government should encourage food use of high-protein, low-cost oilseed meals. Letter to U.S. Senator Mike Mansfield, Washington, DC, Dec. 18. 2 p.

• *Summary:* "... envision the secondary consequences of a U.S. governmental policy that would focus world attention on the acceptability and value of oil-seed meals as high-protein, low-cost Human Food.

"Without reliance on a support price American soybean farmers have increased their soybean crop 100-fold in 30 years without producing a surplus–providing vegetable oil for margarine and high-quality protein feed that has made the American chicken the best-nourished creature on earth.

"With a billion malnourished people in the world and an annual production of 50 million tons of oil-seed meals hardly used at all for human food why not encourage farmers and agricultural and research scientists to do for people what they have so effectively and profitability done for chickens?"

"Why not encourage farmers to plant more soybeans in place of the present problem crops?

"In 102 countries our Foundation has demonstrated the acceptability and great nutritive value of Multi-Purpose Food based on low-cost oil-seed proteins. This type of food also serves, when used in small supplemental quantities, to unlock greatly increased nutritive value of cereal foods which form the bulk of most prevailing diets. Oil-seed meals, used in relief feeding, have the additional advantage of not being competitive with prevailing established world cereal markets."

Note: Chamberlain expounded a similar argument in letters to Congressmen J.L. Piltcher, Chester Bowles, and Secretary of Agriculture, Ezra Taft Benson, during the spring and summer of 1960 (H. Roberts 1967, p. 152). Address: Co-Director, Meals for Millions Foundation, 215 West 7th St., Los Angeles, California 90014.

127. Borsook, Henry. 1958-1983. Papers (Finding aid to archival collection). Los Angeles, California: California

Institute of Technology. 5 boxes (2.5 linear feet). * • Summary: "The Henry Borsook Papers cover the years 1958 to 1983, but significant gaps are present. Section 1 is incoming and outgoing correspondence primarily covering the years 1960 to 1965. It illustrates several facets of Borsook's career, including his relationships with colleagues, graduate students, and the food and vitamin industry, most notably with the American Institute of Baking and Miles Laboratories. Section 2 provides manuscripts and notes, including notes for talks given in the 1970s on food and international development. It shows the breadth of Borsook's interests and contains his book reviews and writings on medical history and on art history. Section 3 contains papers from the late 1970s and early 1980s related to the Meals for Millions Foundation. At the end of the collection is a small amount of biographical material, some reprints, slides, and several books on food and nutrition with annotations made by Borsook."

Background: Henry Borsook, 1897-1984, was a Professor of Biochemistry at Caltech from 1929 to 1968. His major contributions were in the areas of protein synthesis and nutrition. At Caltech, Borsook was twice chairman of the faculty, chaired the student health committee for many years, and sponsored the Anaximandrian Society at his home. Borsook's interest in proteins led him, in the early 1930s, to a new theory about their metabolism. At that time, scientists believed the proteins were probably very stable; Borsook demonstrated there was a continual interchange of proteins. His 1940 book, Vitamins: What They Are and What They Will Do for You, was among the first to present contemporary nutritional ideas to a popular audience. Borsook showed that a good diet consisted not of "food" but of certain amounts of specific nutrients such as proteins, vitamins, calories, and the like. During World War II he served on the Food and Nutrition Board, and helped to draw up the table of Recommended Daily Allowances. At this time he also developed multipurpose food (MPF), an enriched meal based on soybeans. The Meals for Millions Foundation, of which Borsook was a co-founder and long-time trustee, distributed MPF first to post-war Europe and later to underdeveloped areas. Throughout his lifetime, Borsook championed the idea that a good diet was not tied to eating specific foods, but could be scientifically manufactured. After retiring from Caltech in 1968, Henry Borsook moved his laboratory to U. C. Berkeley where he continued working until the late 1970s. (copied from the Online Archive of California). Address: Los Angeles, California.

128. Borsook, Henry. 1958. We could feed the world: Rising population need not mean potential starvation on a worldwide scale. In: Edward Hutchings, Jr., ed. 1958. Frontiers in Science, a Survey. New York: Basic Books; London: Allen & Unwin. vi + 362 p. See p. 80-87. Illust. Index. 21 cm.

• *Summary:* This chapter, in the section titled "The Biological Sciences," begins:

"We have the tools and the technology to feed everyone in the world with our present resources. And yet its been estimated that 80 per cent of the world population normally suffers from under-nutrition or malnutrition.

"One hears any number of explanations for this ironic situation-but at the bottom of them all is the simple fact that we still think of food in terms of the nineteenth century.

"As long as we persist in thinking of food in terms of bushels of wheat, we'll never have enough to go around. As soon as we learn to consider food as a conveyor of essential nutrients–and look for the cheapest and best way to get these nutrients–we'll find we have enough for all."

Today, one billion people in the world need more and better proteins. "We cannot manufacture or synthesize protein." So far as we can see, for a long time to come it will have to be grown, either as animal or vegetable protein. It is costly and inefficient to produce animal protein, which is basically a luxury; most people worldwide can afford but little of it. Legumes are the best source of vegetable protein.

We can make two basic changes which would help a great deal: (1) We should use directly, as human food, much more of the protein now grown for human consumption. Most of it is used as animal feed or thrown away. (2) We must teach processors and consumers to blend incomplete proteins so that they will cover each other's deficiencies in essential amino acids. The resulting mixture can be supplemented in a few cases by enrichment with synthetic amino acids.

As an example of these basic changes Borsook discusses briefly the development of Multi-Purpose Food, which he had a hand in developing.

"The specifications which were given to me... ran somewhat as follows: Three servings were to supply the recommended Daily Allowances of protein, minerals, Vitamins A, B-1, B-2, and Niacin. The food was to be palatable, to blend readily with other foods when other foods were available, to be eaten by itself when they were not. The meal had to be quickly cooked, in not more than 10 minutes, and require only the most rudimentary cooking equipment. It had to keep from six months to a year, packaged in a dry state. It was to cost no more then three cents a meal. It could not offend the religious principles of any people. It had to be transported easily. It could not draw on those foods which Americans eat to a large extent.

"The major ingredient chosen finally was soy grits, with a low fat content. The soy protein was chosen because it was the best cheap protein from a nutritional point of view. It is cheap because it is a by-product. Soy was grown chiefly for its oil,..." Soy grits were chosen in preference to soy flour–which invites comparison with wheat flour and is not a good substitute.

Note: All the authors and editor of this book work together at the California Institute of Technology (Caltech). Address: California Inst. of Technology.

129. Photograph of Clifford Clinton with his wife Nelda (about 1957-58) in Copenhagen, Denmark. 1958.



• *Summary:* Touring the world. A stop in Denmark's Copenhagen, pictured with their luggage with hotel stickers affixed. Clifford and Nelda had only two extensive overseas trips which included pleasure and some visits to Meals for Millions contacts, as well. The first was 1949-50 and the second a few years later. In 1953 they toured Europe for pleasure with their children and spouses.

This photo and date were sent to Soyinfo Center by Donald Clinton, son of Clifford Clinton (Jan. 2011).

130. *Soybean Digest*. 1959. Hafner in charge of exhibit at Calcutta. March. p. 24.

• *Summary:* "Fred H. Hafner of General Mills, Inc., Minneapolis [Minnesota], departed Feb. 22 for India to take charge of a soybean exhibit at a U.S. Solo Small Industries Fair to be held March 15-April 15 in Calcutta... Hafner, director of protein operations for General Mills' oilseeds division, traveled to India in the capacity of technical consultant for the Soybean Council of America. He will demonstrate how soybeans and soybean products can be incorporated into the Indian diet." A photo shows Hafner.

131. Callan, Mary Ann. 1959. Meals–Aid to millions. Los Angeles Times. June 7. Part IV. The Family. p. 1, D. Sunday.
Summary: A dynamic little woman, Miss Florence Rose, operating with a small work force out of an unpretentious office on 7th street in Los Angeles, is busy making friends overseas for the United States. Miss Rose is the executive

secretary of the Meals for Millions Foundation, and she works at their national headquarters. In 12 years the Foundation has shipped more than 56 million 3-cent meals to 100 countries abroad.

Multipurpose Food, developed by Caltech is now produced in the USA in Oxnard, California, primarily from soybean meal. The funds for sending the food abroad now comes from donations. India has produced MPF from peanut meal.

"Overseas women's groups in Brazil, Ethiopia, Greece, India, Japan, Korea, the Philippines, Taiwan, and Viet-Nam have received the friendship food for distribution–in quantities from 500 to 100,000 tons."

Note: This is the earliest article on soy seen (Aug. 2002) in the *Los Angeles Times*. Address: Times staff writer.

132. Borsook, Henry. 1959. We can at this time provide fairly adequate nutrition for the world. Why isn't it being done? Presented at the Second Annual Inter-American Food Congress, Miami Beach, Florida. June 9. 9 p. *Summary:* This is the opening address at the conference. Note: "The address covered three interrelated topics: (1) an explanation of the knowledge of science and food technology which, if applied, would provide everyone with a nutritionally adequate diet, (2) an analysis of obstacles that prevent the full application of this knowledge, and (3) a suggestion of how to overcome these obstructions" (H. Roberts 1967, p. 183-87). A copy of this speech is found in the Meals for Millions (MFM) archives. It begins:

"There are really enough food and supplementary nutrients provided in the world for pretty good nutrition for all the people in it... Yet, as you know, more than half are malnourished and undernourished. I am going to talk to you today about some of the fundamental reasons. They are not all what is commonly written on this subject. And I have a proposal to make to you about doing something about it."

"The present official calorie requirement standards are certainly too high; 2500 calories per capita daily is an adequate supply; also the supply estimates are too high in that they do not take into account of food that does not get into the statistics; a great deal of food is wasted; much food that could be used for human consumption is not; the figures, calories, take no account of the unlimited amount of essential nutrients that can be mined (minerals) and synthesized (vitamins). Even if one accepts the supply figures, a 10 to 15% increase could easily be obtained from food material now wasted and from food which is not, but could be, used for human consumption" (p. 1).

Among "the obstacles are selfish interests with political influence. Another obstacle is bureaucracy, both in the scientific nutrition committees of the UN and in governments... It can be said categorically that there are no religious obstacles..." "The greatest obstacle to progress... is an obstacle that is never mentioned. There can be no solution to the problems of world-wide malnutrition until it is overcome. That obstacle is in the minds of those scientific advisors to governments and the UN who still think of nutrition solely in terms of agriculture. The time has come when nutrition had better end its colonial status to agriculture. It will be better for both agriculture and nutrition if and when a free commonwealth relation is worked out between them.

"It was one of the great scientific achievements of the first half of the 20th century to work out the fundamental definition of food, to change from considering food in the forms in which it came to us as foodstuffs as a conveyor of essential nutrients" (p. 2).

First Dr, Borsook named the essential nutrients, i.e. calories, nitrogen, eight amino acids, fatty acids, minerals, and vitamins, and then set forth what he called the "fundamental principles of the science of nutrition... no one essential nutrient can replace another;... even when a diet contains an abundance of all essential nutrients but one, it is, nevertheless, a diet which will cause disease..."

"Another fundamental principle is that the source of the essential nutrient is immaterial to the body. It may come from the field, the mine or the factory; the body cannot tell the difference."

One should eat a variety of foods. "It points up the third nutritional principle, that in diet there is virtue in variety."

As the developer of Multi-Purpose Food (MPF), he continued: "It doesn't matter whether the indispensable [essential] amino acids we need come from animal protein or from an all-vegetable mixture such as legumes and cereals, or from vegetable foodstuffs enriched with synthetic amino acids, or from any kind of mixture."

"Minerals and vitamins, taken collectively, are cheaper and more convenient in the forms as they are obtained from the mine or synthesized than from food" (p. 3).

On of these principles: "The science of nutrition, hand in hand with food technology, can make great contributions to the world food problem in two ways. One is in the design of proper mixtures of indigenous foods with prescription of the supplements of essential nutrients needed, and second, to make cheap by-products [such as oilseed meals] available for human food,... and to make the supplements available, convenient and cheap enough" (p. 3).

As examples of the results that can be achieved by the application of food technology and science, Dr. Borsook described to the delegates of the food congress the U.S., Indian, and Brazilian versions of MPF plus Incaparina, a food mixture developed by Dr. Scrimshaw and INCAP in Guatemala. He also argued that similar nutritious foods could be developed for poorly nourished populations throughout the world (p. 4).

"A prominent student of nutrition in Latin America only a few years ago: 'Man, in order to live well, must always take a certain proportion of animal proteins in his ration... Vegetable proteins are almost always lacking in one or more of the amino acids and therefore called incomplete proteins.'

"This teaching is quite wrong. One doesn't have to have any animal proteins to be healthy. The mixture of proteins in most vegetables is hardly ever totally devoid of any of the indispensable [essential] amino acids... by mixing two or more vegetable foods with different relative deficiencies the mixture can be nutritionally complete; and this is not difficult to do" (p. 5). Continued. Address: Prof. of Biochemistry, California Inst. of Technology, Research Director, Meals for Millions, 115 W. 7th St., Los Angeles 14, California, U.S.A.

133. Borsook, Henry. 1959. We can at this time provide fairly adequate nutrition for the world. Why isn't it being done? (Continued–Document Part II). Presented at the Second Annual Inter-American Food Congress, Miami Beach, Florida. June 9. 9 p.

• *Summary:* Continued: Official agriculture likes to use an arable land per capita figure to determine the amount of food available in a country. When this figure is low, "the recommendation usually given is that the land usage and conservation must be improved to afford a diet of meat, dairy products, green and leafy vegetables and fruit," which is "the most expensive kind of diet for the poorest people."

"A country's nutritional potential should be and can be measured in terms of the essential nutrients in all forms which it grows, whether they are foods commonly eaten or not."

"Today when the crying need is for more efficient ways to feed the undernourished people, to attempt to increase the protein intake by stepping up livestock production would be wasteful of original calories, very expensive, and it won't work. This is what the notion of the necessity of animal protein leads to. The following are some estimates of the percentage of vegetable calories fed, recovered as calories in" foods of animal origin: pork 20%, milk 15%, eggs 7%, and beef 4%.

"My point is that effective action can be taken now in poor countries on a large scale if we would think in terms of essential nutrients and if we are determined to act. It is unfortunate all around that the posture of official agriculture has been unsympathetic to resorting to chemistry and technology for some of the factors needed in human nutrition. You know what a long struggle it was to legalize margarine. Official agriculture, that is political and bureaucratic agriculture, is concerned primarily with farmers' income and not primarily with the people's nutrition. People who hold to this policy-they are in the highest positions-do not like to hear it said, for example, that the important nutrients in milk-protein, calcium and riboflavin-can be obtained at a fraction of the cost when

procured separately as such," rather than from milk. When purchased as vitamins, one can buy "for 5¢ the vitamin A in 7 lbs. of butter, of the vitamin B-1 in 100 lbs. of wheat, of the vitamin C in 4 quarts of orange juice. Agriculture was afraid that people would turn away from the expensive foods-dairy products, meat, fresh vegetables and fruit-if they could get their essential nutrients more cheaply." But people "eat for pleasure when they can afford to. Agriculture has nothing to fear" (p. 4-5). Dr. Borsook's most biting comments came, however, when he focused on FAO, WHO, and UNICEF. "What about FAO,... What is it doing? The founders of FAO had high hopes. They thought they could arrange a marriage of health and agriculture. But soon two incompatible viewpoints developed. One wanted a strong food and agriculture organization which could take positive steps, the other wanted only a fact-gathering and advisory agency." The latter viewpoint eventually prevailed. "But for the first Director-General of the FAO, Lord Boyd Orr, only to advise was not enough. When member governments would not join in a plan 'to convert human need into effective demand in the markets of the world,' in a plan for action, he refused to stand for reelection to a second term as Director-General.

"The FAO has a Nutrition Division. It is related to the nutrition divisions of two other UN agencies, the World Health Organization, WHO, and the agency especially devoted to children, UNICEF. In my opinion, the nutrition activities of the UN have accomplished the least" (p. 6).

As an example, he gave a long account of how a sixmonth old request for UNICEF assistance to build an MPF plant in the Indian State of Madras still awaited a decision from FAO, WHO, and UNICEF.

"My second point is that the attitude of the FAO in this matter is unhappily characteristic. It is that of an elderly official in an ancient regime bureaucracy; it is courteous (when not contradicted), it is slow, and it is wrong, in this case, terribly slow and terribly wrong.

"I must say here that the Nutrition Division of FAO has done some useful work" to increase crop production, to train nutrition workers, and to sponsor conferences, among other things.

"The FAO is handicapped because it can only advise,... But even if all governments were ready to act, which by FAO's own admission they are not, the FAO would fail because its policies are solely agricultural policies, and the means it recommends are only those obtainable from agriculture and fishery. It won't use, it does not think of using, industry" (p. 7).

"The situation calls for an international agency of a new kind. What is needed is a World Nutrition Agency, a WNA coequal with WHO (World Health Organization) and FAO (Food and Agriculture Organization). Its doctrine should be that of essential nutrients and that it doesn't matter where they come from. "Its policy should not be restricted to advice, and then only when asked for by a government. Its policy should be action, it should find out what is needed and work out ways and means to get better nutrition to the peoples in need quickly. Its policy should be that it will act with government officials when they want help.

"When confronted with 'the bureaucratic habit of obstruction, delay and timidity to stick its neck out, the new agency should by-pass government." And when "confronted by bureaucratic scientists, it should by-pass them and turn to the scientists who are not bureaucrats, who, having the facts, want to act on them. The new agency should seek out all who are willing and can help:..." Lord Boyd-Orr lamented that:

"Governments are prepared to unite men and resources for a world war but the Great Powers are not prepared to unite to banish hunger and poverty from the world... People ask for bread and we give them pamphlets'" (p. 8).

"With this suggestion for the creation of a new international agency, whose doctrine, policy, and tactics would bear a striking similarity to those of Meals for Millions, the father of MPF ended his bluntly worded speech to the Second Annual Inter-American Food Congress" (Roberts 1967, p. 187).

"Predictably, given Dr. Borsook's association with Meals for Millions and his espousal of MPF, the Foundation [MFM] soon became the target of the anger which the Research Director's harsh and public criticism of FAO. WHO, and UNICEF inevitably aroused among UN officials" (Roberts 1967, p. 187). The next 9 pages of Roberts' PhD thesis discuss the fallout from this speech, with mention of Fred Hafner, Dr. Richard Hayward, Dr. Sebrell, Dr. Van Veen, Dr. Max Miler, Mr. Louis H. Bean, Dr. Sabin, Dr. Donald F. Ebright. From June 1959 onwards "UNICEF have not shown the slightest desire to cooperate with MFM or to support the overseas production of MPF." "MFM resented UNICEF's refusal to publicly acknowledge the existence of MPF"-when they acknowledged and encouraged Saridele in Indonesia and Incaparina in Central America (Roberts 1967, p. 188-91).

Note: A mimeograph copy of this speech is at the Meals for Millions archives at Special Collections at UCLA (Los Angeles), Collection No. 1107, Box 32, Notebook No. 3. Address: Prof. of Biochemistry, California Inst. of Technology, Research Director, Meals for Millions, 115 W. 7th St., Los Angeles 14, California, U.S.A.

134. Hafner, Fred H. 1959. Sees important role for soy in India. *Soybean Digest*. July. p. 28-29.

• *Summary:* Toasted soy protein is seen as a promising food for India. No mention is made of Meals for Millions or its Multi-Purpose Food.

135. Hilgenstuhler, T. 1959. L.A. man's friendship food saves starving millions. *Los Angeles Herald & Express*. Aug. 17. p. A-10+. Monday.

• *Summary:* About Meals for Millions. Address: Los Angeles, California.

136. *Wall Street Journal*.1959. General Mills plans to make low-cost "multi-purpose" food Oct. 14.

• *Summary:* On Dec. 1 General Mills plans to begin manufacture and sale of multi-purpose food, a soy-based product aimed at providing low-cost nutrition.

Note: This is the earliest document seen (Sept. 2010) showing an association between General Mills and Multi-Purpose Food (or Meals for Millions). General Mills started making Textured Soy Protein (TSP), the main ingredient in Multi-Purpose Food in about Dec. 1957 (see article in *Soybean Digest*, Dec. 1957, p. 23).

137. *Chemurgic Digest*.1959. Multi-purpose food. Oct. p. 3. • *Summary:* "According to *Wall Street Journal*, General Mills Inc., has said it will begin manufacture and sale December 1 of a soybean product called 'multi-purpose' food, aimed at providing low cost nutrition." The firm, based in Minneapolis, Minnesota, "said the granular food product will sell at wholesale for about 2½ cents for a twoounce serving. One such serving provides one-third of all daily protein, vitamin and mineral requirements, the company said...

"Sales to foreign countries will be made through a nonprofit group, Meals for Millions Foundation, Inc., of Los Angeles. The foundation has distributed more than 100 million such meals abroad since 1946, the company said. The product was developed by Dr. Henry Borsook of the California Institute of Technology. It can be prepared by adding boiling water and a seasoning."

138. *FAO Nutrition Meetings Report Series*. 1959. Report of the FAO/UNICEF Regional School Feeding Seminar for Asia and the Far East. No. 22. 53 p. Held 10-19 Nov. 1958 at Tokyo, Japan. [5 soy ref]

• *Summary:* UNICEF stands for the United Nations International Children's Emergency Fund. Appendix 3 (p. 48-51) titled "Data on some nutritious food products that have been developed in Asia and the Far East," discusses Saridele, groundnut extract curd [tofu made from peanut milk], Indian Multipurpose Food (MPF, developed by CFTRI), miso, natto, and tempeh.

"Saridele' is the name that has been given to a spraydried soybean extract combined with an extract of sesame, or peanut, with or without the addition of malt. Vitamins and calcium are added to saridele in order to make its nutritive value similar to that of cow's milk or to enhance its nutritive value. Flavorings such as vanilla or chocolate are also used, which make the product highly acceptable.

"A plant having a capacity of about 800 kg./day has been erected in Indonesia with the financial assistance of UNICEF and the technical assistance of FAO. Saridele is manufactured from a mixture of soybeans and decorticated sesame in the proportion of 4:1. Malt extract from maize may be used to replace 50% of the cane sugar used. Soybean and sesame are soaked for about six hours and then disintegrated finely, together with 7 volumes of hot water. The slurry is stirred vigorously and then filtered. The filtered liquid is heated under pressure for 10 minutes at 120°C., then flashcooled and formulated with Vitamin A, in oil solution, and malt, if desired. The formulated liquid is homogenized, concentrated in a vacuum evaporator to about 22% solids, then spray-dried. The powder finally is sifted and blended with finely ground cane sugar, and calcium carbonate, riboflavin, ascorbic acid and Vitamin B₁₂ added; the mixture may be flavored with vanilla or chocolate." A table compares the nutritional composition of whole dried cow's milk and Saridele (based on a leaflet from Saridele Ltd., Indonesia). Address: FAO, Rome.

139. Product Name: [Protea].

Foreign Name: Protea.

Manufacturer's Name: Proteinas S.A. de C.V. Manufacturer's Address: Mexico. Date of Introduction: 1959. November.

Ingredients: Incl. soy flour.

New Product–Documentation: E. Orr. 1972. Tropical Products Inst. G73. The use of protein-rich foods for the relief of malnutrition in developing countries: an analysis of experience. p. 17.

"In the 1950s General Mills, in collaboration with a local entrepreneur, set up in Mexico a company, Proteinas S.A. de C.V., to develop a market for Protea. The original Protea was essentially the soya-based Multi-Purpose Food, developed in the USA and sponsored by the Meals for Millions Foundation, for whom General Mills acts as supplier. In its early days the company offered Protea on the retail market and was also the principal supplier of the soya flour used for the Conasupo products. Little detailed information is available about this enterprise. It is known that General Mills withdrew, and that the company has been carried on for some years by the local entrepreneur. It supplies 'industrial ingredients' to the food and pharmaceutical industries in Mexico and also produces consumer products under the Protea trade mark. The latter differ markedly from the original Protea, which had a very high protein content... Sales are said to be currently at a level of \$20,000 per month and are made mainly to institutions, although there are plans for a concentrated effort to develop the retail outlet, which would appear at present to be embryonic."

Note: This is the earliest known commercial soy product made in Mexico, or in Central America.

140. *Soybean Digest*. 1959. General Mills to market MPF. Nov. p. 20.

• *Summary:* "Multi-Purpose Food, a dietary protein concentrate, providing a low-cost source of essential amino acids, vitamins and minerals, will be manufactured and marketed by General Mills, Inc., effective Dec. 1. This announcement was made jointly by Sewall D. Andrews, Jr., vice president and general manager of the oilseeds division of General Mills, Minneapolis [Minnesota], and Clifford E. Clinton, president of the Meals for Millions Foundation, Inc., of Los Angeles.

"Multi-Purpose Food (MPF) is the widely publicized '3¢ meal' originally developed by Dr. Henry Borsook at the California Institute of Technology. It is a soybean product. It has been introduced into more than 100 countries since 1946 by the nonprofit Meals for Millions Foundation. Two ounces of MPF provide one-third of the recommended daily dietary allowance for protein, vitamins A, D, thiamine, riboflavin, niacin, iron, calcium, phosphorus and iodine...

"Now,' Clinton stated, 'it will be possible to meet the ever growing demand from Americans who wish to purchase MPF and utilize its benefits...'

"Initially, Andrews stated, MPF will be introduced to institutions, schools, relief agencies, camps and restaurants, as a stable, fortified, low-cost, protein food in concentrated form. It will also be available to Civil Defense agencies for use in case of national emergency or major disasters.

"The arrangement entered into with General Mills will enable the Foundation to expand its worldwide educational program, using MPF as an example of how dietary deficiencies, of malnourished people can be corrected through the application of 20th century food technology to abundant, available materials of great nutritional value, the use of which as human food is now greatly restricted."

141. Photograph of Clifford Clinton (about 1957-59) with his wife Nelda. 1959.

• *Summary:* Taken in San Pedro, California (Los Angeles Harbor) on the dockside of the *Nordanger*, a freighter destined for South America; this was strictly a pleasure cruise.

In 1947-48 the catchy song "Slow Boat to China" was popular. Many people in those days took freighters because they liked the shipboard life and the various ports of call; it was more the journey than the destination that was important.

This photo and date were sent to Soyinfo Center by Donald Clinton, son of Clifford Clinton (Jan. 2011).



142. Photograph of George Washington Honor Medal of Freedoms Foundation at Valley Forge. 1959.



• Summary: The medal cites Meals for Millions Foundation "for outstanding achievement in bringing about a better

understanding of the American way of life." (1956-1959)

This photo and date were sent to Soyinfo Center by Chris Dodson of Freedom from Hunger Foundation, Davis, California (Nov. 2010).

143. Product Name: MPF (Multi-Purpose Food). Manufacturer's Name: General Mills, Inc., Specialty Products Div.

Manufacturer's Address: 9200 Wayzata Blvd., Minneapolis 26, Minnesota. Date of Introduction: 1959. Dec. Ingredients: Incl. defatted soybean meal.

New Product–Documentation:

Wall Street Journal. 1959. "General Mills plans to make low-cost 'multi-purpose' food." Oct. 14. On Dec. 1 General Mills plans to begin manufacture and sale of multi-purpose food, a soy-based product aimed at providing low-cost nutrition.

Ad (full page) in Soybean Digest. 1961. June. p. 23. "5 General Mills soy products help meet world protein needs." "MPF: Multi-Purpose Food is the vital backbone of a lowcost meal. It provides the high-quality protein, vitamins and minerals needed in the diet."

Soybean Digest Blue Book. 1969. p. 114. "Produces soy Multi Purpose Food." Address: General Mills, Inc. Chemical Div., 4620 W. 77th St., Minneapolis, Minnesota 55435.

An undated 4-panel leaflet (from about 1969), titled "General Mills MPF," is printed in red and blue on beige. On the front panel: "A concentrated food, consisting of protein-rich soy granules, essential vitamins and mineralsprecooked, ready to use. Available in two forms: Coarse granular, or fine granular. On the two inside pages are given: The ingredients. Nutrition information per portion. Percentage of U.S. Recommended Daily Allowances in one serving. MPF-For emergency use (disaster). In daily meal planning: Breakfast, lunch, dinner. For more information write to: General Mills Chemicals, Inc., 4620 West 77th St., Minneapolis, Minnesota 55435." Inserted is a "Consumer order form" for MPF: The Multi-Purpose Food. Each of the two textures is \$4.50 per can, or \$24.30 per case of 10 cans. A black and white photo shows the can. Mail to: General Mills, Inc., 400 Second Ave. So., Dept. 175. Minneapolis, Minnesota 55440.

144. Tiner, Hugh M. 1960. Meals for Millions: A 3-cent 'lunch' fights hunger and malnutrition. Rotarian (The) 96(5):51. May.

• Summary: Tells the story of Clifford Clinton, Meals for Millions, and MPF (Multi-Purpose Food). Describes how many different Rotary Clubs in the USA have sent MPF overseas for use in relief and rehabilitation projects in Costa Rica, Portugal, Greece, Korea, Mexico, Ceylon, Hong Kong, and India. "Last year \$247,000 poured into the



SPECIAL NOTE ABOUT THE PROTEIN IN MPF

The protein of MPF comes entirely from toasted soy granules, a specially prepared defatted soy protein product. The granules are heat processed under conditions which remove flavor components and inactivate enzymes and enzyme inhibitors naturally present in raw soybeans. The result is a delicately toasted soy protein product of exceptional nutritional quality and stability. For further information on the nutritional quality of the protein in MPF request a copy of: "The Nutritional Value of the Protein in General Mills MPF,"

INGREDIENTS: Toasted soy granules, calcium carbonate, sodium ascorbate, ferric ammonium citrate, d-alpha tocopheryl acetate, vitamin A palmitate, niacinamide, cyanocobalamin, pyridoxine hydrochloride, vitamin D_s, riboflavin and potassium iodide.

NUTRITION INFORMATION PER PORTION

Portion Size	1 ounce
Galories	90
Protein, grams	14
Carbohydrate, grams	
Fat, grams	and the second

ONE SERVING (1 OZ.) PROVIDES 20% OF THE U.S. RDA FOR PROTEIN AND 15% OR MORE OF THE U.S. RDA FOR 13 ESSENTIAL VITAMINS AND MINERALS.

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on							20
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MPF IS AN IDEAL FOOD TO HAVE AVAILABLE IN CASE OF EMERGENCY OR DISASTER.

MPF - FOR EMERGENCY USE

One tin contains sufficient protein, vitamins and minerals for an average sized adult for 2 weeks. Survival insurance at low-cost now is possible thru MPF.

MPF plus a source of calories and adequate water, will provide adequate nourishment for short periods of confinement in the event of a national emergency or disaster. If only MPF and water is available, the low calorie intake will result in a significant weight loss.

IN DAILY MEAL PLANNING:

Including as little as 1 ounce (approx. 28 grams) of MPF in foods will add 14 grams of good quality protein. MPF is low in fat and contains no cholesterol or starch. Its relatively high content of indigestible carbohydrate (15.5%) provides bulk in one's diet while at the same time accounting for the high absorption capacity of MPF for liquids.

MPF can be added to many foods or incorporated into favorite recipes without altering the appearance or flavor of foods significantly. Here are a few suggested ways of using MPF-C (Coarse Granular) and MPF-F (Fine Granular):

FOR BREAKFAST

Beverage: Stir 1 level tsp. of MPF-F into 4 ozs. of chilled tomato juice, orange juice or tangerine juice.

Hot cereal: Add 1 level tsp. of MPF-C to a serving of cooked cereal. Add cream or skim milk, cinnamon and sweetening to suit.

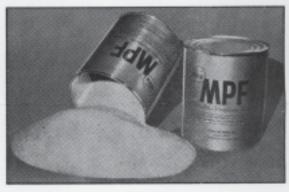
Cold cereal: Add 1 level tsp. of MPF-C to a serving of ready-to-eat cereal. Add cream or skim milk, fruit and sweetening to suit.

CONSUMER ORDER FORM THE MULTI-PURPOSE FOO A CONCENTRATED FOOD, CONSISTING OF PROTEIN-RICH GRANULES, ESSENTIAL

VITAMINS AND MINERALS, INTENDED FOR USE WITH OTHER FOODS.

SPECIAL NOTE ABOUT THE PROTEIN IN MPF

The protein of MPF comes entirely from toasted soy granules, a specially prepared defatted soy flour. The granules are heat processed under conditions which remove flavor components and inactivate enzymes and enzyme inhibitors naturally present in raw soybeans. The result is a delicately toasted soy protein product of exceptional nutritional quality and stability. For further information on the nutritional quality of the protein in MPF request a copy of: "The Nutritional Value of the Protein in General Mills MPF."



FORM	Net Wt. Per Can	Price Per Can	No. of Cans Ordered	Case Price 6-No. 10 Cans	Total Cost Including Shipping
COARSE GRANULAR	4.5 LB.	\$4.50		\$24.30	
FINE GRANULAR	4.0 LB.	\$4.50		\$24.30	
ILL IN:		M	AIL TO:	Total Amount	

FILL IN:

Your Name

Street Address

City

State.

Zip.

General Mills, Inc.

400 Second Ave. So. Dept. 175 Minneapolis, Minn. 55440

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Foundation's headquarters on Seventh Street in Los Angeles and sent 'meals' on their way to the hungry.

"But the chief aim of the Foundation is to aid Governments in developing their own versions of MPF, using food products of their regions. An Indian version, based on peanuts, is already in production, and the building of nine plants has been authorized for this purpose. A soybased MPF is being produced in Brazil. Research is going ahead in the Philippines to develop MPF-type food with fish and coconut meal, in Mexico with soy, in Iraq with sesame and dates, and in the South Pacific with coconuts. Independent, self-supporting Meals for Millions affiliates are active in Brazil, Burma, Ceylon, Formosa, Hawaii, India, Israel, Japan, Mexico, Pakistan, the Philippines, and Thailand, studying, interpreting, and expanding the program." Address: Former president, George Pepperdine College; Past Distirct Governor, Rotary International; Rotarian, San Diego, California.

145. Photograph of Dr. Tom Dooley (about 1960) distributing Multi-Purpose Food at his hospital in Laos. 1960.

• *Summary:* Dr. Dooley is holding one of the larger cans of Multi-Purpose Food.

Note 1. In 1961, in an article in *Soybean Digest* titled "Multi-Purpose Food: Valuable aid to improved nutrition" (June p. 20-21), Fred Hafner of General Mills wrote: "Such eminent men as Dr. Albert Schweitzer (Gabon), Dr. Glen Tuttle (Congo), and the late Dr. Tom Dooley (Laos) praised MPF for its value in treating severe cases of protein starvation (kwashiorkor) and in meeting dietary needs of the malnourished which were treated at their hospitals."

Note 2. Thomas Anthony Dooley III (January 17, 1927–January 18, 1961) was an American Catholic who, while serving as a physician in the United States Navy, became increasingly famous for his humanitarian activities in South East Asia during the late 1950s until his early death from cancer. He authored three popular, inspirational books that described his humanitarian activities in Viet Nam and Laos: *Deliver Us From Evil, The Edge of Tomorrow*, and *The Night They Burned the Mountain*. Some have also described these books as anti-communist, though in the years preceding the Vietnam War they could hardly have been otherwise (Source: Wikipedia Oct. 2010).

This photo and date were sent to Soyinfo Center by Chris Dodson of Freedom from Hunger Foundation, Davis, California (Oct. 2010).

146. *Soybean Digest*. 1960. General Mills to use MPF for earthquake relief [in Morocco]. July. p. 32.

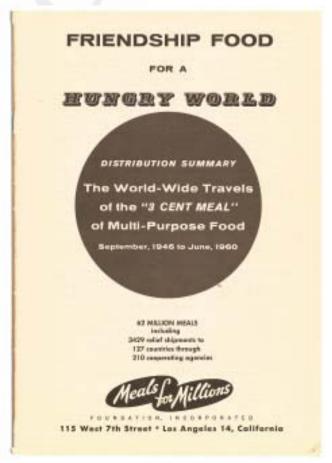
• *Summary:* "A General Mills' check for nearly \$1,500, issued recently to the Meals for Millions Foundation, Inc., Los Angeles, will be used in part to provide Multi-Purpose

Food (MPF) for survivors of the Agadir (Morocco) earthquake."

147. General Mills, Oilseeds Division. 1960. Toasted Soy Protein (TSP) (Ad). Soybean Digest. Sept. p. 23.
Summary: A full-page ad. "Most economical source of high-grade protein fortification... From General Mills–leader of food protein products. General Mills Toasted Soy Protein gives sausage makers, bakers and other food processors an economical way of adding those magic words, 'protein fortified,' to their product. Toasted Soy Protein in the protein source used in General Mills famous Multi-Purpose Food (MPF), a scientific blend of high-quality protein, essential vitamins and minerals. MPF, the new food sensation, is truly a multi-purpose food of many uses. Food processors can use generous amounts of TSP without altering taste or appearance of their product.

"Write for more information and samples of General Mills Toasted Soy Protein to Oilseeds Division..." Address: Minneapolis 26, Minnesota.

148. Meals for Millions Foundation. 1960. Friendship Food for a Hungry World: Distribution summary. Los Angeles, California. 29 p. Undated. 28 cm.



• *Summary:* "The world-wide travels of the '3 cent meal' of Multi-Purpose Food, September 1946 to June, 1960 [13 years and 9 months]: 62 million meals [distributed] including 3,429 relief shipments to 127 countries through 210 cooperating agencies."

This 29-page typewritten booklet contains a complete listing of all the shipments of MPF over 14 years, from September 1946 through June 1960. However no dates are given for shipments to individual countries.

Contents: What is the Meals for Millions Foundation? Multi-Purpose Food (MPF): What it is, what it does. Index of countries. Distribution totals (Sept. 1946–June 1960). Acknowledgment.

The index of countries lists the "Country," the "American Agencies or Denominations Cooperating and/or Served," the "Number of Lbs." and the "Distributing and Recipient Agencies." Under each country is the number of shipments and the number of pounds shipped.

In the Index, the countries are listed alphabetically by region and within each region alphabetically by country, as follows (however in the body of the booklet they are listed alphabetically by country name). Countries receiving more than 50,000 lbs. (25 tons) will be noted: Africa: Angola, Belgian Congo (52,657 lb), Camerouns [Cameroon], Egypt, Eritrea, French Equatorial Africa, Ghana, Kenya, Liberia, Libya, Mauritius Is., Morocco, Mozambique, Nigeria, Republique du Congo [Congo-Brazzaville], Rhodesia, Sierra Leone, South Africa, Tanganyika, Tunisia, Uganda.

Asia-Near East: Iran, Iraq, Israel, Jordan, Lebanon (56,910 lb), Oman, Persian Gulf, Turkey.

Asia–Far East: Afghanistan, Borneo, Burma, Cambodia, Ceylon, China (358,957 lb; 1946-1951), Goa, Hong Kong (238,760 lb), India (1,394,707 lb; 742 shipments. Note: Indian MPF became available in 1956, and shipments from the USA were discontinued; 558,072 lb of Indian MPF were made; 410 shipments), Indonesia, Japan (535,250 lb), Korea (1,254,225 lb; 489 shipments), Laos, Macao, Malaya, Nepal, Okinawa (20,616 lb), Pakistan (83,292 lb), Philippines (122,103 lb), Taiwan (46,089), Thailand, Vietnam.

Asia–Pacific Islands: American Samoa, Caroline Islands, Fiji Islands, Guadalcanal, Hawaii, Marshall Islands, New Hebrides.

Europe: Austria (82,159 lb), Belgium, Czechoslovakia, England, Finland, France (124,996 lb), Germany (206,185 lb), Greece, Hungary, Italy, Luxemburg [Luxembourg], Netherlands, Poland, Rumania, Spain, Switzerland, Trieste, Yugoslavia.

Europe–North Atlantic Islands: Cape Verde Islands, Madeira Island.

Latin and Central America: British Honduras, Canal Zone, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama. South America: Bolivia, Brazil (198,581 lb), Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay, Venezuela.

Caribbean Area: Cuba, French West Indies, Haiti (110,231 lb), Jamaica, Puerto Rico, St. Lucia, Virgin Islands.

North America: Alaska and Aleutian Islands, Canada (51,836 lb), United States (146,635 lb; American Indian relief, Migrant relief, School lunch and institutional projects {Clifton's Golden Rule Cafeteria donated 12,500 lbs}, Miscellaneous).

Additional countries reached through overseas parcels only: Argentina, Cyprus, Denmark, Malta, New Zealand, Norway, Nyasaland, Pitcairn Island, Saudi Arabia, Scotland, Sudan, Sweden, Trinidad.

At the end of all the countries (p. 28) is a box titled "Total Relief Distribution": 3,249 shipments [or perhaps 3,429], 6,412,256 pounds [3,206 tons, or 229 tons a year average for 14 years], 51,298,048 "meals" of MPF. On the next page are the details of the "Distribution totals."

There is also a special acknowledgment at the back to the U.S. Navy and the U.S. Naval Air Reserves "for their cooperation in transporting approximately 200,000 lbs. of M.P.F. during 1959-1960. Operation Handclasp, a peopleto-people project of the U.S. Navy, originating in San Diego, has carried shipments to the Far East and to South America. Planes of the U.S. Naval Air Reserves have carried emergency supplies of MPF to disaster areas, such as flood victims in Nagoya, Japan, and to earthquake victims in Agadir, Morocco."

Note: The countries receiving the most MPF by weight are (in descending order of amount) are: India, Korea, Japan, China, Germany, France, Philippines, and Haiti.

A photo shows the cover of the 29-page summary document. This photo and photocopy of the document were sent to Soyinfo Center by Chris Dodson of Freedom from Hunger Foundation, Davis, California (Nov. 2010). Address: Los Angeles, California.

149. Soybean Council of America Inc. Israel Office. 1960. The story of Eliahu Navot: The soybean pioneer of Israel. Jerusalem, Israel: SCA. 36 p. Undated. Portrait. Many photos. 25 cm.

• *Summary:* Contents: Introduction. The life of E. Navot: "Eliahu Lipovitsky, as he was called before he adopted the Hebrew name Navot, was born in 1894 at Uman in the Ukraine. He immigrated in 1912 and, like all other youngsters who came to Palestine-then part of the Ottoman Empire-he became a hired labourer and guard." At that time the kibbutz (the communal settlement typical of Israel) was beginning to take shape, and various organizations, such as the World Zionist Federation, were founding agricultural farms.

Shortly after World War II he obtained his first soybean seeds from Mr. Mason (then Director of the Dept. of

Agriculture in the British Mandatory Administration). He met Prof. Haim Weizmann, the first President of Israel and in 1949, with his encouragement, left on a study trip around the world, collecting seeds, living with soybean farmers, and learning how to prepare soybeans for human consumption. In Asia, he first saw soybeans grown on a large scale. He visited Malaya, Singapore, Australia, Fiji, Hawaii, and California.

In 1950 he returned to Israel with scores of varieties of seeds and proceeded to plant them in his experimental plots near his home in Herzlia [Herzliya / Herzliyya]-located just north of Tel Aviv. A soybean variety named Ogden [later renamed Herzlia] performed the best. His goal was finding ways to feed the people, and he developed and served many recipes. His work received widespread publicity. One especially gratifying article was published in the official organ of the Israel army; it called him the "Father of the Israel Soybean" and included a photo of him dancing the hora (a circle dance). Another fascinating report was published in "Eitanim," an important monthly devoted to health and hygiene. Soon Navot began lecturing on his pet crop, extolling its many virtues. "When the American Soybean Council began to operate in Israel, Navot was one of the first to offer his services."

The private war of Eliahu Navot: "As early as 1953, Navot published in *Hassadeh*, the major Hebrew journal devoted to agriculture, a technical article summing up his own experiments aimed at the acclimatization of the soybean in Israel. That article evoked great interest, but Navot was not satisfied with the opportunities provided by the press and other public bodies and launched a private campaign aimed at that bastion of conservatism, the kitchen. By means of pamphlets, circulars and manifestoes he was out to convince his fellow-citizens that the soybean well deserves a place of honour among the staple foods of the Israeli family.

"Some of the mimeographed pamphlets written by Navot in the course of his campaign are given below:"

The soybean in Israel and the world. The nutritive value of the soybean. The soybean–Food for millions. The soybean–A source of nutrition for millions (discusses Clifford Clinton and Meals for Millions). The cultivation of soybean in Israel. Soybean sprouts (variety Herzlia). Soybean drinks (soy coffee). Remarkable achievements of the "Herzlia" soybean.

Photos show: (1) Eliahu Navot (full page portrait photo). (2) E. Navot with four of his grandchildren. (3) E. Navot riding on his horse during the 1936-1939 disturbances. (4) Navot's first prize certificate as a cattle grower received at the 1936 Levant Fair. (5) Navot wearing a hat, sunglasses, and medals, and smoking a pipe. (6) Navot dancing the "hora." (7) Navot's medals. (8) Navot among the founders of the "Histadrut"–the General Federation of Labour in Israel. (7) A smiling girl with a

plate of soyfoods. (8) Navot with cupped hands holding soybeans he has grown. (9) Navot in Herzlia holding a bunch of soybean plants, heavily laden with pods, grown in Israel. (10) A wedding feast where all the dishes served were made with soybeans. (11) Navot standing behind a table as he preaches at one of his soya dinners to a group of agricultural school teachers at Kfar Ata. (12) Navot distributes his soya felafels to a group of children with outstretched arms. (13) Navot, the soybean pioneer in Israel, shakes hands with Ogden Reid, U.S. Ambassador to Israel, as George Strayer looks on. (14) Navot seated next to the mayor of Herzlia. In the background are several soybean plants in jars atop a bookshelf. (15) Mr. Navot with a group of young people, enjoying a soya meal. (16) Participants seated at a seminar in Israel from Ceylon, Ghana, and India, invited to a "soya dinner" at Mr. Navot's home. (17) Navot standing at a dinner party behind Mr. Itzhak Ben-Zvi, President of State. (18) Navot shaking hands with and talking to Supreme Court Justice, E. Sussman. (19) Navot shaking hands with and talking to Minister of Development, Mr. M. Ben-Tov. Between them is the Mayor of Tel Aviv, Mr. M. Namir. Address: Jerusalem, Israel.

150. *Los Angeles Times*. 1961. 5-ton food shipment sent starving Congo. Feb. 21. p. 8.

• *Summary:* "A 10,000-lb. shipment of high protein food from the Meals for Millions Foundation of Los Angeles, left from the U.S. Naval Base at Bayonne, New Jersey, Monday to help combat starvation in the Congo."

The foundation headquarters is at 115 W 7th St. Clifford E. Clinton, president of the foundation, said the African nation is suffering from a terrible famine, especially among the 300,000 Baluba tribesmen.

Last month, MFM shipped another 5,000 lb of food, which was consigned to the Congo Christian Medical Relief Program at Leopoldville [later renamed Kinshasa].

Note: Formerly named Zaire, as of Feb. 2011 this country is named Democratic Republic of the Congo.

151. Shurpalekar, S.R.; Chandrasekhara, M.R.; Swaminathan, M.; Subrahmanyan, V. 1961. Chemical composition and nutritive value of soyabean and soyabean products. *Food Science (Mysore, India)* 10(3):52-64. March. Published in 1961 as a 32-page book by the Soybean Council of America in Hamburg, Germany. [178 ref]

• *Summary:* Contents: Introduction. Chemical composition and nutritive value. Soyabean oil. Carbohydrate in soyabean. Minerals in soyabean. Vitamins in soyabean. Factors affecting nutritive value: Trypsin and growth inhibitors, heat processing, other factors. Digestibility and biological value: Animal experiments, supplementation with sulphur amino acids, human feeding experiments. Supplementary value to other food proteins. Processed foods from soyabean: Soyabean milk, dried milk substitutes from soyabean, malt foods containing soyabean, soyabean flour, multipurpose food (fortified soyaflour), dehydrated soup mixture, balanced food, soyabean protein isolate. Fermented soyabean products: Soy sauce, tofu or soyabean curd, miso, natto, tempeh. Conclusion.

Note 1. This is the earliest document seen (Jan. 2001) from India that mentions tempeh.

Note 2. This is the earliest English-language document seen (Aug. 2003) that contains the term "soyabean protein" (or "soyabean proteins").

Note 3. This is the earliest English-language document seen (Aug. 2003) that contains the term "soyabean protein isolate" (or "soyabean protein isolates"). Address: Central Food Technological Research Inst. (CFTRI), Mysore, India.

152. General Mills, Specialty Products Div. 1961. 5 General Mills soy products help meet world protein needs (Ad). *Soybean Digest.* June. p. 23.

• *Summary:* The five products are MPF (Multi-Purpose Food. "the vital backbone of a low-cost meal"), TSP-200 (micro-milled toasted soy protein), LSP-15 (a blend of TSP-200 and General Mills fluid natural lecithin), Genpro 200 (untoasted soy protein), and Syn-Klym (a "synthetic milk" product, based on soy protein, available in both whole fat and non-fat forms). Address: 9200 Wayzata Blvd., Minneapolis 26, Minnesota.

153. Hafner, Fred H. 1961. Multi-Purpose Food: Valuable aid to improved nutrition. *Soybean Digest.* June. p. 20-21. • *Summary:* "Since 1946, the nonprofit Meals for Millions Foundation has distributed over 62 million 2-ounce servings of MPF to 127 countries. Such eminent men as Dr. Albert Schweitzer (Gabon), Dr. Glen Tuttle (Congo), and the late Dr. Tom Dooley (Laos) praised MPF for its value in treating severe cases of protein starvation (kwashiorkor) and in meeting dietary needs of the malnourished which were treated at their hospitals. Since 1959, General Mills (GMI) has been manufacturing MPF for MFM as well as promoting its use in the U.S.A. and abroad." A photo shows Fred H. Hafner. Address: Director of Protein Operations, Specialty Products Div., General Mills, Inc.

154. Meals for Millions. 1961. How you can help expand soybean markets: As protein food for people (Ad). *Soybean Digest*. June. p. 59.

• *Summary:* A half-page vertical ad. "1. Take out an annual membership in non-profit Meals for Millions Foundation (\$10-\$25-\$100).

"2. Make a personal or group contribution (in any amount) through your church, club, community group to provide '3¢ meals' of soy-based Multi-Purpose Food (MPF) to missions, hospitals, schools, orphanages. "In the past 15 years Meals for Millions has introduced 63 million '3¢ meals' of MPF into 127 countries through more than 200 voluntary agencies for use under observation of medical, health and welfare authorities.

"Meals for Millions is unendowed, unsubsidizedmaintained by voluntary contributions-by 'penny power and penny wisdom.'

"The Example of MPM has stimulated its Production in India, Japan, Brazil, Mexico in an international do-ityourself program whereby developing countries are shown how to convert their own oilseed meals into domestic versions of MPF.

"Meals for Millions has received 5 Freedoms Foundation awards 'for outstanding achievement in bringing about a better understanding of the American way of life.""

Note: Founded in 1949, the Freedoms Foundation is a national, non-profit, non-partisan, non-sectarian educational organization. The Foundation is located on an 85-acre campus adjacent to the Valley Forge National Historical Park in Pennsylvania and sits on ground that was once part of General Washington's encampment.

"An Eating-Is-Believing Program. A People-to-People Program. Malnutrition is preventable. Help prevent it with '20th Century Loaves and Fishes.' Soy-based MPF.

"MPF was developed at the California Institute of Technology. A 2-oz '3¢ meal' provides protein, vitamins, minerals in amounts approximately equal to those in ¹/₄pound beef; a glass of milk; a dish of peas and a potato."

"(Contributions deductible for income tax purposes)." Address: 215 West 7th St., Los Angeles 14, California.

155. *Soybean Digest*. 1961. Soybeans and the nutrition of India. June. p. 32-34.

• *Summary:* "According to Dr. P.V. Suhhatme, director, division of statistics, Food and Agriculture Organization of the United Nations, about two-thirds of India's population is malnourished. According to the 1959 U.N. Statistical Year Book, India was the worst fed nation of the 40 that supplied statistics."

Four tables show different aspects of Indian diets. There is a shortage of milk in the Indian diet; milk is considered a nearly perfect food. One of the newer foods developed is Indian Multi-Purpose Food (MPF) which consists of 75% specially processed groundnut flour and 25% Bengal gram flour, fortified with essential vitamins and minerals. It was developed at the CFTRI along the lines of American Multi-Purpose Food, which is based on defatted soy flour. "Indian MPF is a low-cost supplement to the poor-man's diet."

"The greatest handicap toward greater consumption of soybean products in India is their lack of availability. Soybean production in India is negligible." "India's third 5-year plan just drawn up envisages an increase in vegetable oil consumption from 0.36 ounces to 0.47 ounces daily [per person]. This would mean an increased annual requirement of over 500,000 tons of vegetable oils for edible purposes alone, assuming that the Indian population will total 490 million by the end of the third plan."

"India has made its first purchase of U.S. soybean oil– 3,000 metric tons of crude degummed soybean oil under P.L. 480 from North American Continental Co. in late March. The purchase was the culmination of several years' negotiations by the Soybean Council in cooperation with the U.S. Department of Agriculture. First shipment was made Apr. 12 and consigned to 22 vanaspati manufacturers in India." Address: India Office, Soybean Council of America.

156. Meals for Millions Newsletter, Summer 1961. 1961. California: Meals for Millions. 4 p. *

• *Summary:* This was probably a periodical newsletter. However only one known issue remains—in the Helen C. Abell Collection at the University of Guelph, Ontario, Canada. It is boxed with XA1 MS A040119. Address: California.

157. *Life*. 1961. A \$700 prefabricated job to put up in four hours. 51(11):104. Sept. 15.

• *Summary:* The Kelsey-Hayes Company of Detroit, Michigan, is turning out 5,000 prefabricated fallout shelters a month.

The caption to one of the photos reads: "Catalogue of equipment. Accessories for the use in fallout shelters include: at top, air-blower (\$74) and filter (\$55); center, 14-day supply of Multi-Purpose Food, water and vitamins (\$8.98);..." The photo shows MPF in large and small cans.

158. *Soybean Digest*. 1961. MPF is offered dairy distribution [for home bomb shelters and survival kits in case of nuclear war]. Oct. p. 8.

• *Summary:* "A surge in consumer interest resulting from increased [Cold War] political tensions has prompted General Mills to make available its emergency food, MPF (Multi-Purpose Food), to American dairies for route distribution to homes wishing to stock home shelter areas [bomb shelters].

"Civil Defense authorities have recommended that everyone have a 2-week food supply in his home shelter area–and a 3-day survival kit in his automobile in case evacuation is necessary."

159. Creed, Arline. 1961. "Magic food" brings hope to the starving. *Los Angeles Examiner*. Nov. 3. Section 2. p. CCC 1, 3. Friday.

• *Summary:* In the Peruvian jungle, in the village of Pucallpa, stands the remote and hardly adequate hospital of

Dr. Theodore Binder. Natives travel hundreds of miles for his medicines. And with it, they get the best medicine of all– food-to counter their greatest enemy, malnutrition. "This Friendship Food comes to them as a gift from the American people through the efforts of the non-profit Meals for Millions Foundation." Their goal is the abolition of starvation.

"Dr. Albert Schweitzer was so impressed with the purpose and effectiveness of this group that he agreed to serve on its International Advisory Board."

Tells the story of how Clifford Clinton worked with Dr. Henry Borsook of Cal Tech to develop multi-purpose food, starting with a \$5,000 check and a staggering assignment:

"He wanted a high protein food that would be inexpensive to produce, simple to prepare, require no refrigeration, cost little to ship, serve as a meal in itself but be useful as a supplement to any native diet, contain no ingredients which might violate religious or racial taboos– and to top it all, it must taste good."

Dr. Borsook, in less than a year of laboratory research, came up with the answer. "In searching for a base for this food, Dr. Borsook found margarine manufacturers had no further use for soybeans after extracting the oil. The residue [defatted soybean meal or cake], available in tremendous quantities, was being sold for animal feed or fertilizer." It had a high protein content and he fortified it with essential vitamins and minerals.

"Unable to interest a war-preoccupied government in his project, Clinton brought in Florence Rose, Brooklyn social worker, and Ernest R. Chamberlain, attorney and former newspaperman." They sat down together at a table in the basement of his cafeteria. "This was the beginning of the Meals for Millions Foundation and its letterhead then, as now, carried the words '...for the relief and prevention of starvation.""

Photos show: (1) Dr. Theodore Binder with a young patient. (2) A sick, hungry Peruvian mother holding her young daughter. Address: Los Angeles, California.

160. Chamberlain, Ernest R. 1961. More pennies for meals (Letter to the editor). *Rotarian (The)* 99(5):8. Nov. *Summary:* "Among those who were inspired to do something as a result of reading *Meals for Millions* by Hugh M. Tiner [The Rotarian for May, 1960], was Benjamin P. Freeman, Chairman of the International Service Committee of the Rotary Club of Brewster, New York. Every three months he sends us a check for from \$30 to \$50, gathered at Club meetings by 'appropriating' all pennies in the pockets of the 28 members of the Rotary Club of Brewster. Recently he decided to drive to Los Angeles and combine a vacation with a visit to our office and deliver a big can of pennies in person, and also find out a bit more about Meals for Millions.

"The accompanying photo shows Rotarian Freeman (right) seated at a table overflowing with the copper equivalent of 1,189 '3-cent meals' of Multi-Purpose Food. With him is Dr. Donald Ebright, who for 22 years was in charge of distribution of relief supplies for the National Christian Council of India, and a former Rotarian." Address: Secretary, Meals for Millions, Los Angeles, California.

161. Chen, Philip S.; Chen, Helen D. 1962. Soybeans for health, longevity, and economy. 2nd ed. South Lancaster, Massachusetts: The Chemical Elements. xii + 242 p. Jan. Illust. Index. 21 cm. 1st ed. 1956. [24 ref] *Summary:* This book is identical to the original 1956 edition, third printing (the dedication is to William J. Morse and Harry W. Miller), except that: (1) Table 1, titled "Soybean production in the United States" (p. 2) gives statistics to 1960, instead of 1958. (2) Appendix B (p. 224-36) has been updated based on the 1961 *Soybean Blue Book.* (3) The dust jacket has been updated. On the rear dust jacket is a portrait photo of Dr. Philip Chen and a biographical sketch. (4) The paper is slightly thicker.

Note: In 1962 Chen wrote *A New Look at God*, published by Chemical Elements (288 p.). Address: 1. Prof. of Chemistry, Atlantic Union College, South Lancaster, Massachusetts; 2. National Science Foundation Fellow, Cornell Univ.

162. General Mills, Specialty Products Div. 1962. From soy products, General Mills formulates new protein-rich foods (Ad). Soybean Digest. May. p. 28. [11 ref] • Summary: A full-page ad. "We are manufacturing and marketing SMP (Soy Milk Powder) which, when mixed with water, makes a delicious beverage for school lunches and for supplementing diets of children unable to get cow's milk; also, through an agreement with Meals for Millions Foundation, MPF (Multi-Purpose Food) which provides, in concentrated form, the essential nutrients usually lacking from high carbohydrate diets. Using soybeans as the key, we have developed TSP (Toasted Soy Protein)-an unusually low cost, high quality protein completely pre-cooked and ready to use. Other protein foods from soybeans are in the developmental stage. When perfected, these too will contribute to improved world nutrition."

The "Specialty products" logo resembles an infinity sign. A large photo shows a little girl, with a mud wall behind her, looking up at her mother, who is feeding her with a spoon from a bowl. Address: 9200 Wyzata Blvd., Minneapolis 26, Minnesota.

163. Milner, Max. 1962. Food technology in the U.N. protein-rich food programs. Paper presented at the 22nd Annual Meeting of the Institute of Food Technologists, Miami Beach, Florida. Held 11 June 1962. *

• *Summary:* Mimeographed lecture in the files of the Meals for Millions Foundation, Los Angeles. Address: UNICEF.

164. Borsook, Henry. 1962. Plain talk about nutrition. *Engineering and Science* 26(1):9-14. Oct. Reprinted in *California Institute of Technology Quarterly* 4(2):2-7. Winter 1962-63.

• *Summary:* The subtitle reads: "What is a 'good' food? Will any single food substance supply all the essential nutrients? How many calories do you need? Some straight answers by an expert in the field of nutrition." The article begins: "One of the greatest biological discoveries of this century was the separating out of the essential from the accidental in food... The next great discovery in the field and it is *the* discovery from which all the future promise comes, was the proof that the source of an essential nutrient is immaterial. It may come from food which is grown, it may be mined, or it may come from a factory."

"How much protein do we really need, allowing a factor of two for safety? If all of our protein were meat, the most expensive source, it would be a surprisingly small amount–about two ounces. Most of us eat more than twice that. If only a fifth of the protein in our diet was meat and the rest was in a mixture of bread or beans, we would do very well."

During World War II "the British government, in order to save ship tonnage, since all the wheat had to be brought in by ship, made the British people eat whole wheat bread made of 85 percent extraction flour. Children soon began to show signs of calcium and iron deficiencies. This came about because of a material in the branny layers of the wheat berry which forms insoluble salts with calcium and iron; not only are the iron and calcium in the wheat berry not usable, but the berry robs iron and calcium from the other foods that are eaten. The British government then added powdered chalk and an iron salt to the flour to make good the deficiencies that this noxious material in the branny layers had induced."

The author then describes how Mr. Clifford Clinton, of the Clifton cafeterias in Los Angeles, offered free meals then 5-cent meals at his cafeterias, then pioneered the development of Multi-Purpose Food, based on soy protein– and the principles described above. "Mr. Clinton made a grant to Caltech to develop this food, and in the course of a year it was done... A foundation was then formed, Under Mr. Clinton's leadership–the Meals for Millions Foundation–to raise money to make this food and give it away."

A photo shows Borsook, "the man responsible for the development of Multi-Purpose Food." Address: Prof. of Biochemistry, Caltech (California Inst. of Technology), California. 165. *Soybean Digest*. 1962. CROP [Christian Rural Overseas Program] ships protein foods. Nov. p. 16.

• *Summary:* Foods with a high protein content are being requested by church relief agencies in areas of great hunger. CROP has made arrangements for shipments of one such food, MPF (Multi-Purpose Food) from the General Mills plant at Belmond, Iowa. "CROP is the food collecting agency for many American churches."

A photo shows a large sign ("Iowa CROP Food for Indonesia") with sacks of food piled on a platform and four men in the foreground.

166. Chambers, John A. 1962. Soya as a foodstuff. *Arkady Review (Manchester, England)* 39(3):39-41.

• *Summary:* Discusses briefly soy oil, defatted soya flour, American Multi-Purpose Food (50% protein, 1% fat, 31% carbohydrate), soy sauce, tempeh, and tofu. Address: Research Chemist, British Arkady Co. Ltd., Skerton Rd., Old Trafford, Manchester 16, England.

167. **Product Name:** Soy-Fortified Whole-Wheat Bread. **Manufacturer's Name:** Harrison Foods.

Manufacturer's Address: Acccra, Ghana. Date of Introduction: 1962.

New Product–Documentation: Interview with Dr. D.W. Harrison. 1982. Note 1. This is the earliest known commercial soy product made in Ghana. Note 2. This is the earliest known commercial soy product made by Dr. D.W. Harrison in Africa.

168. Meals for Millions. 1962. People to people (Color motion picture). Los Angeles, California: Meals for Millions 16 mm. Summarized in Soybean Digest, June 1962, p. 28. * *Summary:* According to Soybean Digest: "After a year of film making in Africa, India, Korea, Hong Kong, Hollywood and Pasadena, the Meals for Millions 16-mm motion picture in color, 'People to People,' has been completed. Narration is by film star Eddie Albert and the theme song by Peggie Lee.

"The film tells the history and scope of the Meals for Millions program in feeding hungry people with the 3ϕ meal, MPF. The film presents in person sequences showing Dr. Albert Schweitzer at his African hospital at Lambarene, and the late Dr. Tom Dooley relating his experience in Laos with Multi-Purpose Food.

"Available without fee to any group choosing a Meals for Millions project or for \$10 rental including surface mail delivery. For further information write Soybean Digest 6c, Hudson, Iowa."

Note: Also shows Clifford Clinton, Dr. Henry Borsook, Florence Rose. As of March 1984 the film is still available from Meals for Millions. Address: Los Angeles, California. 169. Hafner, Fred H. 1962. Problems involved in increasing world-wide use of soybean products as foods in the Near East and India. In: USDA Northern Regional Research Laboratory, ed. 1962. Proceedings of Conference on Soybean Products for Protein in Human Foods. Peoria, IL: USDA NRRL. iii + 242 p. See p. 195-99.

• *Summary:* Contents: The problem. Problems at our end. Selection of foods a problem. Indigenous foods. Short-sightedness. Problems abroad. Suggested solutions.

"Ten years ago, Spain used very little soybean oil. Spain has large olive groves and olive oil is 'king' there. The mere suggestion that Spain export its olive oil and purchase soybean oil from the U.S. seemed ridiculous to those who knew the eating habits of the Spanish people. Now, 10 years later, Spain is our largest off-shore buyer of soybean oil; Spanish people are using and, in many cases, preferring soybean oil as a food oil; and Spanish olive oil is being exported at a price considerably above its replacement cost as soybean oil. As a result, Spain has a net export income that is much greater than if they continued to utilize their olive oil production in Spain." Address: Director of Edible Protein Products, Specialty Products Div., General Mills, Inc., 9200 Wayzata Blvd., Minneapolis 26, Minnesota.

170. Sebrell, W.H., Jr. 1962. World aspects of protein malnutrition. In: USDA Northern Regional Research Laboratory, ed. 1962. Proceedings of Conference on Soybean Products for Protein in Human Foods. Peoria, IL: USDA NRRL. iii + 242 p. See p. 5-14.

• *Summary:* "There seems to be little doubt that protein malnutrition is the most widespread form of deficiency disease in the world today. Although nutritional anemia, goitre, and various vitamin deficiencies continue to be major problems for certain segments of the population, from a world viewpoint, protein malnutrition far exceeds these in importance.

"There is increasing evidence that protein malnutrition accounts for a major part of the deaths of children between weaning and school age in many parts of the world. This situation has been recognized only in recent years because the effects of the deficiency have been complicated and hidden by the occurrence of infectious diseases. Scrimshaw has recently pointed out that it is necessary to consider not only the effect of nutrition on infections but also the effect of infections on nutrition... Thus the child may die either from the malnutrition or from the effects of the infection, although the basic problem is in each case protein malnutrition."

"This situation is further complicated by the rapidly increasing world population which is already posing a problem of increasing the food supply to keep up with the population growth... It is, of course, essential that caloric needs receive first consideration... However of greater importance is a long continued partial caloric deficiency. This is so closely tied to the need for protein that the two must be considered inseparable from a practical point of view."

"Since the basic calorie needs of the body receive first consideration, if there are not enough calories from other foods, some of the protein food must be utilized for energy."

A table (p. 12) shows the composition of Indian Multi-Purpose Food, which consists of 75% peanut flour and 25% Bengal gram, with thiamine, riboflavin, vitamins A and D, and calcium phosphate added.

Dr. Wei in Taiwan has been experimenting with a mixture of 60% soybean, 20% rice, and 20% wheat. He is also trying a mixture of 40% soybean, 20% peanuts, 20% rice, and 20% wheat (p. 13).

"American Multi-Purpose Food has been made in a variety of formulas based on soybean meal. The results of controlled experiments with these products are not yet available.

"There would seem to be no reason why an excellent product could not be developed, based primarily on soybean meal" (p. 13). Address: M.D., Director, Inst. of Nutrition Sciences, Columbia Univ., New York, NY.

171. General Mills, Inc., Specialty Products Div. 1963.
From soy products, General Mills formulates new proteinrich foods (Ad). *Soybean Digest.* May. p. 5. *Summary:* "A management report from Mr. Sewall D.

Andrews, Corporate Vice President and General Manager, General Mills Specialty Products Division."

"Here at the Specialty Products Division we are concentrating on new protein-rich food products for world feeding. We are manufacturing and marketing SMP (Soy Milk Powder) which, when mixed with water, makes a delicious beverage for school lunches and for supplementing diets of children unable to get cow's milk; also, through an agreement with Meals for Millions Foundation, MPF (Multi-Purpose Food) which provides, in concentrated form, the essential nutrients usually lacking from high carbohydrate diets. Using soybeans as the key, we have developed TSP (Toasted Soy Protein)–an unusually low cost, high quality protein completely pre-cooked, ready to use. Other protein foods from soybeans are in the developmental stage. When perfected, these too will contribute to improved world nutrition."

Photos show: (1) A small portrait photo of Mr. Sewall D. Andrews. (2) A half-page photo of a little girl, looking somewhat hungry, looking up at a woman holding a bowl of food in her left hand and a spoonful of that food in her right–food that she is about to feed to the little girl.

172. Meals for Millions. 1963. Friendship food for a hungry world. Distribution of relief shipments, September 1946–

May 15, 1963. 215 West 7th Street, Los Angeles 14, California. 4 p. Undated. [2 ref]

• Summary: Total distribution of MPF (Multi-Purpose Food) up to 15 May 1963 was 12,830,416 pounds, comprising 102.6 million meals. Countries receiving over 20,000 pounds, in descending order of amount received, were: India (1,979,748 lb), Korea (1,356,110), Japan (541,102), Hong Kong (394,259), China (358,957, stopped in 1951), Brazil (312,244), Germany (206,185), United States (183,366), Philippines (146,943), Haiti (139,823), France (126,022), Pakistan (101,041), Congo (86,101), Austria (82,159), Tanganyika (77,997) Mexico (65,722) Burma (63,554), Taiwan (58,639), Lebanon (56,910), Canada (51,836), Ceylon (38,428), Israel (38,280), Jamaica (38,171), Greece (38,133), Vietnam (37,524), Italy (36,768), Indonesia (35,873), Jordan (33,375), Hungary (33,165), New Guinea (31,535), Gabon (27,704), Liberia (27,187), Okinawa (23,640), Malaya (23,454), Morocco (22,736), Chile (22,721), Iran (21,482), Peru (21,374), Honduras (21,168), Bolivia (20,860), Nepal (20,626), Borneo (20,053).

The following countries (listed alphabetically) were early recipients of soy-based Multi-Purpose Food from Meals for Millions, and were late in introducing soybeans to the country: Bahamas (received 6 shipments totaling 2,079 lb between 1 July 1960 and 31 Dec. 1962). Basutoland [Lesotho] (received 2 shipments totaling 1,539 lb between 1 July 1960 and 31 Dec. 1962). Bolivia (received 2 shipments totaling 1,634 lb between Sept. 1946 and 30 June 1960). British Honduras (received 5 shipments totaling 11,319 lb between Sept. 1946 and 30 June 1960; renamed Belize in about 1975). Cape Verde Islands (received 1 shipment of 2,007 lb between Sept. 1946 and 30 June 1960; independent since 1975). Caroline Islands (received 2 shipments totaling 2,008 lb between Sept. 1946 and 30 June 1960; renamed Federated States of Micronesia in 1986). Central African Republic (received 1 shipment of 2,025 lb between 1 July 1960 and 31 Dec. 1962). Eritrea (received 1 shipment totaling 2,025 lb between Sept. 1946 and 30 June 1969). Fiji Islands (received 2 shipments totaling 2,052 lb between Sept. 1946 and 30 June 1969). Finland (received 1 shipment of 2,040 lb between Sept. 1946 and 30 June 1960). Gabon (received 3 shipments totaling 17,660 lb between Sept. 1946 and 30 June 1960). Guam (received 3 shipments totaling 4,995 lb between 1 July 1960 and 31 Dec. 1962). Guadalcanal ([later part of the Solomon Islands] received 1 shipment of 513 lb between Sept. 1946 and 30 June 1960). Iraq (received 3 shipments totaling 8,122 lb between Sept. 1946 and 30 June 1960). Jordan (received 9 shipments totaling 28,839 lb between Sept. 1946 and 30 June 1960). Liberia (received 10 shipments totaling 21,949 lb between Sept. 1946 and 30 June 1960). Luxemburg [Luxembourg] (received 1 shipment of 5,130 lb between Sept. 1946 and 30 June 1960). Marshall Islands (received 1 shipment of 739 lb

between Sept. 1946 and 30 June 1960). Mozambique (received 3 shipments totaling 7,641 lb between Sept. 1946 and 30 June 1960). New Hebrides [later Vanuatu] (received 1 shipment of 513 lb between Sept. 1946 and 30 June 1960). Oman (received 4 shipments totaling 10,659 lb between Sept. 1946 and 30 June 1960). Panama (received 1 shipment of 96 lb between Sept. 1946 and 30 June 1960). Samoa (American) (received 6 shipments totaling 6,480 lb between Sept. 1946 and 30 June 1960). Somali (received 1 shipment of 270 lb between 1 July 1960 and 31 Dec. 1962). Swaziland (received 1 shipment of 621 lb between 1 July 1960 and 31 Dec. 1962). Tonga Islands [Kingdom of Tonga, independent since 1970] (received 5 shipments totaling 6,723 lb between 1 July 1960 and 31 Dec. 1962). Virgin Islands [USA] (received 2 shipments totaling 2,113 lb between Sept. 1946 and 30 June 1960). Western Samoa [independent since 1962] (received 1 shipment of 1,026 lb between 1 Jan. 1963 and 15 May 1963).

Other countries which received MFM shipments by 15 May 1963 are: Afghanistan, Algeria, Angola, Argentina, Basseterre [Probably refers to the island, Basse-Terre (or Guadeloupe proper) which is the western half of Guadeloupe, separated from the other half, Grand-Terre, by a narrow channel. As of 1994 Guadeloupe is a French Overseas Department. Probably not the seaport on St. Christopher Island, capital of St. Christopher-Nevis-since that is not a country], Belgium, Cambodia, Republic of Cameroun [Cameroon], Canal Zone, Colombia, Costa Rica, Cuba, Czechoslovakia, Dominica, Dominican Republic, Ecuador, Egypt, El Salvador, England, Eritrea, Ethiopia, French West Indies, Gambia, Ghana, Goa [former Portuguese possession; annexed by India in 1962; became a state of India in 1987], Grenada, Guatemala, Haute Volta [Upper Volta, later Burkina Faso], Iraq, Kenya, Laos, Libya, Macao, Madeira Islands [autonomous region of Portugal in east Atlantic Ocean, 600 miles due west of Casablanca, off the coast of Morocco], Mauritius Islands, Montserrat [island in the West Indies], Netherlands, Nicaragua, Nigeria, Northern Rhodesia [later Zambia], Nyasaland [later Malawi], Oman, Paraguay, Persian Gulf, Poland, Puerto Rico, Ruanda Urundi, Rumania [Romania], Ryukyu Islands, American Samoa, Santa Lucia [probably Saint Lucia island in the Caribbean], Sicily, Sierra Leone, South Africa, Southern Rhodesia [later Zimbabwe], Spain, Surinam [Suriname], Switzerland, Thailand, Trieste [Italy], Tunisia, Turkey, Uganda, Uruguay, Venezuela, Yugoslavia.

Note: This is the earliest document seen (March 2010) concerning soybean products (soy flour in MPF) in British Honduras [Belize], Cape Verde, Caroline Islands, Eritrea, Iraq, Lesotho, Liberia, Luxembourg, Marshall Islands, New Hebrides [Vanuatu], Oman, Samoa (American), Tonga, or Western Samoa. Soybeans as such have not yet been reported in these countries. This document contains the earliest date seen (Feb. 2009) for soybean products (soy flour in MPF) in Bolivia (June 1960), British Honduras (June 1960), Cape Verde (June 1960), Central African Republic (Dec. 1962), Eritrea (June 1960), Iraq (June 1960), Lesotho (Dec. 1962), Liberia (June 1960), Luxembourg (June 1960), Marshall Islands (June 1960), New Hebrides (June 1960), Vanuatu), Oman (June 1960), Samoa (American) (June 1960), Tonga (Dec. 1962), or Western Samoa (May 1963). Soybeans as such had not yet been reported by that date in these various countries. Address: Los Angeles, California.

173. Bowser, Hallowell. 1963. The rusty bells of hope. *Saturday Review* 46:24. June 22.

• *Summary:* "With the single exception of death, mankind's classic enemy is hunger. All through the historical period, right up to the present moment, our best thinkers have stood paralyzed before the problem of how to grow enough food to keep expanding populations well fed."

However in recent years a unique new approach to the problem has emerged from a modest Los Angeles organization known as Meals for Millions. Caltech biochemist Dr. Henry Borsook, who is research director of Meals for Millions, says "It is easier, cheaper, and often more convenient to get vitamins and minerals from sources other than food." He is proposing an agricultural revolution "that involves no added agricultural production. Instead, it makes use of foodstuffs not previously utilized as human fare."

"Though it is plagued by a chronic shortage of funds, more than 73,000,000 meals have been sent to starving people in 143 counties, territories, and island dependencies, and the files in MFM headquarters at 215 West 7th Street, in Los Angeles, overflow with letters of thanks for 'The Friendship Food.'

"The head nurse of the Schweitzer clinic at Lambaréné [Lambarene] wrote, 'It is wonderful food. The patients like it and it does them great good... They love the flavour of MPF in crocodile soup... We have used MPF sparingly because we do not know when we might be so fortunate as to receive more.""

"The MFM self-help program has been especially successful in India, Japan, Mexico, and Brazil, which have taken over production of MPF themselves, adapting the formula to local conditions. India, for instance, uses a base of peanut meal and Bengal gram [chickpea, garbanzo bean] instead of soy meal. Many other nations are preparing to produce MPF independently."

174. National Service for Freedom from Hunger, Bulletin (Colombo, Ceylon).1963. Food for thought: "The Wonder Food"–Meals for Millions. No. 3. Sept. p. 1-4.
Summary: At the top right of page 1 is the FAO "Freedom from Hunger" logo. "8. The discovery of MFP (Multipurpose Food) is likely to be treated as another American gimmick, or, at best, damned with faint praise, because of the labels it has been given, namely: 'The Wonder Food' and 'Meals for Millions.' Fortunately the empirical evidence in support of it and the concept behind it are now overwhelmingly in its favour as a significant contribution to the world food problem. Dr. Borsook began producing the multi-purpose food in 1945 in the laboratory. It consisted of soy-grits mixed with vitamins and minerals, to provide at minimum cost (3 cents US dollars), in minimum bulk (2 ozs.), a high quality, palatable protein food, providing 1/3 of the minimum daily adult requirements of the vitamins, minerals, etc. laid down by the US food standards, in addition to 200 calories. On the basis of this discovery, the 'Meals for Millions' Foundation was set up in 1946 'for the relief and prevention of starvation and malnutrition in the world'. The objectives of the Foundation and its independent affiliates in other countries was to encourage MPF production in countries where malnutrition is widespread and chronic, and where proteins of good quality and essential vitamins and minerals are critically deficient in the prevailing diets. All this would still have little relevance for Ceylon if not for the fact that the idea and practice have established themselves firmly in our neighbouring country, India. The Indian government and many of its Ministers and Officials became deeply interested in the idea, and initiated, since 1955, active Programmes of Research and Pilot Projects, mainly through the Central Food Technological Research Institute in Mysore. In 1956, an Indian MPF was produced, consisting of de-fatted ground-nut meal and Bengalli gram [Bengal gram], enriched with vitamins and minerals; and an intensive Programme for the popularization of the Indian MPF was launched on the occasion of the Swearing-In Ceremony of the Indian Union Government's Cabinet at Rashtrapati Bhavan. At this ceremony, the Indian Prime Minister himself expressed his appreciation of the importance of the idea, and indicated his intention to support it with maximum assistance from Government. Since then, on the initiative of Dr. P.S. Deshmukh, the Indian Union Minister of Agriculture, and the President of the 'Meals for Millions' Association of India, Dr. V. Subramaniam, Research Director of the Association, multipurpose food is making much progress in India. At Coimbatore, there is now operating a plant that produces 5 tons of MPF per day to take care of the entire School Feeding Programme of the Madras State. Dr. Subramaniam, in the course of an address, stated that 'today, every State in India wants MPF, and more people speak, not of the wonder bean (soybean), but of the wonder food MPF."

On page 2 is this notice is a rectangular box: "We are greatly indebted for much of the material on MPF to Mr. H. Jayasena, a Government Official, who is also a member of the Jaycees [United States Junior Chamber, a leadership training and civic organization for people ages 18-41]. Mr. Jayasena is a representative of the small Meals for Millions Committee in Ceylon, and an author of an unpublished monograph on the subject."

Also on page 2 is a full-page Ceylon Food Balance Sheet with nine columns for each of about 30 basic foodstuffs: Production. Change in stock. Foreign trade: Gross imports. Gross exports. Available supply. Distribution: Feed. Seed. Manufacture. Waste. Ceylon's main crop is rice (paddy-wetland).

175. Hafner, Fred H. 1963. Re: Praise for the work of Mr. H. Jayasena with Multi Purpose Food in Ceylon. Letter to H. Jayasena, 185 Baseline Road, Borella, Colombo 9, Ceylon, Dec. 27. 2 p. Typed, with signature on letterhead (carbon copy).

• *Summary:* I want "to tell you how pleased I am with the vigorous campaign you are waging in behalf of MPF. The article in the FAO publication carries the message in a forceful way... Yet despite your enthusiasm, FAO's support, Meals for Millions' and GMI's interest, there's one thing lacking-the approval of the Ceylonese government and its advisory agencies.

"General Mills cannot consider capital investment in Ceylon due to the complete lack of any guarantees against appropriation by the Ceylonese Government... Meanwhile malnutrition is a problem in Ceylon, particularly among children and nursing mothers. We cannot defer action on an MPF project until the U.S. and Ceylon governments have resolved their differences...

"What we would prefer, of course, is: 1. Permission from the Ceylonese Government to introduce MPF into Ceylon on a commercial basis. 2. Contractual agreement with a responsible firm in Ceylon... to import, distribute, and market MPF to establish that a market exists; then import the ingredients and manufacture MPF in Ceylon. 3. Development of a completely indigenous MPF operation after volume of MPF sales has reached a level that would justify investment in a 2 ton/hour plant."

Copies sent to E.R. Chamberlain and L.R. Brewster. Address: Director of Edible Protein Products, Specialty Products Div., General Mills, Inc., 9200 Wayzata Blvd., Minneapolis 26, Minnesota.

176. Bhutiani, R.C. 1963. Indian multi purpose food: Recipes. Mysore, India: Central Food Technological Research Institute. 13 p. Illust. 12 cm. * Address: India.

177. Jayasena, H. 1963. Meals for Millions and Multi-Purpose Food. How to feed the nation better at less cost (Brochure). Ceylon: 14 p. 36 cm. [42 ref] *Summary:* This scholarly mimeographed leaflet, which cites 42 references, addresses its basic theme directly. In

recent years, Ceylon has been consuming more than she has produced, creating a serious negative trade balance. Therefore the people of Ceylon (Sinhalese) must learn to make more efficient use of her existing food. And they need more protein in their rice-centered diet.

Dr. Henry Borsook, Professor of Biochemistry at the California Institute of Technology and Research Director of the Meals for Millions Foundation and original inventor of the world famous "3¢ meal–multi-purpose food" points out that one doesn't need "to have any animal proteins to be healthy. The mixture of proteins in most vegetables is hardly ever totally devoid of any of the indispensable amino acids. One or two may be low in one food. This relative deficiency is not the same in all vegetables and by mixing two or more vegetable foods with different relative deficiencies, the mixture can be nutritionally complete, and this is not difficult to do." He further points out that "A country's nutritional potential should and can be measured in terms of the essential nutrients in all forms which it grows, whether they are in foods commonly eaten or not." (p. 3).

In addition to "the cultivation of pulses, attention should be given to the production of leguminous crops which are rich in vegetable proteins like groundnut and soybeans. While these crops can be useful in providing much needed protein, we feel that soybean which through modern processing methods can be made to yield a 'complete' protein that compares favourably with milk or meat is the crop which should receive the greatest emphasis. In this connection it may be noted that: 'Wherever soybeans can be grown–and there are few conditions under which they cannot–they are the cheapest source of complete protein in terms of land area required and the hours of labour employed per pound of protein provided.'" (p. 5. Meals for Millions Foundation, *International Inter-Affiliate News*, Nov. 1956, p. 8)

"We are glad to make due acknowledgement of the great interest and helpfulness the Meals for Millions Foundation is continuing to show, to lead to the day when Ceylon, like India, will be able to produce her own multipurpose food and help the people to attain a still higher level of health and nutrition.

"To re-capitulate, we have attempted in this memorandum, among other things, to show the steps that may be taken towards raising nutritional levels, bringing down the cost of living, augmenting savings for ensuring better capital investment, emphasising the gravity of the population problem before the country, the need for adapting food production to meet the nutritional standards of the population on more scientific lines and, pointed out the importance of producing low-cost nutritional supplements and infant foods, especially to help the low income groups." (p. 14). Address: All Ceylon Buddhist Congress. 178. Pawley, Walter H. 1963. Possibilities of increasing world food production. Rome, Italy: Food and Agriculture Organization of the United Nations. ix + 231 p. Illust. (part color). Map (folded color). 23 cm. Series: Freedom from Hunger Campaign, Basic Study No. 10 * Address: Director.

179. Photograph of (left to right) Nelda Clinton, Clifford Clinton, Fred Patterson, Jean Davis and her son, David. 1963.



• *Summary:* Fred Patterson was Nelda's father. Jean Clinton Davis was the daughter of Clifford and Nelda. Taken in 1963, in Jean's living room in Los Angeles, after the untimely death of her husband.

This photo and date were sent to Soyinfo Center by Donald Clinton, son of Clifford Clinton (Jan. 2011).

180. Hall, Elizabeth. 1964. Food for the future: Millions of tiny microbes, known as yeast cells, filled with vitamins and proteins, may relieve the pain of children suffering with kwashiorkor and other protein deficiency diseases. *Science News Letter* 85(1):10-11. Jan. 4.

• Summary: The cells of food yeast, Torulopsis utilis, live on sugar and nitrogen; 1,000 pounds of food yeast seed can produce 7,000 pounds (3½ tons) of yeast protein per day. By contrast, a 1,000-pound steer (a giant "protein factory") produces only nine-tenths of a pound of protein a day. 1,000 pounds of soybean seed produce only about 82 pounds of protein per day under favorable conditions. Food yeast is an excellent source of B-vitamins, however it should be used only as a supplement, rather than as the sole source of protein in a diet.

Another type of yeast (*Saccharomyces rouxii*), known as "primary dried yeast," is the familiar type of bread used to leaven bread and ferment wine. A one-celled organism, it reproduces by budding.

Yeast "concentrates are being used in nutritional supplements such as Multi-Purpose Food sent overseas by

Meals for Millions."

181. Flumerfelt, W.E. 1964. Sammy Soy grows up. *Soybean News* 15(2):1-3, 6. Jan.

• *Summary:* The first full tankcar of domestic soybean oil was made by Otto Eisenschiml in 1918 or 1919 at the original solvent extraction plant of the Chicago Linseed Oil plant. Dr. Eisenschiml, now in his 80's and still vigorous, was really the pioneer in the utilization of soybean oil industrially. Address: Director of Marketing Oilseeds Operations, Specialty Products Div., General Mills, Inc.

182. *Rotarian (The)*.1964. More Meals for Millions. 104(3):48. March.

• *Summary:* In May 1960 (p. 51) an article about Meals for Millions, by Hugh M. Tiner, first appeared in *The Rotarian*, explaining that nearly a dozen Rotary Clubs had joined the fight against hunger by providing or distributing Multi-Purpose Food to people in many nations. "Since the article appeared, more Rotary Clubs have acted. Seven California Clubs–those in West Covina, Wilshire, Wilmington, Baldwin Park, West Hollywood, Tarzana, and Avalon–have helped provide MPF to people in seven nations, often through Rotary Clubs in the receiving nations. The Rotary Clubs of West Kauai, Hawaii, and Brewster, New York, have also made donations to the Foundation. In all, Rotary Clubs have accounted for the shipment of tons of MPF to the hungry, and each standard 600-pound shipment supplies at least 4,800 meals."

183. Asimow, Morris. 1964. Project Brazil: A case study in micro planning. *International Development Review*. June. * Address: Univ. of California at Los Angeles.

184. Shurpalekar, S.R.; Chandrasekhara, M.R.; Korula, Soma; Swaminathan, M.; Sreenivasan, A.; Subrahmanyan, V. 1964. Studies on a spray-dried infant food based on peanut protein isolate and full-fat soy flour and fortified with DL-methionine and certain vitamins and minerals. I. Preparation, chemical composition, and shelf life. *Food Technology* 18(6):108-10. June. (In 3 parts). [17 ref] *Summary:* Meals for Millions may have inspired this research, but is not mentioned in the article. Address: Central Food Technological Research Inst. (CFTRI), Mysore, India.

185. Shurpalekar, S.R.; Korula, Soma; Chandrasekhara, M.R.; Swaminathan, M.; Chandrasekhar, B.S.; Sreenivasan, A.; Subrahmanyan, V. 1964. Studies on a spray-dried infant food based on peanut protein isolate and full-fat soy flour and fortified with DL-methionine and certain vitamins and minerals. II. Protein efficiency ratio and over-all nutritive value. *Food Technology* 18(6):110-12. June. (In 3 parts). [10 ref]

• *Summary:* This study was conducted on weanling albino rats. The PER of the infant food was 2.34, and that of the same fortified with DL-methionine was 2.86, compared with 3.19 for milk proteins. The infant food (both fortified and unfortified) promoted growth well. Address: Central Food Technological Research Inst. (CFTRI), Mysore, India.

186. Jayasena, H. 1964. Ceylon Meals for MillionsProgram. Report of proceedings of the inaugural meeting of the Meals for Millions Council of Ceylon, held 22 Sept.1964 (Leaflet). Ceylon: Mimeograph leaflet published by the author. 2 p. 36 cm.

• *Summary:* "The Junior Chamber of Colombo, on the suggestion of Miss Florence Rose, Executive Director of the Meals for Millions Foundation, U.S.A. who while on a brief visit to Ceylon since 1955 when she last came and founded the original Meals for Millions Committee, organised the reactivation of this programme by convening a meeting of voluntary social service and welfare organisations and interested persons to form the Meals for Millions Council of Ceylon. This meeting was held at the Jubilee Room of the Galle Face Hotel at 6.30 P.M. on 22.9.1964.

"The proceedings of the meeting commenced by a discussion in which Miss Florence Rose expressed her deep debt to Mr. K. Somasundaram, former Director of the Ceylon Red Cross Society and to Dr. J.H.F. Jayasuriya who organised the meeting of the original Ceylon Meals for Millions Committee at his residence and to all those who helped to get the programme moving and thereby making the present developments possible.

"In the course of her talk Miss Florence Rose reviewed the programme of the Meals for Millions Foundation all over the world and drew special attention to the developments that have taken place in India, Brazil, Philippines and Japan where the example of the American MPF had stimulated the development of local variations using indigenous raw materials hitherto unused as human food. She explained that in the course of the years since 1955 when she came to this beautiful Island, the Meals for Millions Foundation, U.S.A. had gifted to Ceylon approximately 40,000 lbs. of American MPF which utilises soyabean meal as its protein base to the Government of Ceylon, the Ceylon Red Cross Meals for Millions Committee and other voluntary agencies here. She also explained that in the course of the 18 years in which she has been directing this 'People to People' programme, 13 million pounds of this 'Friendship Food' (MPF) had been introduced to 129 countries." "She pointed out that the Indian version of this food-'Indian multi-purpose Food' is now used in the State of Madras to provide essential protein, vitamins and minerals for over one million children in the Madras State school feeding programme. She also emphasised the developments now taking place in the Philippines, which have been stimulated greatly by the work of the Philippines Meals for Millions Affiliate and the scientific collaboration of Universities, Research Foundations and their leaders.

"After this introductory address, the colour film 'People to People' was screened which showed examples of the work of the Meals for Millions programme in various countries, with special emphasis on the Indian programme and the great interest displayed in this connection by the late Mr. Nehru, former Prime Minister of India who states in this film: 'This India needs, this is what India wants; but we must do it in our own way.'"

"The name of Prof. C.C. de Silva was unanimously adopted as the Chairman of the Ceylon Meals for Millions Council. This was proposed by Mr. Upatissa Hulugalla and seconded by Mr. H. Jayasena.

"Mr. Upatissa Hulugalla proposed that Mr. H. Jayasena be elected the Convenor and Secretary of the Ceylon Meals for Millions Council. The notion was seconded by Mr. N.D. Wijayanayaka and was unanimously adopted by the House."

A list of the 14 people present at the inaugural meeting includes Mr. H. Stanley Fernando (Chamber of Commerce), Dr. (Mrs.) B.V. De Mel, Mr. I. Paiva, Dr. M.J. Carrol, Director U.S. Information Services and Mr. H. Jayasena.

Miss Florence Rose expressed her appreciation to various people including to "Mr. H. Jayasena, whose personal interest and educational efforts on behalf of the programme began five years ago when as Secretary of the National Development Inquiry of the All Ceylon Buddhist Congress he first wrote to her Headquarters for information regarding the programme." Address: Ceylon Meals for Millions Council.

187. Rose, Florence. 1964. Re: Ten pound package lost in mail. Letter to The Post Office, Colombo, Ceylon, Oct. 2. 1 p. Typed, without signature on letterhead.

• *Summary:* This letter is interesting mainly because of the attractive letterhead on which it is written: "Meals for Millions Association of India: A non-profit organisation dedicated to the relief and prevention of malnutrition." Near the top right: "Phone: 43698. Please address communications to: Dr. (Miss) Radha Karnad, 16, Talkatora Road, New Delhi 1.

Down the left side are the names of 15 officers, the positions they occupy, and the city where each lives: President. Regional Vice-Presidents (2), Secretary-Treasurer. Associate Secretary. Publicity. Research Committee (5).

The letter also shows that Florence Rose was in Colombo from Sept. 19 to Sept. 24; she stayed at the Gallo Face Hotel. A 10-pound package she sent to Mr. H. Jayasena at 185 Baseline Rd., Borella, Colombo 9, Ceylon, had not arrived by the time she left. 188. Rose, Florence. 1964. Re: Big problems at Meals for Millions in California. Requests. Letter to Mr. H. Jayasena, 185 Baseline Rd., Borella, Colombo 9, Ceylon, Oct. 2. 2 p. Typed, with signature on letterhead. 34 cm.

• Summary: "My dear friend Jay,

"Last night I began to read the mail that had accumulated for me in New Delhi during the past week or ten days. You know that the contents were not such as to make me happy-but quite the contrary. My worst fears were confirmed that hasty and unnecessary violence had been done to our carefully built program of the past eighteen years-and that while I also believe that the program has not received a death blow, I also believe that irreparable damage has been done by members of our Executive Committee who had no personal familiarity with the problem involvedproblems that did not differ from situations that had confronted us in the past and which were successfully surmounted by Ernest and myself and others, who had a deep and abiding faith in our program.

"There were a few bright lights shining in the darkness that enveloped me as I read the letters from Los Angeles. First of course there is always that special quality that makes Ernest the rare human being that he is-the quality reflected in the Meals for Millions program throughout the world. As long as Ernest is functioning and his fine mind as well as his spirit is able to work constructively with me, I can face the future with confidence-and try to repair the harm that has already been done.

"The second bright light was your dear letter of September 25th with its post script of September 29th. I have already written to Ernest that the only comfort that I had in Ceylon was the wonderful spirit that you and my good friends the De Silvas maintained throughout my stay. Even though I gave you only a fragmentary idea of the problem, your reactions reaffirmed by own convictions that nothing must be permitted to stop our forward march-'if humanly possible.'"

"Oxfam pamphlet: A thousand thanks for making an effort to find another copy... The chapter entitled 'Shall we close down' has a special significance for us."

"Daily Mirror–Issue of September 23rd [1964]. When you get a chance, please mail me as many extra copies of this issue as our friends there could obtain for us." At the end is a handwritten note by Florence.

This letter is written on the letterhead of: "Meals for Millions Association of India: A non-profit organisation dedicated to the relief and prevention of malnutrition." Near the top right: "Phone: 43698. Please address communications to: Dr. (Miss) Radha Karnad, 16, Talkatora Road, New Delhi 1." Down the left side are the names of 15 officers, the positions they occupy, and the city where each lives. Address: New Delhi, India. 189. Chamberlain, Ernest R. 1964. Re: Delighted with articles in the *Ceylon Mirror*. Letter to H. Jayasena, Meals for Millions, Colombo, Ceylon, Nov. 10. 1 p. Typed, with signature on letterhead.

• *Summary:* "I noted in your letter to Florence [Rose, that] Mr. Piava inquired as to how we liked the articles in the *Ceylon Mirror*.

"So I have written to the editor of the *Mirror* tonight and enclose copy of my letter for your information. This will begin perhaps to express to him and his fellow workers how thrilled we were with the wonderful publicity.

"The USIS [United States Information Service] in Ceylon evidently relayed the publicity to Washington [DC]. Florence received a phone call and tonight a reporter interviewed her for a story they will probably give international publicity.

"We will keep an eye and ear out for it.

"Many thanks. We know how much we owe you for all the good which we know will come of this, Gratefully, Ernest."

At the bottom left is a handwritten note: "I'll be writing soon, dear friend–Florence." Address: Co-Director, Meals for Millions Foundation, 215 West 7th St., Los Angeles, California 90014. Phone: MAdison 7-2545.

190. Miller, Gerald; Asimow, Morris. 1964. Project proposal: Iran. Los Angeles, California. 2 p. Dec. Mimeographed. *

• *Summary:* This feasibility study, based on Morris Asimow's idea of micro planning, was the first ever sponsored by the Meals for Millions Foundation of Los Angeles. Address: Meals for Millions, Los Angeles, California.

191. Jayasena, H. 1964. Meals for Millions and multipurpose food (Leaflet). Ceylon: All Ceylon Buddhist Congress. 2 p. 36 cm.

• *Summary:* Contents of this mimeographed leaflet: Introduction. World-wide programme against hunger. India's example. An old dictum challenged. Food tradition and coconuts. W.H.O. [World Health Organization of the United Nations] recommends. A step forward.

"Multi-purpose food consists of a scientific blend of vegetable proteins, vitamins and minerals to provide maximum nutrition in palatable protein form at minimum cost. Besides, it has been designed to provide an adequate supplement to inadequate diets without affecting the taste and texture of the food usually consumed.

"This food was first developed by Professor Dr. Henry Borsook at the California Institute of Technology, U.S.A. in 1945 from a moderate research grant provided by Mr. Clifford Clinton, a civic leader and restaurant operator of Los Angeles. "Multi-purpose Food called MPF for short was first produced out of soyabean press-cake and enriched with vitamins and minerals to provide in a two ounce quantity one-third of the minimum daily requirements of the essential protein, vitamins and minerals for an adult man established by regulation by the U.S. Food and Drug Administration."

"In 1946, the non-profit-making Meals for Millions Foundation was established in the USA to introduce this new concept for the prevention of malnutrition. By this programme, the Meals for Millions Foundation proposed:

"(1) To introduce to under-developed countries, the soy-based multi-purpose food (MPF) as an example of the type of low-cost food concentrate that could convert poor deficient diets into good nutritious diets.

"(2) To stimulate self-help programmes in the developing countries for them to produce from their own resources MPF type foods to prevent malnutrition among the vulnerable groups in their countries.

"India's example: Although till 1956, the American Meals for Millions Foundation was the only source of multi-purpose food, the stimulus provided by the popularisation of the MPF idea in India led to research being carried out at the Central Food Technological Research Institute, Mysore which resulted in an indigenous MPF being produced in India in 1954. It was made out of local raw material consisting principally of peanut and Bengal gram. This programme received the enthusiastic support of the Indian Prime Minister and the members of his cabinet.

"The Government of Madras after appropriate feeding trials decided to use Indian MPF for its school feeding programme involving about one million children. The MPF required for this feeding programme is produced by a private manufacturer. This idea is catching up in other States of the Indian Union. Indian MPF, a minimum of 1 to 2 ounces costing 3 to 6 N.P. per day is considered sufficient to meet a substantial part of the protein and vitamin deficiencies in the Indian diet. Besides India, Brazil, Mexico, and Japan are also producing MPFs, making use of indigenous raw material.

"An old dictum challenged: MPF whether of the soybased or other varieties have been formulated on the principle which Dr. Henry Borsook once explained in the following words:

"We recognized in 1946 that the outstanding world nutrition problem was protein deficiency. The means for coping with vitamin and mineral deficiencies was worked out. The obstacle to coping with the problem of protein deficiency was the wrong teaching which prevailed...that without animal protein there would always be protein malnutrition. There is no scientific justification for this dictum.' "It was motivated' he said 'by antiquated ideas, by wrong economics...'

"Dr. Henry Borsook, stressing this point further explained:

"We know from proved scientific evidence that certain mixtures of vegetable proteins can do just as well nutritionally as animal proteins and we know the reason why. Animal protein is too expensive. A cow or a hog converts only about three percent of its feed into human food..."

"Vegetable proteins' Dr. Borsook emphasised 'are the cheapest in land, human labour and materials. There are vast unused reserves of human food in vegetable proteins, especially those in industrial by-products."

Incidentally, Dr. Henry Borsook is not alone in this view. This same view is shared by Dr. Moises Behar, Director of the Institute of Nutrition, Central America and Panama, among others. The thesis that animal protein is not essential for human nutrition because by the scientific mixing of various foods it is possible to produce a kind of vegetable "meat" is indeed heartening news for Buddhists especially who by reasons of religious persuasion are enjoined to abstain from killing animals for food or other purposes."

"It is noteworthy that while soyabean meal has been in use as a human food for quite some time, in regard to peanut press-cake, the W.H.O. Protein Advisory Group has recently concluded that solvent extracted groundnut flour can be safely used in feeding children, provided that solvents of known characteristics are utilized and controlled. We would like to make the observation that we should not stop with growing peanut and *gingelly* alone. It will be well to consider growing soybean in Ceylon which has experimentally proved feasible in certain parts of the country. In terms of vegetable protein it gives the highest yield. IT is also worth reflecting that it is a crop that has retained its place in the food economy of China for nearly 6,000 years.

"A step forward:

"In conclusion it may be pointed out that multi-purpose food is a product that has been universally used. From 1946 till to-date, approximately 13 million pounds of this "wonder food" have been introduced through voluntary agencies to medical, health, and welfare authorities in 129 countries and territories.

"All the conditions requiring the production of MPF in Ceylon are now present. We have malnutrition and undernutrition of a considerable scale. We have a fair supply of one product, namely, coconut, that can form the base of such a product. The know-how and the technology also can be had, if needed. NPF has experimentally proved as a mean of reducing rice-intake, not only without ill-effects, but with nutritional benefits. The sooner MPF is popularised in Ceylon, the better it will be for the people's welfare." Address: Honorary Secretary, National Development Enquiry, All Ceylon Buddhist Congress.

192. McGovern, George S. 1964. War against want: America's Food for Peace program. New York, NY: Walker and Company. xix + 148 p. Forward by President Lyndon B. Johnson. Illust. No index. 21 cm.

• *Summary:* This good history and analysis of the U.S. Food for Peace Program (Public Law 480) is greatly weakened by lack of an index.

Contents: Prologue. Acknowledgments. 1. The challenge of hunger. 2. Tools for the attack. Serving the Food for Peace table. 4. Food: Instrument of economic development. 5. Alianza para el Progreso (Alliance for Progress, proposed by President Kennedy on 13 March 1961). 6. Food and the India way. 7. Freedom from hunger. 8. Victory in the war against want. Appendix I: The Food for Peace Program. Appendix II: A partial list of voluntary participants in the Food for Peace program.

The Food for Peace program began in 1954. Senator McGovern was born in 1922. On 16 Dec. 1960 Presidentelect Kennedy asked him to serve as director of a newly proposed White House Office of Food for Peace. In the opening hours of his administration, on 24 Jan. 1961, President Kennedy issued an Executive Order creating the Office of Food for Peace; Senator McGovern was its first director.

Chapter 2 includes a history of U.S. relief feeding programs, the work of Herbert Hoover, and the Lend Lease Act of March 1941 (in which the USA procured vast quantities of food for our fighting overseas Allies such as Britain and the USSR), and the Marshall Plan (which sent \$13,000 million in American resources into Western Europe over 4 years). But after the Korean Conflict (1950-1953) farm surpluses began to accumulate in America at the same time there were chronic food shortages in many parts of the world. So in 1954 Congress enacted legislation designed to utilize U.S. food surpluses in less-developed countries. "This was the very important Agricultural Trade Development and Assistance Act of 1954, Public Law 480. Known around the world as 'PL 480' it was an ingenious combination of self-interest and idealism."

Title I of PL 480 consists of foreign currency sales. Title II is outright grants of food in times of emergency or disaster. Title III authorizes distribution abroad of surplus food by private voluntary agencies, such as CARE and many church-connected agencies. In 1959 a new provision was added to PL 480–the extension of long-term credit at low interest rates on dollar sales of surplus food and fiber. The total of U.S. food assistance since 1948 is over \$20,000 million.

Chapter 7, titled "Freedom from hunger," focuses on FAO (The Food and Agriculture Organization of the United Nations) and its forerunners. FAO was born out of the Hot Springs Conference held by forty-four nations at the Homestead Hotel, Hot Springs, Virginia, from May 18 to June 3, 1943. President Franklin D. Roosevelt issued an invitation to this conference at the peak of World War II, on 30 March 1943, to countries associated with the United States in the war, to discuss world problems of agriculture, nutrition an food. "This first World Food Congress established an interim commission with an office in Washington, D.C., which functioned until" FAO was formally established as an agency of the United Nations on 16 Oct. 1945 in Quebec, Canada, to assume the work of the International Agriculture Institute and is presently governed by the U.N. Conference of Member Nations. FAO's headquarters was transferred from Washington to Rome, Italy, in early 1951 (p. 101).

"In July 1960, FAO, with the approval and cooperation of the United Nations system, launched the five-year, worldwide Freedom from Hunger Campaign." The message of this campaign "to the more affluent nations has concentrated on arousing public awareness of the danger which global hunger and malnutrition pose to the peace and progress of mankind. It has also sought to encourage international cooperation in facing up to the solution of these problems."

"Every nation has been urged to establish a Citizens' Freedom from Hunger Foundation to raise funds for the campaign. In this way private individuals, women's clubs, religious groups, civic organizations, and commercial firms can participate through contributions of money or materials.

"The American Freedom from Hunger Foundation Campaign was named by President Kennedy on November 22, 1961, the day before Thanksgiving." A ceremony in the White House launched the U.S. phase of the campaign. Alvin Shapiro of Washington, DC, as the first head of the American Foundation (p. 103-04). A photo (facing p. 15) shows the people present at the launching of the FFH Campaign in the Fish Room of the White House (left to right): Marian Anderson, Senator George McGovern, President John F. Kennedy, German Chancellor Konrad Adenauer, and Mrs. Woodrow Wilson.

"A highlight of the campaign was the World Food Congress in Washington, D.C., June 14-18, 1963, timed to commemorate the twentieth anniversary of the Hot Springs World Food Conference" [in Virginia]. President Kennedy opened the conference with a memorable speech (p. 106). The United States pledged \$40 million in commodities, as part of a program to reduce U.S. food surpluses and also feed the hungry (p. 108).

Note: In March 1979 The American Freedom from Hunger Foundation merged with the Meals for Millions Foundation to become the "Meals for Millions / Freedom from Hunger Foundation."

The World Food Program was first established at the 1960 Food and Agricultural Organization (FAO)

Conference, when George McGovern, director of the US Food for Peace Program, proposed establishing a multilateral food aid program. WFP was formally established in 1963 by the FAO and the United Nations General Assembly on a three-year experimental basis. In 1965, the program was extended to a continuing basis.

Chapter 8, "Victory in the war against want, begins: On 23 Sept. 1959 Soviet premier Nikita Khruschev, at the start of his visit to the United States, visited the farm of Roswell Garst near the city of Coon Rapids, Iowa. He wanted to learn more about modern agriculture. In the Soviet Union nearly 50% of the entire labor force was involved in producing food, compared with only 8% in the United States. Yet the remaining 92% of Americans are better fed than is the Russian populace, and the USA has surplus food which it uses to feed the hungry overseas (p. 113-14).

"The great changes in American agriculture came at an accelerating pace after 1915 with the sharply increased demands for food of World War I serving as a catalyst. In the half century since then the American farm has been transformed. Every phase of the farm operation is heavily assisted by machinery. Rural electrification not only lights the farmhouse but runs everything from water pump to milking machine, hybrid seed, chemical fertilizer, pesticides, livestock feed supplements, soybean products, and a host of other developments, including the cooperative movement, have changed the face and form of rural America."

In 1862, under Abraham Lincoln and during the Civil War, three historic acts "laid the institutional foundation of American agriculture: The Homestead Act, the Morrill Act, and the creation of the Department of Agriculture (p. 115-16).

In the last half of Chapter 8 McGovern suggests "a tenpoint battle plan against hunger led by the American people, which I am convinced will end in victory." These are largely McGovern's opinions about how the Food for Peace program could be improved and expanded. Four example, No. 4 is to "eliminate the political restrictions on our Food for Peace (FFP) program." He advocates that surplus American food be sent to hungry people (especially children) living in Communist countries, such as the USSR, China, or Cuba.

Appendix I gives 4 pages of statistics about the FFP program, including a graph showing the dollar value of FFP shipments to 5 different regions of the world from 1955 to 1963. Shipments to Europe peaked in 1957 at \$850 million and decreased sharply thereafter. Shipments to the Near East and South Asia peaked in 1961 at \$700 million and have decreased since then but were still the largest in 1963.

Appendix II includes directories of: (1) The executive committee of the American Food for Peace Council. Many of the members of the Executive Committee are private citizens. Mr. Dwayne O. Andreas, an Executive Vice President, is from Farmers Union Grain Terminal Association (FUGTA). (2) The American Freedom From Hunger Foundation, Inc., divided into officers, executive committee, and board of trustees (incl. Dwayne Andreas). (3) American Council of Voluntary Agencies for Foreign Service, Inc. (4) United States trade groups cooperating in foreign market development (incl. Soybean Council of America, and American Soybean Association). Address: Senator, South Dakota.

193. Phadnis, Leela. 1964. The effect of rice on the biological value of American Multi-Purpose Food. PhD thesis, Kansas State University. 115 leaves. 28 cm. * *Summary:* This is the first PhD thesis published about Multi-Purpose Food. Address: Kansas.

194. Meals for Millions Foundation. 1965. Feasibility of a high protein food processing plant in Khuzistan, Iran. Los Angeles, California. Mimeographed. *

195. Balu, V.; Bhutiani, R.C. 1965? Indian multi purpose food: Recipes. Mysore City, India: Central Food Technological Research Institute. 37 p. Illust. 12 cm. * Address: Mysore, India.

196. Meals for Millions Foundation. 1965? Food for Freedom Program, 1954-1964. Los Angeles, California. 10 p. Undated. 35 cm.

• *Summary:* Contents: Total receipts to June 30, 1964– \$121,548. 3¢ meals represented–4,051,613. Approximate number of share-banks set up. Highest yearly total in receipts–\$21,604. Average per year–\$12,150. Receipts from Junior Woman's Clubs. Approximate cost of 10-year program–\$48,000 (30% of receipts). Number of markets having share-banks–138. Largest returns from single restaurant organizations–Clifton Cafeterias was by far the largest, \$36,495.

History of Food for Freedom (FFF), incl. Florence Rose, Southern California Restaurant Association (SCRA), National Restaurant Association (NRA), the Junior Woman's Clubs.

Since 1954 share-banks have been set up in the following cities, towns, large suburbs (mostly in southern California).

Questions raised to committee [of NRA] during investigation. Address: Los Angeles, California.

197. Haskin. 1966. Questions: Rodeo Rider school opened. *Hartford Courant*. March 19. p. 11.

• *Summary:* Food–Question: What is the address of the foundation which distributes three-cent meals made from soybeans?–L.D.

"Answer: Meals for Millions Foundation, Inc., is at 215 West Seventh St., Los Angeles, Calif. 90014. Millions of meals of the soybean food product, Multi-Purpose Food, have been distributed throughout the world by this nonsectarian, nonprofit organization."

Note: If this address is correct, Meals for Millions has moved from 115 West Seventh St.

198. *Los Angeles Times*. 1966. Meals for Millions to move to S.M. [Santa Monica]. April 10. p. WS4.

199. Swaminathan, M. 1966. The use of soyabean and its products in feeding infants and in the prevention of protein malnutrition in weaned infants and pre-school children in developing countries. *Indian J. of Nutrition and Dietetics* 3(4):138-50. Oct. [63 ref]

• Summary: Contents: Introduction. Chemical composition: Carbohydrates, fat, minerals, vitamins, proteins. Factory affecting the nutritive value of soya proteins: Trypsin and growth inhibitors, heat processing, other factors. Nutritive value of soya proteins (with or without methionine supplementation): Experiments with animals, experiments with human beings, supplementary value to other food proteins. Processed foods from soyabean for feeding infants and preschool children: Milk substitutes and infant foods, processed protein foods based on soya (soya flour, Multipurpose Food or MPF, soup powder). Foods based on soyabean and other oilseed meals: Precooked roller dried foods, extrusion-cooked full-fat soybean flour. Other soya products (soy protein isolate, tofu, natto, miso, tempeh, soy sauce). Conclusion. Address: Central Food Technological Research Inst. (CFTRI), Mysore, India.

200. Parpia, H.A.B.; Subramanian, N. 1966. Plant protein foods in India. *Advances in Chemistry Series* No. 57. p. 112-32. Chap. 9. World Protein Resources. [16 ref] *Summary:* The emphasis is on peanut proteins, including peanut protein isolate, milk substitutes, spray-dried infant foods, etc. Soy protein is mentioned only briefly (p. 118). Address: Central Food Technological Research Inst. (CFTRI), Mysore, India.

201. Roberts, Hibbert Rice. 1967. The Meals for Millions Foundation: a study of a non-governmental organization. PhD thesis in Political Science, University of Washington. 288 leaves. Approved March 14. 28 cm. [53 + 100+ footnotes]

• *Summary:* An excellent, very insightful work. Probably the best, most objective, most complete study ever done of the Meals for Millions Foundation, Inc., a U.S. charity that provided food. This is the 2nd PhD thesis published about Multi-Purpose Food. Hibbert Rice Roberts was born in 1931.

Note: Unfortunately, no biography of Clifford E. Clinton has ever been written. Abundant archival materials exist for such a book about this very interesting and important man.

Contents: List of tables (4 tables). 1. Introduction. 2. Multi-Purpose Food and the origins of the Meals for Millions Foundation. 3. Meals for Millions: Constitutional development and internal structure. 4. Conflict and cooperation within the United States. 5. HMF and the United States government. 6. Meals for Millions and the United Nations Children's Fund [UNICEF]. 7. Meals for Millions overseas. 8. New leadership and new policies. 9. Conclusion. Bibliography.

Introduction: This is a study of an international nongovernmental organization (NGO). Although there are thousands of NGOs that operate internationally, they have captured the attention of only relatively few scholars. "NGO's represent the 'unofficial side of world affairs' in counter-distinction to the official government side reflected by such intergovernmental organizations (IGO's as the United Nations, the Organization of American States, and the European Economic Community)." The United Nations and its specialized agencies have, since 1945, concluded a host of "consultative agreements" (as provided in Article 71 of the UN charter); the United Nations has concluded such agreements with 297 NGO's, UNICEF with 57, FAO with 40, and WHO with 46.

Lyman C. White, in his book on "International Non-Governmental Organizations:... (1951, p. 10), observes that they are frequently "pioneers–the first to recognize a need, the first to do something about it, either in study and research or in a program of action."

"In brief, MFM is a small non-profit organization founded to provide famine relief and to promote a scientific approach to the prevention of starvation. The Foundation pursues its first objective by distributing an American produced, low-cost, soybean protein food, Multi-Purpose Food (MPF), in countries whose people suffer from chronic malnutrition or undernourishment... MFM works toward its second and infinitely more difficult goal by attempting to stimulate the formulation and production of MPF or MPFtype foods in foreign countries" (p. 3-4).

Walter H. Pawley of FAO's Freedom from Hunger Campaign wrote in 1963, "up to half the population of the world continues to suffer from under-nutrition and malnutrition in varying degrees" (p. 4).

"MFM's efforts to combat starvation fit into the much broader struggle by the majority of the worlds population to secure a decent standard of living."

"Two research considerations also made Meals for Millions an attractive subject for a study of an NGO. First... [it] has numerous contacts with the representatives of governmental, non-governmental, and intergovernmental organizations as well as citizens of over one hundred countries... Secondly, the officers of Meals for Millions agreed to make available all their records and correspondence including that of a confidential nature. This commitment, which was more than fulfilled during the summer of 1962, permitted the writer to review the multitudinous correspondence, reports, transcripts and notes of interviews,... and financial records kept of file at the Los Angeles headquarters of the Foundation. Key officers of the Foundation including its president, one of its vice presidents, its research director, its executive director, its codirector and secretary plus important members of the staff made themselves available for at least one and frequently more interviews. The writer was also permitted to observe the day-to-day operations of the headquarters office, attend staff meetings, listen to an executive council session, and become fairly well-acquainted with the 'tone' of the Foundation" (p. 6).

Chapter 2, "Multi-Purpose Food and the origins of the Meals for Millions Foundation, begins (p. 8): "Meals for Millions Foundation was incorporated in the State of California on 5 July 1946 because the aspirations of its President, Clifford E. Clinton, became linked to the existence of the vegetable protein food supplement, Multi-Purpose Food." There follows the story of Mr. Clinton's life and work.

When he moved to Los Angeles to establish a restaurant, he "decided to apply a principle of 'practical Christianity' and never to refuse a meal to a person who could not pay for it. Since the [Great] depression was beginning to gain momentum, there were many residents of Los Angeles who fitted into this category. Indeed, during the first sixty days of business Clinton's restaurant served nearly 10,000 who could not pay for their food. This number far exceeded that of paying customers and obviously presented a challenge to Clinton's ideal. However, Clinton believed that if the ideal were valid then there had to be a way of achieving it. Working on this assumption, Clinton went to the various concerns that supplied his restaurant and asked them to sell their food to him at cost. The food suppliers, who had plenty of food but no buyers, agreed to Mr. Clinton's request. Many of them, in fact, exceeded their initial promise by giving Clinton quantities of food they could not sell. Clinton then set up a basement cafeteria where each item of food could be purchased for one cent. Volunteers helped serve the food, the local musicians' union supplied an orchestra of unemployed musicians free of charge to provide entertainment, and artists donated their talents to decorate the cafeteria. Next he sold tickets for a penny a piece to regular paying customers who when asked for a meal by someone on the street would give them a few tickets with directions... to Clifton's cafeteria. Mr. Clinton continued this system of relief throughout most of World War II" (p. 8-9).

"With the entry of the United States into World War II, Clinton [now age 42] set aside plans for expansion in order to enlist in the army. But he soon received an honorable discharge so that he could act as a food consultant for the War Food Administration [WFA] and, in 1943, for the United Nations Relief and Rehabilitation Administration [UNRRA, established by agreement of 44 nations on 9 Nov. 1943]. Clinton's position as a food consultant once more started him thinking about the need for a low-cost, highly nutritious food that could be easily transported and stored. His interest in this type of food received further stimulation when he learned that his restaurants faced the necessity of either closing down for one day a week, serving more meatless dishes, or buying from the black market." He preferred the second choice, but realized "that some substitute would have to be found to make up for the loss of protein that would result from serving meatless dishes.

"At this juncture, Ernest R. Chamberlain, who was working with Mr. Clinton in a campaign to wipe out corruption in the city government of Los Angeles, mentioned the work of Dr. Henry Borsook in the field of nutrition... At Mr. Chamberlain's suggestion, Mr. Clinton contacted Dr. Borsook and offered to subsidize a project to develop a low-cost food that would provide essential nutrients. Dr. Borsook accepted the offer after he received Mr. Clinton's promise that the results, if successful, would be made available to the world free of charge... Dr. Borsook's research ended in success when in 1944 he produced a soybean based product which he named, Multi-Purpose Food." Continued. Address: Seattle, Washington.

202. Roberts, Hibbert Rice. 1967. The Meals for Millions Foundation: a study of a non-governmental organization (Continued–Document Part II). PhD thesis in Political Science, University of Washington. 288 leaves. [53 + 100+ footnotes]

• *Summary:* Continued: "Dr. Borsook soon refined his original formula, Formula B, so that there are now three formulas of the American produced MPF, i.e., Formulas A, B, and C. Formula A's ingredients consist of: toasted soy grits, salt, hydrolyzed vegetable protein, granulated onion, food yeast, chili powder fortified with calcium carbonate, ascorbic acid (vitamin C), niacin, vitamin A, riboflavin, pyridoxine (vitamin B-6), thiamine, vitamin D, potassium iodide, and vitamin B-12. The ingredients of formula B are the same as formula A without the seasoning, and formula C is identical to B except that 25% of the soy protein is replaced by dry milk solids" (p. 11). Tables show (p. 12-14): (1) Essential amino acids in MPF. (2) Guaranteed nutrients in two ounces of MPF (all 3 formulas, and as % RDA and % MDR).

"Once developed Clinton immediately began to serve MPF is his restaurants either as a five cent meal or as a supplement to other foods. Thus he served nourishing, lowcost protein dishes to his customers despite meat shortages and rationing." Then "Mr. Clinton started to consider the broader implications of the product of Dr. Borsook's research. Gradually he realized that MPF represented more than a temporary expedient to overcome wartime difficulties and restrictions. It appeared to him that MPF could provide a possible answer to the world's problem of hunger" (p. 14).

"Convinced that his idea was worth exploring, Clinton and his son [Edmond] embarked upon a trip to the east coast in 1945 to find some organization that would utilize MPF in a program to combat starvation. They spent much time in New York City and in Washington, D.C. in an attempt to arouse the interest of businessmen, churches, the Red Cross, the Salvation Army, and various federal government officials. No one, however, showed a desire to do anything with MPF until the Clintons contacted the East-West Association founded by Pearl S. Buck. Miss Florence Rose, an assistant of Miss Buck in the East West Association, had heard of Mr. Clinton's efforts to gain a sponsor for MPF and persuaded her employer to grant him an interview. During the course of the interview Miss Buck became convinced that MPF was worth sponsoring. She felt that an organization for manufacturing and distributing MPF would be a kind of 'Red Cross in Food.' Also Miss Buck was 'very much impressed with the singleness of mind and the creative energy' of Mr. Clinton.' Miss Rose, who was present throughout the interview, expressed her keen interest in the potential of MPF... In fact, her enthusiasm impressed Mr. Clinton to the extent that he asked her to join him in the venture of promoting MPF." Miss Rose was unable to accept at that time because of other commitments. But "the first contact had been made between the future President and the future Executive Director of the Meals for Millions Foundation.

"The Clintons returned to the west coast shortly after their interview with Miss Buck. Basically their trip had been a failure... Reluctant to allow MPF's potential to go untested, Clinton decided to attempt to form an organization of his own. His belief that the need for such an organization did exist was re-enforced by the response to an article by Paul de Kruif in the September, 1945 issue of the *Reader's Digest*," titled "How We Can Help Feed Europe's Hungry." "As a result of Mr. de Kruif's laudatory account, requests for information about MPF came to Mr. Clinton from all areas of the world. Many of the letters contained contributions, which he had to return since no means existed for using them. Subsequently a small token organization was formed and incorporated in the summer of 1946 as the Meals for Millions Foundation.

"Almost immediately the foundation ran into difficulties. Mr. Clinton found that he could no longer afford the time nor the energy to provide the leadership and the spark necessary to make the foundation a success. In addition to the need for a full-time director, the Foundation also found itself in danger of collapsing because of a lack of money.

"At this critical juncture, Mr. Clinton held a meeting at his home. Among those present was Florence Rose, who had accepted an invitation to come to Los Angeles and observe the work of the infant organization. Here Mr. Clinton announced that he would no longer be able to devote as much time to the promotion of MPF as he had in the past and asked if anyone present would take over the direction of MFM. When no one else responded, Miss Rose said she would accept the responsibility because she 'hated to see and idea die.'

"Mr. Clinton immediately appointed Miss Rose to the post of Executive Secretary and named Ernest Chamberlain,... Secretary... Mr. Clinton's son, Edmond J. Clinton, was appointed Vice President. Dr. Borsook accepted the post of Research Director, and A.J. Gock, an officer of the Bank of America, agreed to serve as Treasurer" (p. 17-18).

Biographies are then given of Florence Rose and Ernest Chamberlain. "Florence Rose brought to Meals for Millions the knowledge and experience of a person who had worked for nearly twenty-five years for causes espoused by nonprofit organizations. She had worked in the New York City office of Margaret Sanger as her personal assistant. "In this capacity, Miss Rose accompanied her employer on many trips abroad to promote the idea and teach the techniques of birth control. Before she left Margaret Sanger in 1940 to work for Pearl S. Buck, Florence Rose learned to endure the disappointments that arise out of the promotion of unpopular causes and developed the capacity to persevere in the face of seemingly immovable opposition or apathy." She believed in demonstration clinics as used by Mrs. Sanger. "From personal observation it can also be stated that Miss Rose possesses an extraordinary amount of energy and has, as reflected in her choice of career, a keen desire to improve the lot of mankind" (p. 18-19).

Ernest Chamberlain was "a former lawyer, newspaper reporter, and public relations agent." Born in Topeka, Kansas on 18 Aug. 1892, he attended George Washington University (Washington, DC) where he received a law degree in 1918. He enlisted in the U.S. Army during World War I. After the war he worked "in the office of the Governor of Kansas, George Allen, where he became so fascinated with the socialist doctrines of Mr. Jake Sheppard, an opponent of Governor Allen and the President of the 'Peoples' College,' that he quit his job to teach at the Peoples' College and to organize Consumers' stores. A year later, in 1920, Mr. Chamberlain went to Oklahoma City where he practiced law primarily in the area of civil liberties and worked for the Oklahoma Leader, a labor-socialist daily newspaper. Before the end of 1920 he gave up his law practice to become a full-time reporter for the Oklahoma Leader,... and other publications printed by the Leader

Press." He "also participated in the formation of the Farmer-Labor Reconstruction League, which helped to elect Mr. Jack Walston governor of Oklahoma in 1922 and to impeach him a year later."

"In the summer of 1938, Mr. Chamberlain moved with his wife and two children to Los Angeles where he worked for the information office of the WPA. Before long, however, his penchant for causes asserted itself and he became the press agent for Clifford Clinton's campaign to remove ten councilmen from office and reform the government of the city of Los Angeles. By 1942, Mr. Chamberlain had resigned from ... WPA and was working as an aide to Mr. Clinton on a full-time basis. Not surprisingly, given his more than 25 year commitment to helping underprivileged people, Mr. Chamberlain saw in MPF a tremendous potential for combatting hunger and quickly accepted his employer's suggestion that he become the Secretary of Meals for Millions. MFM thus acquired a man talented in publicity techniques, familiar with lobbying in Washington, D.C., and obviously ready to devote himself to a non-profit cause (p. 20-21).

The final member of the trio is Dr. Henry Borsook. "Holder of both a Ph.D. and an M.D., Dr. Borsook joined the staff of the California Institute of Technology in 1929" (p. 21).

MFM was a foundation with no endowment, and it was founded by default. "But the belief in the efficacy of action shared by the three participants in reform movements... coupled with Dr. Borsook's and their desire to alleviate human suffering gave MFM the unity and strength it needed to persist in the promotion for twenty years" [1946-1966] (p. 22-23). Continued. Address: Seattle, Washington.

203. Roberts, Hibbert Rice. 1967. The Meals for Millions Foundation: a study of a non-governmental organization (Continued–Document Part III). PhD thesis in Political Science, University of Washington. 288 leaves. [53 + 100+ footnotes]

• Summary: Continued: Chapter 3. "This chapter, which discusses the formal rules governing the Meals for Millions Foundation and the organization, functions, and staff of its headquarters in Los Angeles, California, sets forth the framework intended to support a global effort against starvation." Begins with an analysis of the two occasions when the by-laws of the Foundation were revised, and the events which led to these revisions-in 1955 and 1962. The first revision in 1955 (of the original 1946 by-laws) represented an attempt by the board to meet charges "that the Foundation's policy-making procedures placed too much control in the hands of a few individuals; the second in 1962 grew out of similar complaints by individuals more intimately involved in the affairs of MFM." There was a growing conviction "that it would be advantageous to involve MFM's directors more closely in the affairs of their corporation than they had been in the past." For the first 9 years, no board meetings occurred and "Florence Rose and Ernest Chamberlain ran the Foundation substantially free from institutionalized control.

Discusses the period from 1959-1961 and the influence of Mr. Robert Thompson, who in 1959, acting as a management consultant, offered "to make a complete analysis of the structure, work, procedures, and finances of the Foundation free of charge. His offer was accepted. His very critical and partly inaccurate report had long-lasting repercussions that wracked and nearly wrecked MFM during the fall of 1961. By 1962 a "Special Committee of the board agreed that "reforms would enhance MFM's fundraising capabilities." One reform was closer control of spending. Everything came to a head at a Special Meeting of the Board of Directors on 28 Nov. 1961, in the Pine Room at Clifton's Cafeteria, "when Florence Rose, Ernest Chamberlain, and Clifford Clinton, apparently on the defensive," threatened to resign if the directors implemented the Special Committee's recommendations. After things simmered down, new by-laws were adopted on 15 April 1962; "a highly centralized structure of policy formation and control was established" (p. 24-36).

Internal organization: Discusses the day to day working of the downtown Los Angeles office. "Here, assisted by 17 administrative and clerical personnel, Miss Rose and Mr. Chamberlain strive to meet the many faceted demands which daily bombard their office." "The functions of this staff divide into four categories: famine relief and prevention; education and programming; fundraising; and administration." However these categories "defy any clear division of labor and partly because MFM suffers from a marked shortage of personnel (p. 38). Creation of an Auxiliary and receipt of profits General Mills derives from its sale Formula B MPF. Attempt in 1962 to open an office on the east coast of the United States; it was closed after less than two years (p. 42). The center of activity would continue to be "Los Angeles, where the manufacturer of MPF is located and where half a floor of Clinton's has been provided without cost to the foundation and its staff." For the next 14 years "the Foundation strove to preserve and extend its contacts with representatives of agencies in the east by sending staff personnel on yearly cross-country trips" (p. 42-43).

Discusses Mr. Fred Hafner of General Mills, the Food Banks Department, Dr. Donald Ebright (director of the Extension Services Department and an ordained minister; in 1961 about one-third of MFM's income came from church organizations); Mrs. Hazel Hopkins (who wrote over 6,000 letters in 1960), Mrs. Jean Burden (head of the Public Relations Department, she wrote press releases, magazine and newspaper articles, and gathered material for the Foundation's *Newsletter*). "MFM's unquenchable thirst for funds absorbs the attention of practically the entire staff" (p. 45-48).

Chapter 4. "Conflict and cooperation within the United States" [among organizations in the private sector] begins: "Meals for Millions, despite its status as an NGO, is first and foremost an American organization. No other characteristic means more because the vitality of the Foundation's relief and prevention program depends directly upon the support it attracts from organizations and individuals within the United States" (p. 50). More than "180 American non-profit organizations have throughout the years assisted MFM because they share its concern for the welfare of undernourished people. In the commercial realm, first Gentry and now General Mills have performed an indispensable service for MFM" by manufacturing its MPF. MFM had often abrasive relations with the National Information Bureau, a key non-profit agency that acts as a guardian of standards in the field of American philanthropy."

"In the summer of 1946, as Florence Rose, Ernest Chamberlain, and Hazel Hopkins sat in the basement arcade of Clifford's Restaurant sandwiched between the parlors of a tattoo artist and a fortune teller, and plotted the tactics they would use to breathe life into their infant organization, they must have realized the enormity of their responsibilities." For one of their highest priorities was to win MFM a share of the money donated by the American people to charitable organizations. For example, the previous year, the huge and well-known American Red Cross had spent more than \$4 million on "public information and educational relations" plus an equal or greater amount for "membership enrollment and fund raising." Having only a portion of the \$40,000 pledged by Clifford Clinton, Edmond Clinton, Ransom Callicott, and Clifton's Restaurant for working capital, the trio realized that MFM needed, yet could not afford, extensive publicity to attract donations. But the problem of finances and publicity, however compelling, distressed Miss Rose and Mr. Chamberlain no more than the plight of the people suffering from the after-effects of the Second World War" (p. 52-54).

A long paragraph describes the extent of hunger reported in Europe and India.

"Impelled by the practical need for money and the humanitarian desire to aid the starving, MFM's staff hit upon the deceptively simple tactic of offering MPF free to agencies and individuals engaged in relief activities. Their plan, if successful, would permit MFM to speedily put MPF into the battle against hunger without an expensive staff and would give the Foundation the publicity it needed to attract contributions from the American public. In effect, they were gambling that overburdened and understaffed relief agencies, though unfamiliar with the nutritional properties of MPF or the program of MFM, would: (1) accept a shipment of MPF, (2) use it properly, (3) recognize its nutritional value, and (4) communicate the reactions to MFM.

"In less than a year, letters and experience reports from across the Atlantic and Pacific Oceans and from within the United States poured into the Foundation's office with the welcome news that the trio had won its gamble." Many testimonials follow (p. 51-55).

"Equally laudatory reports arrived at Clifton's Restaurant from Asian countries." By late 1947 MFM and MPF had become newsworthy enough to gain some mention on local, national, and trade publications, such as *Time* magazine, the *New York Times, Soybean Digest*, and the *Christian Science Monitor*. In 1947 MFM donated 500,00 meals to in an American project to send a "Friendship Train" across the United States to collect food for Europe. One result was more glowing newspaper coverage (p. 57-58). Continued. Address: Seattle, Washington.

204. Roberts, Hibbert Rice. 1967. The Meals for Millions Foundation: a study of a non-governmental organization (Continued–Document Part IV). PhD thesis in Political Science, University of Washington. 288 leaves. [53 + 100+ footnotes]

• *Summary:* Continued: "From the outset MFM found mail appeals the most effective fund-raising device. Each appeal normally consisted of a form letter carrying a message signed by the President of Meals for Millions, a 'Newsletter,' and an addressed envelope for sending contributions to the Foundation. Usually written by Ernest Chamberlain, both the President's cover letter and the *Newsletter* strive unabashedly to arouse the emotions of the reader" (p. 58). The mail appeals were sent three times a year to a list of about 45,000 potential donors. The resulting contributions accounted for 60-70% of MFM's budget.

Dr. Ebright, who was deeply involved with the National Christian Council of India from 1947 to 1952, "found himself embroiled in the most turbulent and misery-filled period of Indian history as the partitioned sub-continent reeled from the upheaval and horror of communalism." He was surprised and delighted to receive shipments of MPF in early 1948. He stated: "There was no doubt about it— wounds began to heal and doctors became enthusiastic, I then became one of the first Americans to use MPF in large quantities and I used it in our total relief program both in the north and south for the next 4 or 5 years." He wrote about MPF at length in his book *Free India* published in 1954, five years before he joined MFM (p. 61-63).

"Upon returning to the United States in 1960, Dr. Ebright visited MFM's headquarters at the invitation of Florence Rose, who then offered him the position of Director or Extension Services." As a result of his work and attendance at church conferences, "In 1961 the annual high of Methodist donations to MFM leaped from a previous high of \$3,500 to one of \$33,415" (p. 63).

"From 1946 to 1962 Americans contributed \$3,182,958 to MFM–a disappointing sum in terms of the time and energy poured into fund-raising by MFM's staff and officers and the severe limitations it has imposed upon the foundation's capacity to respond to appeals for relief shipments of MPF and to stimulate overseas production of MPF-type foods." "Figures relating to MFM's finances are based upon the annual financial audits of the Foundation's records by the certified public accounting firm of Kahan, Seltzer, and Eckstein of Los Angeles" (p. 65).

Table 4 (p. 66) shows the yearly income of MFM from 1946-47 to 1961-62. The following give a general idea of the ups and downs: 1946–\$60,916. 1947–\$272,649. 1950–\$41,658. 1955–\$215,090. 1960–\$285,204. 1961-62–\$332,297.

"... more than once Florence Rose and Ernest Chamberlain delayed paying themselves in order to meet the pay roll of the office staff. In general, the instability and inadequacy of MFM's income generates an air of permanent crisis and frustration within the ranks of the Los Angeles staff as they struggle to fill the requests for relief shipments which stream into the office daily.

"To make matters worse for MFM, the fundraising endeavors of Florence Rose and staff have been hampered by its relations to two key non-profit organizations in the American field of philanthropy. Particularly damaging has been MFM's standing with the National Information Bureau. Founded in 1918 'to maintain standards in the field of philanthropy and to aid thoughtful contributors to give wisely,' the National Information Bureau (NIB) prepares and upon request sends to its subscribers evaluation reports about any of approximately 500 non-profit organizations that solicit contributions within the United States." "NIB approval comes only when a non-profit organization complies with the following 'basic standards of philanthropy." The headings are: Board. Purpose, Program, Cooperation, Ethical Promotion, Fund Raising, Audit, and Budget. For a non-profit, winning NIB approval is almost essential to success. Meals for Millions never did win this approval. NIB's evaluation of MFM found: The "Foundation's board of directors was too small and too inactive to exercise adequate administrative control." MFM's literature "includes statements which are probably entirely inaccurate as to fact and other statements which are exceedingly questionable from the point of view of constructive relief. MFM's slogan '3¢ buys a meal' apparently ignored the contributions of other voluntary agencies in providing the expensive services [such as transportation, warehousing, distribution, plus MFM's fundraising costs] necessary to deliver the 3¢ meal to a consumer" (p. 67-69). Additional contentious issues arose over the years, for example: MPF was not cooked and thus

could not be considered a meal as the average person understands the term. MPF could not be delivered to the needy person for less than 36 cents a pound. "MFM's literature carries a misleading or even false sense of hope." MFM made changes in a half-hearted attempt to win approval but ultimately the efforts resulted in a stalemate (p. 70-77).

Almost equally damaging, MFM failed "to secure membership in the American Council of Voluntary Agencies for Foreign Service, a coordinating vehicle for overseas voluntary aid agencies." "Incorporated in New York State on 15 June 1945, the Council facilitates the exchange of information among its 40 members, runs the Technical Assistance Information Clearing House under contract with the U.S. government, and provides a channel through which voluntary agencies can coordinate their overseas efforts with those of the federal government."

"The prestige of the Council and its member agencies, e.g., Church World Service, CARE, and the American Friends Service Committee,... led MFM to submit an application for membership in January 1955; a simple act, which, as in the case of the National Information Bureau, unwittingly embroiled Florence Rose and staff in an ordeal of frustration." Again, MFM's application for membership was never accepted. (p. 78-102).

MFM was modestly successful in raising funds from American business groups. Since "1946 no outside support had been more essential to MFM than the blending of MPF from Spencer Kellogg's [soybean] expeller grits by the Gentry Company of Los Angeles for 13 years and the complete processing of MPF by General Mills, Inc. [from 1 Dec. 1959] up to the present."

Footnote 81 (p. 104): "In addition to Gentry, another member of the Southern California Dehydrators Association produced a soup mix based on Dr. Borsook's formula... for a short time in 1947."

There is a long analysis of the relationship between MFM and General Mills, Inc. (GMI) and "the advantages and liabilities that accompanied the linking of MFM with a major American food processor."

"Ten years [1949-1959] elapsed between the time MFM first approached GMI with a proposal for manufacturing MPF and the signing of an agreement making GMI the sole American producer of Dr. Borsook's formula." In Sept. 1957, "Fred H. Hafner, GMI's director of Marketing of Edible Proteins and Vitamins, suggested that MFM might find Toasted Soy Protein (TSP) a desirable source of protein for MPF. Less than a month earlier, Maurice Abrahams, a manufacturer of MPF in Brazil, read an advertisement about TSP and requested GMI to send samples to Meals for Millions and Dr. Borsook."

A "mixture of humanitarian and economic motives underlay the working relationship" between MFM and GMI. On 21 Nov. 1957 Hafner wrote Ernest Chamberlain:

"... one of my objectives in life is to see the people of this world better fed which I believe ties in exactly with the dedicated purpose of your foundation." "Sixteen months later, a nine-point document, supplemented by a memorandum dated 2 November 1959, set forth the terms of GMI's agreement to produce formulas A, B, and C MPF for MFM and for possible sale in the United States, Canada, and Mexico. Among other things, MFM agrees to purchase, after a period of one year, 500,000 pounds of MPF yearly provided GMI sold at least 150,000 pounds of MPF annually to organizations other than MFM and its auxiliary." GMI was given the rights to advertise and sell MPF under its own labels. MFM, a small non-profit, had to protect its image from any taint of commercialism. But many unexpected problems and conflicts arose (p. 105-14). Continued. Address: Seattle, Washington.

205. Roberts, Hibbert Rice. 1967. The Meals for Millions Foundation: a study of a non-governmental organization (Continued–Document Part V). PhD thesis in Political Science, University of Washington. 288 leaves. [53 + 100+ footnotes]

• *Summary:* Continued: Chapter 5, "MFM and the United States government." "Over a period of nearly twenty years, the executive and legislative branches of the federal government have been a source of both assistance and frustration to MFM's staff as it sought to promote the use and production of MPF and MFP-type foods throughout the world." Dr. Allan K. Smith of the USDA's Northern Regional Research Laboratory (Peoria, Illinois), "an expert on soybean protein and its uses gave great encouragement to the infant Foundation [starting with a letter dated 30 Dec. 1947] and undoubtedly brought to its attention a potential source of technical advice,..." (p. 115-18).

The Bureau of Educational Affairs of the State Department provided ongoing help. The Foreign Training Division of USDA's Foreign Agricultural Service also responded favorably and now furnishes MFM the names and itinerary of individuals brought to the United States by the USDA to study American food and nutrition programs. "As a result, many foreign nutritionists, politicians, officials, and businessmen on U.S. government sponsored tours have visited MFM headquarters and have listened to Miss Rose and staff explain the MPF answer to protein scarcity in developing nations of the world." This "represents another step in the slow process of educating the citizens of other countries about the potential of vegetable proteins as a source of human food and the wisdom of manufacturing MPF-type foods." Perhaps the U.S. "officials believed that the example of an American-supported voluntary agency motivatd by an unselfish desire to help improve the living conditions of people in other countries would create a favorable impression of the United States in the minds of its guests. In any case, the routing of visitors to

MFM by two federal departments appears to be a satisfactory arrangement for everyone involved" (p. 118-20).

The U.S. government sometimes helped in transporting MPF to foreign countries for relief. In one case, in 1959-60, MFM sent (with transportation paid) "over 74,000 pounds of MPF to Hong Kong, Japan, the Philippines and Taiwan in less than a year" (p. 120). It might be seen as part of the fight against communism. Also discuses Public Law 480– the Agricultural Trade and Assistance Act of 1954, which was signed into law on 10 July 1954–which offered to pay for some shipping (p. 120). "The lack of an MFM representative in Washington, who could personally press appropriate officials, greatly hurt MFM."

In Feb. 1958, in a speech delivered at Caltech, President Richard Nixon mentioned "Multi-Purpose Food which has meant so much to undernourished peoples all over the world" and congratulated Dr. Borsook for his "imaginative work" (p. 132-33; See also *Pasadena Star News* 17 Feb. 1958).

Also discusses the Armed Forces, school lunch program, civil defense and bomb shelters, and the American Soybean Association. The "Foreign Agricultural Service of the USDA and the American Soybean Association had entered into an agreement, on 7 Feb. 1956, which committed 108 million yen or \$300,000 of PL 480 counterpart funds for a project to 'expand the market for U.S. soybeans in Japan.'" This was part of Section 104 within Public Law 480. MFM unsuccessfully tried to attach itself to this agreement (p. 143).

Continues the discussion of PL 480, Senator Hubert Humphrey (encouraged MFM; cordial relationship), MFM's "ambitiously conceived but sporadically executed campaign to convince U.S. officials that high-protein vegetable supplements, i.e., MPF, should be incorporated into the relief and emergency feeding programs authorized by PL 480" (p. 144-51). George McGovern (Director of the Food for Peace program). Dec. 1961 Eddie Albert of MFM shows the film "People to People: to McGovern, who calls it "an inspiration" and requests a copy for his office (p. 154-55). But the benefits to MFM of all this effort were negligible.

At the national level, pressed by a keen and understandable desire to augment the limited resources and modest capabilities of the Foundation, Miss Rose and Mr. Chamberlain seem to strike out in any direction that they feel might lead to an improvement in the fortunes of their organization. What started to be a relatively simple effort on the part of MFM to obtain a PL 480 grant of \$18,000 to develop a Japanese version of MPF, soon spiraled into an increasingly complex campaign to alter the focus of the United States overseas surplus food disposal program. The question of whether MFM, or more specifically Miss Rose and Mr. Chamberlain, should embark on such a campaign was never raised" (p. 159). Chapter 6, Meals for Millions and the United Nations Children's Fund (UNICEF). The apparent identity of interest between the Fund and the Foundation "helps to explain why Miss Rose and Mr. Chamberlain concentrated so heavily upon the establishment of a cooperative relationship with UNICEF (p. 161). However from its beginning in 1947, when MFM first offered to donate MPF to UNICEF, until the present, this relationship was filled with disappointments and frustrations for MFM (p. 161-96).

Dr. James Hundley of UNICEF told a MFM delegation of three (on 26 Feb. 1958) that the Saridele (soybean milk powder) plant in Indonesia had cost UNICEF approximately \$480,000. But villagers found the powder "difficult to blend with water and prone to absorb moisture and harden when left exposed to the air" (p. 179).

The unfortunate and unhappy relationship shattered unmistakably on 9 June 1959 when Dr. Henry Borsook delivered the opening address at the Second Annual Inter-American Food Congress in Miami Beach, Florida. The "answer he gave to the question posed in the title of his address, 'We can at this time provide fairly adequate nutrition for the world. Why isn't it being done?' included a bitter and poignant indictment of 'official agriculture' in general and United Nations nutritional scientists in particular" (p. 182-87). Thereafter, UNICEF officials showed no desire to cooperative with MFM. Yet both sides were at fault. "Thus, it is little wonder that MFM–UNICEF relations were filled with more discord than collaboration and understanding" (p. 196).

Chapter 7, "Meals for Millions overseas," concentrates on the development of the production of MPF-type foods in India and Brazil, where they are still (as of 1967) being produced, in order to describe and analyze MFM's approach to famine prevention (p. 197). "India: In 1957, Meals for Millions achieved its most significant advance in the field of hunger prevention when the Mysore Central Food Technological Research Institute [CFTRI] started to produce on a regular albeit limited basis an Indian version of American MPF for use in a school lunch program in the state of Mysore." The formulation was based on peanuts and bengal gram. But it was not until 1960 that a large-scale Indian MPF plant went into operation (p. 221-23). From 1946 to 1956 MFM gave India 1.39 million pounds of American MPF but there were ongoing problems with its distribution (p. 199-202).

Brazil: "In June 1956 a Brazilian company began processing its own soybean-based, fortified food supplement patterned after the American MPF. Here Maurice Abrahams had taken the initiative–not MFM. Pages 223-56 describe, step by step, the chain of events that led to the ill-fated attempt to start making an MPF-type food in Brazil. The idea for this project "started in the later summer of 1953 when Mr. Abrahams, a United States citizen residing in Sao Paulo, Brazil, happened to read a glowing account of MFM and MPF in the July, 1953 issue of Readers' Digest. He was stimulated to think of the commercial potential, as well as the humanitarian value of an inexpensive soybean food if sold on a large scale to lower-income and malnourished Brazilians. After an exchange of letters with Miss Rose, Mr. Abrahams concluded that a commercial venture was feasible and flew to Los Angeles to discuss the details of a contract to produce MPF in Brazil. Though later events were to show that Mr. Abrahams had made an error in judgment, when they signed an agreement on 19 April 1954 [with Mr. Abrahams doing business as the Capital Research and Management Company], he and MFM's officers were highly optimistic about the great market potential of a Brazilian MPF." Details of the contract are given (p. 223-24). Continued. Address: Seattle, Washington.

206. Roberts, Hibbert Rice. 1967. The Meals for Millions Foundation: a study of a non-governmental organization (Continued–Document Part VI). PhD thesis in Political Science, University of Washington. 288 leaves. [53 + 100+ footnotes]

• *Summary:* Continued: "Discouraged by the unproductive results of her correspondence with Maurice Abrahams, Miss Rose flew to Brazil in late June of 1961, and in eight weeks of whirlwind activities managed to give the Brazilian MPF program a new, albeit tenuous base on life, as later events show (p. 233). Details of her tour and method of operating are given. "Her approach was typically aggressive, persistent, and, quite frequently persuasive" (p. 235).

She met (and, after being rejected, had a 1-hour discussion with) the President of Brazil, Janio Quadros; the governor of Minais Gerais, Magalhaes Pinto, and his Secretary of Health; Dona Maria de Lourdes Mello, an active supporter of MPF; Dona Dulce Sampaio, who ran a welfare organization in Recife. And she started an Auxiliary of MFM named FRAM in northeast Brazil, where poverty was extensive; many of Brazil's highest ranking national public health officials accepted Miss Rose's invitation to serve as officers of FRAM.

By the time she "left Brazil, she had managed to see [in 2 months] approximately 400 government officials and officers of such organizations as the Rotary and Lions Clubs, had promised gifts of over 60 tons of MPF, and had injected some cautious optimism into Maurice Abrahams." Delays and frustrations plagued a request of the Governor of Minas Gerais for U.S. financial assistance. But in the end (mid-1962), it all came to naught. Very little MPF was ever produced in Brazil. Unfortunately, we are never told how much or when production of MPF in Brazil stopped. (p. 254-56).

"From the foregoing accounts of promotion of MPFtype food supplements in India and Brazil, several observations can be made about the approach to famine

prevention employed by the Meals for Millions Foundation for nearly 16 years. First, the assumption by Miss Rose and her staff that the overseas distribution of American MPF by relief agencies would stimulate the development and manufacture of local versions of a vegetable protein food supplement proved to be of questionable validity. In India, not only did problems arising out of the distribution of American MPF for famine relief plague the Foundation staff and absorb its attention, but the use of MPF as an emergency food failed to capture the attention of anyone, with the possible exception of Dr. Subrahmanyan, in a position to recognize its value as a model for the formulation of an Indian food supplement. Indeed, were it not for Miss Rose's trip to India, it is quite conceivable that MPF would have continued to be considered merely a relief food."

"Secondly, MFM seems to have underestimated the difficulties associated with producing MPF in an emerging nation. Not only did MFM's staff eschew considering such important factors as a country's food customs, agricultural resources, and political and economic stability prior to the initiation of a famine prevention program, but, once committed, Miss Rose and her staff were ill-prepared to render material or technical assistance to their overseas representative" (p. 257).

Chapter 8, "New leadership and new policies," begins: "Between 1964 and 1965, a dramatic upheaval in which Florence Rose was ousted as executive director, Ernest Chamberlain resigned as co-director, and Clifford Clinton retired as president, occurred in MFM's leadership, and was closely followed by equally radical changes in the internal and overseas operations of the Foundation. The following pages describe the tangled and sometimes unsavory events that led to the acquisition of a new MFM president, Dr. Morris Asimow, and a new executive director, Mr. Gerald Miller..."

"The change in executive director of MFM came as a consequence of the board of director's dissatisfaction with Miss Rose's financial management of the Foundation. During the summer of 1964, while Florence Rose was on a world tour... the headquarters staff became convinced that the Foundation was on the verge of bankruptcy." The board of directors met on 10 Aug. 1964; a summary of their findings about MFM's finances is given. "In spite of Mr. Chamberlain's repeated warnings about MFM's financial difficulties, Florence Rose chose to continue her tour rather than to return to the home office." The Executive Committee met on 14 Sept. 1964 and took drastic remedial steps to save the foundation. Miss Rose was replaced by Mr. Gerald Miller, a former employee of the World Health Organization. "On 15 September 1964, Mr. Miller suspended the operations of the Foundation and dismissed its staff without notice" (p. 258-60).

Then, unknown to MFM's staff, "a power struggle that would rock the Foundation for over a year was about to begin.

"On 24 October 1964, Dr. Omar Fareed, a local physician was elected president of the board of directors to replace an ailing Clifford Clinton [who was under Dr. Fareed's care]. This election proved to be a costly one, since Dr. Fareed soon began to criticize Mr. Miller and the entire board of directors for their 'mismanagement' of the Foundation. His sharpest attacks... occurred in the autumn of 1965." Amidst the uproar and turmoil of a board meeting, on 9 Oct. 1965, "Clifford Clinton submitted his resignation as the Chairman of the Board"–twice in one day! Dr. Borsook submitted his resignation at the same stormy meeting.

At a meeting on 17 Nov. 1965, the board approved Mr. Miller's suggestion of a Meals for Millions factory and office. The board also removed Dr. Fareed as a director and accepted the resignation of Clifford Clinton both as a director and as the honorary chairman of the board.

"Unfortunately... Dr. Fareed's removal from the Board of Directors did not silence him. On 8 August 1966, Dr. Morris Asimow convened the board to hear Mr. Jackson, MFM's accountant, report that the financial returns from MFM's summer appeal letter were approximately one-third less than normal." Mrs. Overtake attributed this decline "to a letter sent out by Dr. Fareed on 9 May, which urged 'friends and patients' not to contribute to the Foundation. As he has access to MFM's mailing list, the board felt it likely that he had contacted all of the names on it. To counteract the effects of the Fareed letter" the board sent out its own letter (p. 258-64).

On 24 Oct. 1964, at a meeting of the board of directors, Dr. Asimow and Mr. Miller set forth a new basic strategy for MFM. It would place less emphasis on sending out relief food (MPF) and greater emphasis on starvation prevention; concentrate MFM's efforts on a limited number of countries; and "combine MFM's nutritional program with educational and technical assistance, hopefully in cooperation with other agencies. In the United States, they planned to push forward with the construction of a new office and plant facility in which they expected to develop prototypic equipment to train technical and managerial staff from other countries in the techniques of MPF production. Furthermore, they hoped to enlist the support of AID, which also had an interest in fellowship-internship programs."

"The contemplated changes in Meals for Millions' foreign operations owe much to the 'micro planning' theories of Morris Asimow, a metallurgist and professor of engineering at UCLA who has spent several years studying the problem of economic development in emerging nations. In the early 1960's, Dr. Asimow became increasingly critical of large-scale development programs that failed to solicit the advice or financial support of local business

leaders, because such programs were imposed from above by some distant governmental or inter-governmental agency. He believed, therefore, that such projects 'seldom inspire the internal leadership of a region to initiate a sustained development effort. Instead it fosters in them a hope that the increased government spending will cause their existing small mercantile businesses to do a little better without requiring them to exert much effort or bold initiative" (Asimow 1964). His alternative "involves the selection of a cohesive region within an underdeveloped country to which a team of especially trained individuals is sent to formulate small-scale development projects. Upon its arrival, the team interviews local businessmen, farmers, and community leaders to ascertain the economic conditions and potential of the region." Local entrepreneurs should be invited to participate and to form corporations for local financing (p. 264-66). Note: Clearly, micro planning is different from "micro finance." Continued. Address: Seattle, Washington.

207. Roberts, Hibbert Rice. 1967. The Meals for Millions Foundation: a study of a non-governmental organization (Continued–Document Part VII). PhD thesis in Political Science, University of Washington. 288 leaves. [53 + 100+ footnotes]

• *Summary:* Continued: "Two tentative plans for the production of MPF [overseas] emerged from the 1965 feasibility study" [on Iran]. They involved establishing two separate MPF production plants in Iran (p. 273). Note: Neither of these plants was ever established.

An analysis of various fund-raising methods showed that only the direct mail appeals were worth retaining. In the future Mr. Miller "wanted all requests to stress MFM's starvation prevention and self-help projects rather than its relief activities" (p. 274).

Chapter 9, "Conclusion." Founded in 1946 by people firmly convinced of MPF, MFM soon became engaged in a struggle to survive and to implement its programs. "Many internal factors seemed to indicate that the Foundation faced a certain and early demise. First, it had no guaranteed income, which meant that the MFM staff would have to compete with hundreds of other non-profit organizations for contributions from the American public. Furthermore, not only was the staff of Meals for Millions extremely small and heterogeneous, but it was completely inexperienced in famine relief work and unskilled in providing technical assistance or inaugurating self-help projects in foreign countries. Thirdly, although the by-laws of the foundation placed a board of directors and an executive committee in a position to oversee and direct the activities of the Los Angeles headquarters, the actual formation and execution of policy depended on the judgment of two individuals, Florence Rose and Ernest Chamberlain. Thus the guiding direction of MFM came from the personal predilections of

two individuals rather than from an institutional statement of purpose backed by a hierarchical organizational structure" (p. 277-78).

"Given its own limitations and the unfriendly aspects of the environment in which it had to exist, why did the Foundation survive?" First, the appeals of MFM moved the American public to donate money over the long term.

"While the determination, perseverance, energy, and zeal with which MFM's executive and co-directors pursued their objectives aroused the opposition of many individuals, these same characteristics were also of extreme importance in giving MFM a sense of mission and the inner strength it needed to absorb setbacks and persist in the promotion of vegetable protein foods despite the apathy, indifference, and open hostility that greeted its activities" (p. 279).

As a small NGO, Meals for Millions raises important questions. For example: Is it possible for such NGOs "to operate on the basis of any preconceived, set plan?" Or must they inevitably be flexible to new opportunities, new techniques, and new directions? At what point does flexibility lead to instability that could threaten the organization's very existence? How stable "can an organization be with no assured financial base?"

This case of a single NGO can "illustrate some of the problems that NGO's may face and... show some of the complexities inherent in their operation and indeed in their very existence" (p. 280).

This "example of the Meals for Millions Foundation suggests that the activities of non-governmental organizations represent a dynamic and significant element in international affairs, one which can add a new dimension to the humanitarian activities of intergovernmental organizations. An NGO may act as an innovator with a relatively greater amount of freedom than an IGO such as UNICEF... An NGO may have a greater opportunity to test new ideas and methods which can ultimately pave the way or set an example for later activities of a similar nature by larger yet less flexible IGO's. This ability of NGO's to experiment and acquire experience in dealing with a particular problem facing emerging nations, e.g., poor nutrition, offers IGO's a valuable supplementary source of expertise as they struggle to cope with the many difficulties which accompany the modernization process unfolding in many areas of the world. Perhaps most significant, NGO's, through their international, humanitarian activities, can funnel the benefits and knowledge of Twentieth Century science and technology directly to people throughout the world and, therefore, represent important agents of international cooperation.

Autobiographical note: Hibbert Rice Roberts III "was born in San Francisco, California on 22 July 1931. His father, now deceased, was Hibbert Rice Roberts and his mother is Kathryn Roberts Rapp. He was raised in Rochester, New York where he was graduated from Benjamin Franklin High School in 1949. Upon receipt of an A.B. degree in 1953 from Cornell University, Ithaca, New York, he served in the United States Air Force for two years. He then attended the University of Washington and received an A.M. degree in Political Science in 1967. After a year and a half of teaching in secondary schools, he returned to the University of Washington to begin studies for a Ph.D. in Political Science. In September, 1962 he joined the faculty of Whitman College, Walla Walla, Washington, where he is presently an Assistant Professor of Political Science."

Note 1. He married Sandra Kay Schwarts on 28 Dec. 1960. She was the daughter of Fred Schwarts and Verda Mary Ratsch. Children were: Nicole Catherine Roberts (born 21 Sept. 1962) and Brady Marshall Roberts (born 30 March 1964).

Note: In this thesis, Meals for Millions is abbreviated "MfM" rather than "MFM." We have chosen to use the latter abbreviation, because it is generally used by the organization itself and to facilitate case-sensitive electronic searching. Address: Seattle, Washington.

208. Horton, Yvonne. 1967. Soybean products: Candid consumer. *Christian Science Monitor*. July 6. p. 10. *Summary:* Increasingly sophisticated edible plant proteins are now available to American consumers, after getting their start in institutions.

Synthetic bacon bits, named Bac-Os, made by General Mills, Inc. from isolated soy protein under the trade name Bontrae, resemble crisp fried pieces of lean bacon without fat. They are being test marketed in Buffalo and Syracuse, New York; in Sacramento and Stockton, California; and in Denver, Colorado.

Before being test marketed at retail outlets, Bac-Os were used for salads on Eastern Airlines flights and for bacon, lettuce and tomato sandwiches in restaurant chains, university dining halls, etc.

Another high-protein product made from Soybeans by General Mills is Modern Protein Food (MPF), also called Multi-Purpose Food; it is recommended by the maker for stocking fallout shelters, for stretching food budgets, and for vegetarian or other special (religious) diets.

Many other food manufacturers are doing research on "vegetable protein products." Archer Daniels Midland Co. of Minneapolis makes TVP (Textured Vegetable Protein), which contains no waste, less than 1% fat, and can be cooked in many ways. Other companies involved in the field are Central Soya Co., Ralston Purina Co., Swift and Co., and Worthington Foods. Address: Home economics writer, Christian Science Monitor.

209. Los Angeles Times. 1967. Pilot plant and training center opened by Meals for Millions. July 9. p. WS12.
Summary: Meals for Millions has opened a demonstration pilot plant at 1800 Olympic Blvd., Santa Monica,

California. Mark Sterner is foreman of the demonstration plant. It contains \$40,000 worth of machinery and has the capacity to produce 3-4 tons of high-protein food supplement (or protein beverage) per day from oil seeds such as soy bean, sunflower, safflower, sesame, or cotton.

Also in the building is a "multitrax classroom, where foreign technical trainees can select verbal instruction from one of five different languages all of which are electronically synchronized with a rear projection visual presentation.

Starting later this month, students from the following countries will arrive at Meals for Millions to attend training classes: Bolivia, Brazil, Chile, Ecuador, Japan, Korea, Philippines, and Taiwan.

They will learn how to make the high protein food supplement or beverage from seeds indigenous to their home countries. They will also learn processing sanitation, packaging, marketing, and distribution, so they may start a self-help program when they arrive home.

210. Lilliston, Lynn. 1967. MPF–Food supplement that makes war on the spectre of starvation. Food supplement. *Los Angeles Times*. Aug. 14. p. D1, D12.

• *Summary:* Meals for Millions has sent protein-rich food supplements to hungry children in Mississippi.

211. Jayasena, H. 1967. Re: Feeding Trial Programme with Indian Multi-Purpose Food (Leaflet). Letter to Lady Coomaraswamy, President, Aug. 1 p.

• *Summary:* "Dear Dr. / Sir / Madam, In view of the need to determine more economic ways of providing optimum nutrition for all sections of the population and more especially, the vulnerable groups, this Foundation seeks your kind co-operation in order to ensure the carrying out of feeding trials with children utilising Indian Multi-Purpose Food as a supplement to their regular dietary. The ultimate purpose of this programme is to prepare the way for the development of a Multi-Purpose Food to be produced locally out of an indigenous raw material.

"We are sending herewith some literature regarding Multi-Purpose Food which may be of interest to you."

Note: Lady Coomaraswamy began life as an aristrocratic English lady named Elizabeth Clay Beeby. In 1875 she married Sri Muthu Coomaraswamy, a legislator in Ceylon and went with him to live in his native land. They had a son, the famous Indologist Ananda K. Coomaraswamy, born 22 Aug. 1877 in Colombo, Ceylon, a true Renaissance man, who brilliantly reinterpreted Indian art for Westerners who viewed it as pagan, and at the same time he challenged Eurocentrism in Indology and the rest. Muthu died in 1879. Elizabeth died in 1939. So it is not clear who "Lady Coomaraswamy, President," is. Maybe she was president of the Ceylon Meals for Millions Foundation. Address: Secretary, Ceylon Meals for Millions Foundation, 185 Baseline Rd., Borella, Colombo 9, Sri Lanka.

212. Swaminathan, M. 1967. Availability of plant proteins. In: Anthony A. Albanese, ed. 1967. Newer Methods of Nutritional Biochemistry, with Applications and Interpretations. Vol. III. New York: Academic Press. xv + 527 p. See p. 197-241. [179 ref]

• *Summary:* Soy is mentioned briefly in various tables and other places throughout this chapter. The section titled "Use of Plant Proteins in Child Feeding" (p. 220-22), soymilk is discussed at length in the subsection on "Infant Foods" and soy flour and Multi-Purpose Food (MPF) in the subsection on "Processed Protein Foods."

Anthony A. Albanese was born in 1908. Address: Applied Nutrition and Dietetics Discipline, Central Food Technological Research Inst. (CFTRI), Mysore, India.

213. Ceylon Meals for Millions Foundation. 1967? Indian Multi-Purpose Food and Nutro Biscuits in the Indian dietary (Brochure). Colombo, Ceylon. 3 p. Undated. *Summary:* Contents: Introduction. MPF as a protein supplement (incl. a table of the nutrients in 1 ounce of MPF). MPF is versatile. MPF in our diet. Seasoned MPF. Consumer trials. Cost of MPF. Nutro Biscuits (developed for distribution by the Meals for Millions Association of India; a table gives their nutritional composition).

"Clinical trials carried out using Nutro Biscuits in diet therapy of children suffering from protein malnutrition have proved their efficacy as a high protein food in improving and combating malnutrition."

Pages 2 and 3 are forms for a feeding trial program. Address: MFM Foundation, 185 Baseline Rd., Borella, Colombo 9, Sri Lanka.

214. Chen, Philip S.; Chen, Helen D. 1968. Soybeans for health, longevity, and economy. 3rd ed. South Lancaster, Massachusetts: The Chemical Elements. xii + 242 p. Nov. Illust. Index. 21 cm. 1st ed. 1956. [24 ref] *Summary:* This book is identical to the original 1956 edition, third printing. Address: 1. Prof. of Chemistry, Atlantic Union College, South Lancaster, Massachusetts; 2. National Science Foundation Fellow, Cornell Univ.

215. Photograph of Florence Rose of Meals for Millions. 1968.

• *Summary:* A digital vesion of this photo was sent to Soyinfo Center by Chris Dodson of Freedom from Hunger Foundation, Davis, California (Oct. 2010). The original of this photo hangs in the conference room at Freedom from Hunger.

The date was sent by Donald Clinton, son of Clifford E. Clinton (Jan. 2011). He has a photo with this date on the



back, given to his father, Clifford Clinton. That could be the date the photo was taken, or it could have been taken earlier.

216. Fay, Sharon E. 1969. Feeding hungry still Clinton's mission. *Los Angeles Times*. April 17. p. J1, J13. *Summary:* Clifford E. Clinton says that his lifelong concern with feeding the hungry and combatting malnutrition is a basic element in his character. "An inherited trait."

Clinton's policy of feeding the needy in Depressionstricken Los Angeles put Clifton's Cafeteria on a collision course with bankruptcy. He knew he had to find a way to stay in business and continue his mission.

So he established a second cafeteria [in a basement] not far away where he served a full course meal for 5 cents to those who could pay. To those who were destitute or could pay a penny, he served a bowl of brown rice over which was ladled vegetable soup fortified with vitamins and minerals. This place became known as the "penny cafeteria."

Tells the story of how he went to Dr. Henry Borsook, a research biochemist at Caltech, of how Dr. Borsook developed Multi-Purpose Food (MPF), then how he spent a year visiting government and U.N. agencies is search of a way to distribute this new food. He recalls that they looked at him as if he were nuts. So in 1946 he founded the Meals for Millions Foundation, a private nonprofit organization– which is still active but is now located in Santa Monica. He is no longer directly connected with the foundation.

Findings reported on Monday by the Senate special subcommittee on hunger in the continental United States are no surprise to Mr. Clinton. He says that many hungry and malnourished people live in Los Angeles, and are less than normal human beings because of their basic condition. Why should a missionary go overseas to feed the hungry when his neighbors are starving?—he asks.

A photo shows Clifford Clinton seated at his desk in his West Los Angeles condominium. Address: Times staff writer.

217. Prater, A.N.; Powell, M.E.; Sterner, M.M. 1969. Use of oilseed proteins in dairy product substitutes. *USDA Agricultural Research Service* ARS 72-71. p. 87-90. May. • *Summary:* "Sodium caseinate which is manufactured from nonfat milk is a high protein product with good biological value. The casein is first extracted from the milk with acid and is then converted into a soluble product by addition of a sodium compound. The remaining milk ingredients are discarded. Sodium caseinate is used in whole or in part as a substitute for the protein in nonfat milk solids, but the overall quality of the finished product is considered inferior from the taste palatability standpoint in direct proportion to the amount of substitution.

"Furthermore, sodium caseinate poses an interesting labeling situation. The Food and Drug Administration

considers sodium caseinate to be a chemical product derived from milk. In some products which contain sodium caseinate the claim is made that there is no dairy product present. This is true when the legal definition of milk is applied, but the implied inference that no product from milk is present is misleading." Address: 1. Consultant, Encino, California; 2. Consultant, Glendale, CA; 3. Meals for Millions Foundation, Santa Monica, CA.

218. Clinton, Clifford E. 1969. A tribute to Florence Rose. *Clifton's Food for Thot (Los Angeles, California)* No. 1954. Aug. 7. 6 panels.



• *Summary:* This little periodical circular is 6 panels printed back to back on 1 sheet of paper ($8\frac{1}{2} \times 11$ inches). Each panel is 22 x 9.5 cm.

The first half of this issue is a tribute by Clifford Clinton, the second half by Ernest R. Chamberlain. Florence died on 26 April 1969. She kept the common touch. The diminutive 5-foot figure was full of energy and always on the go–traveling the world for Meals for Millions. She coined the term "Friendship Food," which came out like this: "This gift of Friendship Food comes to you from Americans who have faith that food, friendship, and freedom are the Foundation of human progress in a peaceful world."

"Today that statement still appears on thousands of cans now in household use on five continents... It played its part in winning our Foundation three "Freedoms Foundation Awards."

In his appeal for new shipments, Dr. Tom Dooley visited Meals for Millions in Los Angeles. He said, "Florence, I tell you this. I use Multi-Purpose Food in my hospital every single day with every single patient. You might say it is Tom Dooley's third hand."

Peggy Lee, after hearing Florence talk, wrote a song titled "Meals for Millions." She "hired a 50-piece orchestra, had it recorded with herself as vocalist... Remember how she surprised you with a gift of a hundred or so recordings of her song–put in long-distance calls to disc-jockeys all over the country, who played her record for her and for us– the song used in a later production of our Meals for Millions film narrated by another friend you inspired, Florence, the actor Eddie Albert."

"In the spring of 1946 Meals for Millions Foundation was a dream in Clifford Clinton's mind and heart. Dr. Henry Borsook had developed Multi-Purpose food at Caltech–was ready for the eating-is-believing test. Clinton had gone east to offer the new food to government relief authorities. He knocked on all the right doors, got all the wrong answers from government relief officials–from agricultural experts more concerned with farm incomes than with human hunger. This despite Dr. Paul de Kruif's article in *Reader's Digest* about MPF being the answer to Europe's food problem...

"But you read it, Florence. You had never feared a wild idea that made good sense. You had pioneered with Margaret Sanger in the conversion of humanity to the need for planned parenthood-then known as birth control. Now Mrs. Sanger's pioneering work was done. New hands took charge. Mrs. Sanger was an aging invalid and you were with her in Tucson [Arizona], wondering what to do next when you heard about Clifford and Multi-Purpose Food." Florence liked the idea, came to Los Angeles, and was asked to be executive director. Florence also brought Pearl Buck into the picture.

A portrait photo shows Florence Rose.

219. Townsend, Dorothy. 1969. Clifford E. Clinton, restaurant owner and reformer, dies at 69. *Los Angeles Times*. Nov. 22. p. A1, A5.

• *Summary:* The "colorful restaurateur, reformer of the 1930s, mayoral candidate, and founder of Meals for Millions diet late Thursday night [Nov. 20] of an apparent heart attack at his home." He first gained recognition in Los Angeles during the Depression by initiating a policy of feeding the hungry.

In a Times interview on April 17 of this year, he said his motive sprang from youthful experience as the son of missionary parents in China after the Boxer Rebellion.

In the late 1930s he worked to fight gambling and vice in Los Angeles.

In 1945 he declared himself a candidate for mayor and ran second to Fletcher Bowron in the primary election.

Turning his attention again to the problem of hunger, he helped to fund research "that led to a formula utilizing meal-like protein residue which was called MPF– Multipurpose food."

Looking for a way to distribute MPF, Mr. Clinton spent a year unsuccessfully visiting government and United Nations agencies on the east coast. Then in 1946 he founded a private nonprofit organization named Meals for Millions Foundation.

He is survived by his wife, Nelda; two sons, Edmond and Donald; a daughter, Mrs. Jean Roeschlaub, all of Los Angeles; 14 grandchildren; two brothers and four sisters. Funeral services are to be held Monday at 2:30 p.m. at Hollywood Presbyterian Church, Forest Lawn Memorial Park Mortuary, Glendale.

A large portrait photo shows Clifford E. Clinton.

220. *SoyaScan Notes*. 1969. Clifford Clinton–Social Security Death Index (Overview). Nov. Compiled by William Shurtleff of Soyinfo Center.

• *Summary:* According to the Social Security Death Index for "Clifford Clinton." His Social Security number (SSN) is 551-07-8692. Issued by state of California. Date of birth: 3 Aug. 1900. Date of death: Nov. 1969. Estimated age at death: 69 years, 3 months. Last known residence: Los Angeles city, Los Angeles County, California. ZIP Code 90024.

221. *Soybean Digest*. 1969. MPF provides protein for world's hungry. Nov. p. 3.

• *Summary:* Multi-purpose food, developed for the Meals for Millions Foundation nearly 25 years ago, "continues to provide vital protein-enrichment to the diets of the hungry both at home and abroad."

"Of equal significance, through the Foundation's pilot plant and training center in Santa Monica, California, students from all over the world learn how to process their own protein-rich food supplement from their own resources.

"Today, soy-based MPF is being manufactured in Japan, Brazil, Mexico, and Korea. These plants, operated by the inhabitants of the countries, with the technological assistance of Meals for Millions, personify the self-help philosophy of the Foundation which believes in a hand-up rather than a hand-out program."

A photo shows two young boys carrying a case of "Meals for Millions–Friendship Food."

222. Lough, Adine Travis. 1969. The miracle of Meals for Millions. Meals for Million Foundation, Santa Monica, California. 3 p. 28 cm.

• *Summary:* On the cover of this typeset 3-column brochure is printed in large letters: Our founder, Clifford E. Clinton. 1900-1969. "He was a friend of God and Man." Reginald H. Helfferich, D.D. [Doctor of Divinity]. In the center of the cover a large portrait photo shows Clifford Clinton. The text of the brochure is based on an interview with Mr. and Mrs. Clinton conducted in 1969.

"The view from Clifford Clinton's windows high above Wilshire Boulevard in Los Angeles embraces" the sprawling city. Two "landmarks, not quite visible, make their presence very much felt to this man whose dedication to feeding the world's hungry is legend.

One man's dream: On the east in downtown Los Angeles stands Clifton's Cafeteria, a haven for the hungry from the days of the great depression through the present. To the west in Santa Monica, California, the Meals for Millions Foundation symbolizes the hopeful future of one man's dream, to which he personally has brought so much fulfillment.

"The son of self-supporting missionary parents, Clinton, as a boy, saw the ravaging effects of malnutrition on the people of China where his parents were stationed. It was the small lad's assignment to search out the blind infants (left to die by their parents because of their infirmity) and to bring them to the missionary school for nourishment, warmth, and later, their education. A grisly assignment for a child, but raised in the Christian philosophy of his parents, he knew only that he must help."

The missionary spirit was paramount in the lives of his parents. "Their faith in God and their indomitable spirit lent them the fiber to carry on their work under the most difficult circumstances.

"My father first established himself in business–a restaurant on Market Street in San Francisco–so that he might be self supporting. Then, shortly after the Boxer Rebellion [1898-1900], he and my mother moved our whole family to the interior of North China so that they might perform their missionary work. The trip from Tientsin [pinyin: Tianjin] took three weeks by mule and oxcart–15 oxcarts in all–carrying family, furniture and all our goods. Certainly they intended it as a permanent move.'

"But in 1906, a brief two years later, the senior Clinton received word that his business in San Francisco had been completely destroyed by the earthquake. From the brevity of the cable, he did not at first realize that not only his business but much of the city had been demolished.

"No longer self supporting, he left his wife and family in China and returned home to re-establish himself so he could continue his missionary work." Eventually he returned to China to an established mission in southern China. He and his family had to learn the dialect of the new area. But they could never accept the harsh fact of so many people crippled by diseases, malnutrition, and starvation.

Young Clifford Clinton returned to California to serve in World War I. He then worked with his father in his restaurant and later married the equally dedicated Nelda Patterson. But "the indelible awareness of the hungry of the world haunted this man's being.

"In 1931 [as the Great Depression was raging] he moved his wife, two sons and daughter to Los Angeles where he opened the first Clifton's Cafeteria. While the location was changed over the years from 6th and Olive to 7th and Broadway, with off-shoot sites in other areas, the philosophy of the owner never vacillated.

"Moral obligation to feed the hungry: 'We offered to feed anyone who was hungry,' Clinton said. 'It was and is our earnest belief that anyone making money from the community must return a portion of that which he receives back to the community. It was our duty to serve them whether or not they could pay. "You see, we believe the Golden Rule does work. All we had to decide was how to carry out that concept within our own field. It was perfectly obvious to us that we had an obligation to feed the hungry who came to our doors."

"In the first 90-day period, over ten thousand people lined the streets around Clifton's Cafeteria. These were depression years and the needy far outnumbered the paying customers. But Clinton would not go back on his word.

"We had a moral obligation to fulfill our promise. We offered a full, standard meal-soup, salad, entree, dessert-for which people could pay 5ϕ if they had it, or nothing if they did not."

"Soon, in the frantic melee of the hungry rushing to feed their families, Clifton's was so swamped that the paying customers could not get through the doors. Lines of hungry humanity encircled the cafeteria for blocks around.

"We were having difficulty just staying in business but we would not go back on our word-we could not. The question was never whether we should give it up, it was, rather, how can we make it work?"

"They secured a site at 3rd and Hill and turned it into a cafeteria where the needy could be fed. They would receive a ticket at the 6th and Olive Clifton's which was good for a complete meal at the new location. This practical solution to a seemingly impossible problem allowed business to continue unimpeded so that the promise of food to the hungry could be met."

"Huge protein shortages: 'Even as the needs of our local people were being resolved, we realized that we were making only a dent in the giant problem of world famine. Later, the second World War created huge protein shortages. It was impossible to provide nutrition for the more than two billion people who faced apparent starvation or who would succumb to the crippling diseases of malnutrition.'

"Impossible? The missionary's son, reared in the philosophy of faith in God and service to humanity, could not allow himself to recognize that word.

"Multi-Purpose Food (MPF) is born: With his wife he went to see Dr. Henry Borsook of Caltech. Clinton told the prominent research biochemist, 'This is what I want. This is what I must have." The specifications and requirements of the new food are listed.

"'It was a tall order,' Mrs. Nelda Patterson Clinton smiled reflectively. 'We were a little embarrassed. After all, Clinton was not a trained biochemist. However, as a humanitarian and a businessman, he saw the need from a practical angle. As far as biochemistry was concerned, we knew we had gone to the very top in Dr. Borsook.'

"Henry Borsook, whose chief research interest was protein synthesis and the place of vitamins in the diet, was excited and delighted. He knew that oilseeds such as soybeans, sesame and sunflower seeds are the best low-cost protein grown in quantity on most continents. In this country, millions of bushels were being pressed for margarine fats and cooking oils. The residue, remaining after the oils were extracted (a meal-cake solid matter) was usually [sic, sometimes] thrown away or fed to domestic animals.

"Using this [soybean] meal-cake as his base, Dr. Borsook developed a formula meeting every one of Clifford Clinton's specifications. This formula, with few variations, is the same employed in the Multi-Purpose Food (MPF) now distributed by the non-profit Meals for Millions Foundation, 1800 Olympic Boulevard, Santa Monica, California." Continued.

223. Lough, Adine Travis. 1969. The miracle of Meals for Millions (Continued–Part II). Meals for Million Foundation, Santa Monica, California. 3 p. 28 cm.

• *Summary:* Continued: "Incorporated into a one-bowl rice dish, this high-protein food supplement was first introduced at Clifton's Cafeteria in the mid-1940s. Nelda Clinton worked on the floor of the cafeteria and was soon to report the astonishing repercussions this new food was having on the elderly people who came to be fed. 'I'm not having colds anymore,' and 'I feel stronger.'

"It was then that the Clintons decided they must serve a wider field. 'We knew some organizations must be formed to attract the interest of influential people who could, in turn help us to reach out to more people.'

"Meals for Millions founded in 1946: The Meals for Millions Foundation had its first 'headquarters' in the basement of Clifton's Cafeteria. Pearl Buck was an early director–(a character based on Clifford Clinton appeared in her best-selling novel 'God's Men'). Florence Rose and Ernest Chamberlain (later to serve as executive director and co-director until their retirement in 1964) joined the Clinton's son, Edmond Jackson Clinton, II, Dr. Borsook, Ransom Callicott and Don Stevens in the original organization.

"Eleanor Roosevelt invited the Clintons to her apartment in New York to learn more about this vital food supplement. 'I remember we all sat on the floor, cooking up a batch of MPF over the flame of a candle,' Clinton smiled. 'She was so enthusiastic.'

"Thousands of pounds of MPF were sent to the United Rescue Mission and to missions throughout the world. Dr. Albert Schweitzer told the Clintons when they visited his hospital in Lambarene, Gabon, Africa, 'The lepers' sores heal more rapidly after servings of MPF.' Dr. Tom Dooley at his hospital in Laos, called MPF 'My third arm.'"

Overcoming hunger in the United States is now Meals for Millions' first priority. "The foundation is actively engaged in programs with Indians, migrant workers, Mexican-Americans and others in poverty areas. In addition, the specialized training in nutrition and food technology available at the Foundation lends a hand up, so that the hungry not only are fed, but can learn how to feed themselves for the rest of their lives."

"Meals for Millions Foundation, Inc.–under the executive directorship of Mark M. Sterner, recipient of the 1968 Eisenhower Distinguished Service Award–is committed to making Clinton's 'impossible dream' come true.

A photo (p. 2) shows Mr. and Mrs. Clinton seated side by side. This same photo is in this book with the date 1955. The photo of Clifford Clinton on the cover of this brochure is simply the right half of the photo of Mr. and Mrs. Clinton seated side by side.

Note 1. Adine Lough may have been employed as director of public relations by Meals for Millions at the time she wrote this. She is listed as holding this position in the MFM 1970 annual report (published in early 1971).

Note 2. The last MPF was made and distributed in 1980 by General Mills.

224. Meals for Millions Foundation. 1969. Annual report 1968. Santa Monica, California: MFM Foundation. 8 p. Typed with signature on letterhead.

• Summary: Submitted by I.F. Saunders, Executive Director. Contents: Summary. MFM board and staff. Technical training. Research & development. Multi-purpose food shipments (278,113 lb to 33 countries). Financial condition (Donations in 1968 were \$408,000, the highest in MFM's history. Only 7% of income was used for administration and management, and only 13% for fund raising and public relations). U.S. Projects: California ("Governor Ronald Reagan has readily accepted the title of Honorary Chairman of the Meals for Millions California Chapter." He has participated in MFM "activities over the past years, and is acquainted with what we are doing and firmly believes in the way we are doing it"), Nevada, Arizona, Mississippi, South Carolina. Overseas Projects: Japan, Korea, Taiwan, Philippines, Hong Kong, Thailand, India, Ceylon, Pakistan, Iran, Ecuador, Chile, Brazil, Mexico. Remarks.

Note 1. This is the earliest document seen (Dec. 2010) which shows that Meals for Millions Foundation was now located at 1800 Olympic Blvd. in Santa Monica–15 miles west of Los Angeles. Actually, MFM moved to this location in 1967.

Note 2. This is the earliest annual report seen (Dec. 2010) for Meals for Millions.

Chris Dodson of Freedom from Hunger (FFH), who kindly sent this annual report (and almost all subsequent MFM / FFH annual reports) to Soyinfo Center (Dec. 2010), says she can find no evidence of annual reports for 1965, 1966, or 1967 in the FFH archives. Address: 1800 Olympic Boulevard (P.O. Box 1666), Santa Monica, California. Phone: 870-0451. 225. Soypro International Inc. 1969. A study of business prospects in the food industry of India. Cedar Falls, Iowa. iv + 87 p. Summarized as "Soybeans have good future in India" in Soybean Digest. 1969. Dec. p. 28. 28 cm. [20 ref] *Summary:* As part of The Canadian Food Advisory Team. For Malwa Economic Development Society (MEDS), Indore (which has expressed an interest in entering some aspect of the food industry in India). Sponsored by United Church of Canada.

Contents: Objectives and guidelines. Part I: Food resources and malnutrition. Food grains and pulses. Calories. Proteins: Legumes, oilseeds, milk, fish, poultry, meat. Fats and oils. Areas of food needs: Undernourishment protein malnutrition. Summary and conclusions.

Part II: Food marketing. The non-market. Primary factors of the real market. Guidelines for product selection and production. Selling the product.

Part III: What is being done. Food ingredients: Grain processing, oilseeds for human nutrition. Consumer products: Protein foods for infants and children, foods for general consumption.

Part IV: Prospects for soybean production and soya food processing. Production: Yields, crop input, returns in relation to other crops. Market outlets and prices: Domestic markets for soy products, estimated prices. Soybean processing: Processing plants, storage, transportation, plant investment costs (new plants, converting existing plants to soybean processing). Low fiber meal and soy flour: Investment cost for production, marketing. Full-fat soy flour. Soy protein isolates. Specialty soy foods: Soy milk and related products, soy-based snack foods, cereals, dal. Conclusions.

Part V: Potential projects. Storage. Rice milling. Pulse milling. Soybean processing for soy flour, soy protein isolates. Sesame processing. Bread. Baby foods. High protein mixes. Synthetic milk or base for toned milk–related dairy products. Extruded high protein snacks / cereals. Lowcost quick-cooking dal. Food marketing and distribution.

List of references. Appendixes. Population of India. Recent production trends and current yields of key crops in India. Rough calculations of gross protein availability from local production in India.

This practical, business-oriented report focuses on lowcost high-protein foods designed to help private business meet India's problems of protein malnutrition, especially among infants and children. "Similarly, with fast rising interest in soybean production and utilization, considerable early attention had been given to this particular field..." In 1965-66, and in 1966-67 India had two devastating drought years. Prior to this, India has experienced four major droughts accompanied by famines since 1900: 1907-08, 1918-19 (the worst, with a 32.3% drop in agricultural output), 1920-21 (the second worst; 24.0% drop), and 1923-24 (16.6% drop).

Pulses, mostly in the form of dal ("the poor man's meat") have for many years been second only to food grains as a source of protein in Indian diets. Most pulses are dehulled by hand-powered stone mills at home before cooking, with a wastage of about 10%. However pulses are not keeping pace with the food grains in India's Green Revolution. Average yields are relatively low and response to fertilizer is low. Per capita consumption is static, or declining. India's main oilseeds in 1967-68 were (in descending order of output in million metric tons): groundnuts in the shell (5.83), cottonseed (2.00), rapeseed and mustard (1.48), sesame (0.42), and niger seed (0.10). Only groundnut, sesame, and niger also provide significant amounts of protein for humans. Yet after the oil is removed, most of the protein-rich oilseed cakes are used in livestock feeds or fertilizer, or exported; only about 10% of the available protein is used directly in human diets. There is now much interest in using more groundnut protein (as flour or isolate) in human foods; it has been used in toned milk. India's major source of animal protein is milk (both from water buffaloes and cows), with per capita daily consumption being 123 gm (4.4 oz).

Relatively little red meat is consumed in India; many states prohibit slaughter of cows. Goats and water buffaloes are the major sources of meat. According to CFTRI, 39% of Indians are deficient in proteins, and a high proportion of these are infants and children. Per capita availability of oils is 9.3 lb/year. 70 to 75% of all food produced stays on the farm and is consumed directly by the producers. Wheat is the main grain in north India, and rice in south India. About 25% of Indians are vegetarian by conviction, and "75% are now willing to eat animal products, with the latter percentage increasing every year. In practice, diets are still largely vegetarian because of the scarcity and cost of animal products." Prestige is the single most important marketing factor in part because India is still a highly class-conscious society. The market is highly segmented. Products need to be targeted separately at the top 3 or 4 of the 5 class segments. The high class line should be introduced first. Cheap food or "food for the poor" has little chance of succeeding in commercial channels. Except as food for children, it is very hard to sell food on the basis of its nutritional or health-giving benefits. Sampling is the most effective promotional technique.

Several companies produce dried baby foods from milk and sell them in tin cans. In 1968 the biggest seller was Amul (3,500 to 3,800 tons), made by Kaira Dairy Coop. The pioneer commercial weaning food in India was Farex, made by Glaxo and sold in tins at Rs. 13 per kg. Kaira Dairy Coop launched Bal-Amul at Rs. 11 per kg and now produces 1,000 tons/year, expected to grow to 5,000 tons by 1974. Bal-Amul contains about 25% full-fat soy flour, 25% rice and wheat flour, 20% gram flour, 11% sugar, 10% nonfat dried milk, and 6-8% moisture. Processing equipment was donated by UNICEF. Soy flour and milk powder were donated by USAID. It will soon be offered in plastic bags at Rs. 7 to 8 per kg to reach a broader market. CSM contains 25% defatted or low-fat soy flour. Bal-Ahar contains 65% bulgur wheat, 25% groundnut flour, 10% Bengal gram [chickpea] flour plus vitamin/mineral pre-mix. Requiring 10-15 minutes cooking in water, it does not contain any soy. Use of CSM and Bal-Ahar is limited to food relief programs; they are not sold commercially.

MPF (Multi-Purpose Food, formulated under sponsorship of the Meals for Millions Foundation in the U.S.) consists of 75% groundnut flour, 25% Bengal gram flour, plus a vitamin/mineral pre-mix. Containing 45% protein, it sells for only Rs. 3.5/kg and is thus the cheapest protein source on the market and one of the best. However it has not met with any real success. 7 plants have been authorized to produce MPF in India. None are operating at capacity and most are not operating at all. Total output, currently 600 tons/year, is purchased largely by OXFAM for the Meals for Millions Foundation.

UNICEF is supplying an X-25 Wenger Cooker-extruder to CFTRI to experiment with extruded high-protein snacks. Note: The Wenger X-25 is a low-cost extrusion cooker / extruder. This is the earliest document seen (Jan 2011) that mentions the use of a low-cost extrusion cooker.

The population of India has grown from 314.8 million in 1941 to about 533.3 million in 1969. Each year the population is growing by about 13 million people. Roughly 80% lives in rural areas. In terms of gross protein availability, the main sources produced in India (in million metric tons of protein) are: rice 3.03, pulses 2.69, wheat 2.49, groundnuts 1.12, milk 1.05, and jowar (sorghum) 0.91. Soy is not listed. Address: Cedar Falls, Iowa.

226. *Clifton's Food for Thot (Los Angeles, California)*.1970. In memory of Clifford E. Clinton, our founder. No. 1985. March 12. 8 p.



• *Summary:* This little periodical circular is 8 panels printed back to back on one large (36 x 22 cm) sheet of paper. Each panel is 22 x 9.5 cm. 150,00 readers.

Brief chronology of Clifford E. Clinton: 1900 Aug. 3– Born in Berkeley, California. His parents were Presbyterian missionaries in China and he was a devout Presbyterian who attended public worship but never mentioned his denomination to others or in print.

1906 April–"Clifford's father E.J. Clinton operated dining rooms and cafeterias in San Francisco. The 1906 earthquake and fire destroyed much of San Francisco, including E.J.'s business [which supported his family's missionary work in China]. He managed to rebuild it. But both before and after this period Clifford's parents took their family to the Chinese mission field for stays of several years each.

"As a boy in China Clifford witnessed starving peasants and children scratching and scraping for food-sights he never forgot."

Note: He apparently never attended college. Rather, he worked in his father's restaurants in San Francisco.

1917-18–World War I–He served as a sergeant in the Tank Corps. His commanding officer was Major Dwight Eisenhower.

1930?–By the time Clifford E. Clinton sold his interest in the cafeteria company founded by his father in San Francisco, and in which he himself had worked all the jobs up to president, and had come with his wife Nelda and three children (Edmond, Jean and Donald) to Los Angeles to start Clifton's in 1931, he had already decided on the philosophy and policies which would govern Clifton's and his entire approach to business.

"If I was only in business to make a living, I wouldn't be interested,' he said to his wife. 'It is only a platform to reach out from... to render service... to help others... to help mankind."

1931 July–He founded Clifton's cafeteria in Los Angeles. As a result of his experience with hunger in China, "he pledged that no person would be turned away hungry, even if without funds."

"In his first *Operation Manual* (1931), Clifford Clinton addressed the following words to his associates:

"In twenty years association with a business (in San Francisco) one can observe many things.

"One of the things I have observed is that a successful dining place must be more than just a place to eat.

"It must have some personality, a character, which makes people love it like an old friend...

"Such a personality cannot be purchased with equipment, nor applied with the paint on the walls...

"This personality, Ideal, and character, must spring from an inner something which exists in every person... This Ideal must be "The desire to be of service to our fellow man." "The first Clifton's cafeteria was located at 618 S. Olive St. in downtown Los Angeles. Tropical in decor, it opened its doors in July 1931 and was called *Pacific Seas*. In the basement was a place for meditation called The Garden, where guests were welcome to visit and linger in a replica of the garden at Gethsemane. Attendants in First Century costumes guided visitors through The Room of the Weavers, thence into The Grotto of the Rock, where the recorded words of 'The Influence of One Life' could be heard, and, finally into the Garden itself where they could view a statue of Christ in prayer under an ancient olive tree."

"In the years 1931-1933 thousands of jobless, hungry men and women walked the streets. For a time it became necessary to establish an additional *Penny Cafeteria* at Third and Hill Streets, which served, at a penny a portion or for nothing to those without funds, over one million needy people, to help bridge the gap before the establishment of Federal Relief agencies."

1935–Clifton's *Brookdale* was opened at 7th and Broadway. Here, to this day, among flowing brooks and redwood trees, guests were invited to pause for a moment's meditation in a little stone chapel, where they may view a beautiful forest scene made of 10,000 miniature pieces, while listening to an inspirational recorded message 'Parable of the Redwoods.'

"In later years other Clifton's locations grew up-at Lakewood, West Covina, Midtown Los Angeles (Hoover St.), and Century City. While these are more contemporary in decor than the original locations (*Pacific Seas* closed in 1960), they are animated by and reflect the same basic policies established by Clifford and Nelda Clinton at the beginning-such policies as: 'Dine free unless delighted,' 'No guest need go hungry for lack of funds,' and 'Food for the soul is important too.'

And well and good, these ideals—fine as an ethical standard, but why mix all this into daily business operations? Why not conduct business as business? These questions were asked in the early years and are sometimes asked today. Clifford Clinton replied:

"Business is many things to many men... To us business is not a compartment shut off from other interests. It is a part of our life. We see no reason why our other interests and ideals should not be part of our business... We believe that everything contributing to a better life should be applied to business. It is only when the best fruits of religion are assimilated into our business, our pleasure, our politics, our lives, that they have complete moral and spiritual justification.'

"Clifford Clinton aimed at nothing less than trying to apply the principle of the Golden Rule to his business, though, as he put it to his associates, 'We shall not permit a high purpose to make us solemn or preachy. We shall live normal, healthy, happy lives-have fun at our work. The Golden rule is the rule for happiness and self fulfillment– not for prudishness, intolerance, self-denial.' He always had a large capacity for fun, play and enjoyment, and imparted it to others. He generously shared that 'inner something' within himself."

A portrait photo shows Clifford E. Clinton in his later years. Continued.

227. Clifton's Food for Thot (Los Angeles, California).1970.
In memory of Clifford E. Clinton, our founder (Continued–Part II, 1936-1938). No. 1985. March 12. 8 p.
Summary: Continued: 1936–"CIVIC: Clifford Clinton believed in serving not only his business patrons and associates, but his city as well. Los Angels had been good to him and his family. He owed something to his community from which he drew his livelihood. That is why in 1936 he accepted County Supervisor John Anson Ford's call to duty as chairman of a special committee to investigate waste and mismanagement at the huge L.A. County General Hospital. A saving of \$120,000 a year resulted.

"This, however, brought a backfire from politicians who wanted Clinton to keep hands off civic affairs and stick to his business. Reprisals were directed against Clifton's and against Clifford Clinton-his person, reputation, home and family.

"In 1937 Clinton served on the county grand jury and joined in a minority report which exposed graft and corruption of public officials. This led to the bombing of Clinton's home, the bombing of investigator Harry Raymond, and the recall of the then mayor of Los Angeles.

"Clinton was chairman of a citizen's committee which led the movement for honest local government. It was called CIVIC, was a non-profit corporation, had its office in the basement of one of Clinton's cafeterias, had as one of its members the Rev. Bob Shuler, and had two slogans on its letterhead–'We will fight for the Ideals and Sacred Things of the City, both alone and with many,' and 'Eternal Vigilance is the Price of Liberty.'

Note: In 1932, as the Great Depression worsened, the Emergency Relief Administration (ERA) was created by President Herbert Hoover. In May 1933 it was renamed the Federal Emergency Relief Administration (FERA) by the Roosevelt Administration, as a result of the Federal Emergency Relief Act (FERA). In December 1935 it was replaced by the Works Progress Administration (WPA).

"At times many feared Clifton's bankruptcy was inevitable. In one ninety-day period 10,000 persons availed themselves of the privilege of dining free at Clifton's.

"The 1938 mayoral recall campaign and later campaigns brought a deluge of accusations, frame-ups, jailings, stonings and bombings against Clifford Clinton, his business friends, investigators and witnesses. Nevertheless, the CIVIC Committee was privileged to serve in a vigorous way in four successful state, county and municipal campaigns since the summer of 1938. The people elected a new Mayor, City Council, District Attorney, and Governor.

"To these CIVIC efforts for better government, Clifford Clinton and Clifton's contributed more than 95% of the funds. Nelda Clinton and Ransom M. Callicott (Clifford's partner) gave extra hours to managing the day-to-day operations of the business. Clifton's guests and friends donated services, learned the political ropes and became a formidable volunteer citizens' army. More than 2,200 radio broadcasts were given and factual material was published in pamphlets, papers and magazines.

"One of those who became associated with Clifford Clinton during these CIVIC years, and aided the cause immeasurably, was Ernest R. Chamberlain. This brilliant former newspaperman served on after the CIVIC battles concluded and became one of the founders with Clifford Clinton of the Meals for Millions Foundation."

There follows a tribute in poetry written by Nelle Shuler Fertig, daughter of the Rev. Bob Shuler, Clinton's fellow member in CIVIC–titled "To my father's friend" (In memory of Clifford E. Clinton).

228. Clifton's Food for Thot (Los Angeles, California).1970. In memory of Clifford E. Clinton, our founder (Continued-Part III, 1942-1970). No. 1985. March 12. 8 p. • Summary: Continued: 1942–World War II. "At age 42, leaving business in the capable hands of his wife, his partner and his associates, Clinton enlisted as a private in the Army. He was offered training at Officers' Candidate School, took it, and became a First Lieutenant in the Medical Administrative Corp. He was assigned to Fort Benning, Georgia, where he took charge of all feeding. His methods, especially his techniques of cutting food waste drastically, attracted the attention of the Office of the Quartermaster General in Washington, D.C., and shortly thereafter Clinton was placed on civilian status and made a consultant to the Army, the War Food Department, and UNRRA. He traveled around the country and around the world advising on food, inspecting conditions and curtailing waste. In one of the citations he received he is credited with saving the Army 20 train-carloads of wasted food per month. Clifford Clinton never could stand waste-not since his early years as a young boy in China."

"The 'No guest need go hungry...' policy [at Clifton's restaurants] was met in this and various ways until the year 1943. Here is Clinton writing about what happened then:

"In 1943, when considering our Community Center expansion program, Clifton's determined to meet this policy scientifically and went to Dr. Henry Borsook, an eminent biochemist in at Cal Tech in Pasadena, with a set of requirements for the development of a balanced food.'

"Clifton's put up a research grant and by the end of 1943 Dr. Borsook's research had resulted in the development of Multi-Purpose Food (MPF)... Since its development, Clifton's has been meeting its policy by serving MPF to those unable to pay (yet needing good nutrition nonetheless). It is available for 5¢ per portion, or *free to those who need*.

"When Clifford Clinton returned to Clifton's from World War II, he recalled that when serving as food consultant to the War Department, he had learned of the famine and malnutrition which would follow the war. He tried to get MPF-type foods into service in the cause of hunger relief. 'Considerable time was spent in trying to get agencies to see the value of using inexpensive and nourishing food in this type of relief feeding,' he wrote. Some progress was made, but not much.

1946–So in 1946 Clinton "decided to set up a private, non-profit Foundation called Meals for Millions, to make permanent war on hunger and malnutrition in America and the world.

Clinton actively served as founder-president of MFM "until his retirement in 1965. Co-founders with him were Dr. Borsook, Ransom Callicott, Ernest Chamberlain, Edmond Clinton [Clifford's son] and Florence Rose. Florence was a remarkable dedicated, tireless, spirited dynamo who arrived on the scene from her previous work with Margaret Sanger and Pearl Buck just about the time Meals for Millions was being organized. She served as Executive Director and Ernest Chamberlain served as Co-Director of the Foundation until they both retired in 1965.

1965–Clifford Clinton, Florence Rose, and Ernest Chamberlain all retire from the Meals for Millions Foundation, which they had founded it in 1946.

1969 Nov. 20–Died peacefully at his home in Los Angeles. Dr. Raymond I. Lindquist, Minister of the First Presbyterian Church of Hollywood, conducted services.

1970–Today the Foundation's offices, protein foods processing plant, and class rooms are located at 1800 Olympic Blvd. in Santa Monica [California]. Col. I.F. Saunders is Executive Director.

"Meals for Millions participates in emergency relief programs and has distributed over 15 million pounds of MPF to people in 129 countries and territories. Special emphasis today is on helping to eliminate hunger and malnutrition in America, as well as on training food technicians from hunger-areas abroad how to establish their own high protein food processing plants in their own countries, utilizing their own indigenous crops and food stuffs. Thus, the concept is helping others to help themselves.

"All men have the right to eat. The most fundamental freedom is freedom from hunger. It is the right of every person to basic nourishment. These are the thoughts and beacons which animated the life of Clifford E. Clinton. He was a man who cared, and loved, and served, and tried, also, to satisfy other human hungers–for friendship, beauty, intellectual and spiritual satisfaction, happiness, peace and contentment.

The brochure ends with a poem "For Clifford Clinton," by Esther York Burkholder (Editor, *Clifton's Food for Thot*). And finally with excerpts from the "Funeral service" conducted by Raymond I. Lindquist, minister of the First Presbyterian Church of Hollywood.

Note: Clifford E. Clinton lived 1900-1969. Clifton's Cafeteria was both a restaurant and a soup kitchen. Almost all these circulars, published from 1931 to 1995, are in: Collection of Clifton's Cafeteria circulars (Collection 1827). Department of Special Collections, Charles E. Young Research Library, UCLA. 7 boxes (3.5 linear feet).

229. Meals for Millions Foundation. 1970. Annual report 1969. Santa Monica, California: MFM Foundation. 9 p. Typed with signature on letterhead.



1800 olympic blvd. • p.o. box 1666 santa monica. california 90406 telephone 870-0451 / 451-0777

• *Summary:* Submitted by I.F. Saunders, Executive Director. MFM's logo (in the upper left on the title page) shows two hands gripping the handle of a horizontal spoon, with its mouth to the right facing upward–in white on a black background. Note: This is the earliest document seen (Dec. 2010) on which this logo appears.

Contents: In Memoriam: Three great friends of the Foundation passed away in 1969: "Our Founder, Clifford E, Clinton, a giant among men; Florence Rose, the first Executive Director, beloved around the world; and Don Belding, a much-revered and long-time member of the Board of Directors.

"Their loss is felt deeply by each of us."

Summary of annual report. MFM board and staff (In March of 1969, at the Semi-Annual Meeting of the Board of Directors, in accordance with the By-Laws of this Foundation," Dr. Morris Asimow was re-elected chairman of the board and Mr. Russell Eller, was re-elected president...)

"Key loss to the staff was: Mark Sterner, who now lives in Korea, but who continues to help us through his work with Korea High Protein Foods, Inc." Meals for Millions training school (administrated by Eva Kadiev). Research and development (enriched noodles, peanut meal concentrate, crystalline protein). United States projects: California, Texas, Connecticut, South Carolina, American Indians. Overseas Projects: Korea, Ecuador, Japan, Taiwan, Hong Kong, Thailand, India, Pakistan, Iran, Vietnam, Brazil, Mexico, Chile. Women's Clubs. Public relations. Remarks.

Note 1. No financial information is given, nor information on shipments of MPF for the year.

Note 2. A photo (on the Web, Dec. 2010) shows Clifford E. Clinton's signature on his grave marker at Forest Lawn Memorial Park (Glendale, California). Plot: Kindly Light section, Lot 311, Interment Space 6. The grave site is on a grassy hillside. Address: 1800 Olympic Boulevard (P.O. Box 1666), Santa Monica, California. Phone: 870-0451.

230. *Soybean Digest*. 1970. MPF produces good results in Iran. April. p. 48.

• *Summary:* Multi-Purpose Food (MPF) showed good results in feeding tests with Iranian school students, according to Dr. A.M. Setayesh, author of a report on the subject.

"MPF, which contains 50% vegetable protein balanced with the required vitamins and minerals, is produced by [sic, for] the Meals for Millions Foundation in California. Students on the test received 20 grams of MPF mixed with water daily.

"There is considerable malnutrition in Iran, partly due to a shortage of food but in large part due to ignorance of what constitutes a good diet."

231. Narayanaswamy, D.; Daniel, V.A.; Desai, B.L.M.; Rajalakshmi, D.; Swaminathan, M.; Parpia, H.A.B. 1970. The effect of supplementation with limiting amino acids on the protein efficiency ratio of a low-cost protein food based on wheat and soybean flours and fortified with essential vitamins and minerals. *Nutrition Reports International* 2(4):225-30. Oct. [10 ref]

• *Summary:* A low-cost protein food has been prepared. It is a blend of 70 parts of wheat flour and 30 parts of processed full-fat soybean flour, fortified with vitamins and minerals. It contains about 22.5% protein. "The PER of the food at 10% protein level was 1.93. Addition of methionine significantly increased the PER to 2.40, while addition of a mixture of methionine, threonine and lysine further increased the PER to 2.91 as compared with 3.0 for milk proteins." Address: Central Food Technological Research Inst. (CFTRI), Mysore, India.

232. Setayesh, A.M. 1970. Study of the effects of nutritional feeding program with Multi-Purpose Food on students of schools in the DIP. Hudson, Iowa: Soybean Digest. Summarized in Soybean Digest, April 1970, p. 48. *

• *Summary: Soybean Digest* states: "Multi-Purpose Food (MPF) showed marked results in feeding tests with Iranian school students. Dr. A.M. Setayesh, who conducted the tests, reports:

"MPF, which contains 50% vegetable protein balanced with the required vitamins and minerals is produced by Meals for Millions Foundation of California. Students on the test received 20 grams of MPF mixed with water daily.

"There is considerable malnutrition in Iran, partly due to a shortage of food but in large part due to ignorance of what constitutes a good diet. Steps are being taken to cultivate fruits and vegetables and also to expand the livestock program.

"Over a third of the students who did not receive the high protein food did not gain weight during the academic year, and some lost weight. Over 90% of those receiving MPF made a good gain in weight during the test period." Address: Kuezestan Water & Power Authority.

233. Meals for Millions Foundation. 1970? How to use MPF: Multi-Purpose Food (Leaflet). Santa Monica, California. 2 panels each side. Front and back. Each panel: 25 x 8 cm. Undated.

• *Summary:* Contains 14 recipes. Note that the address and phone number are slightly different from their other addresses in Santa Monica. This may well mean that this undated leaflet was published before others from this period. Address: 1820 Olympic Boulevard, P.O. Box 1666, Santa Monica, California 90406. Phone: (213) 870-0451.

234. Meals for Millions Foundation. 1971. Annual report 1970. Santa Monica, California: MFM Foundation. 15 p. 25 x 19 cm.



• *Summary:* Submitted by I.F. Saunders, Executive Director. The report is printed with dark brown ink on beige paper. Contents: Introduction. Board of Directors and committees (Chairman is Morris Asimow, PhD, Prof. of Engineering, UCLA; President is Russell Z. Eller). Club

activities, by Mrs. Mary Flint-Director (Successful involvement with Walks for Development). Program report, by Donald Ebright, PhD, program director: 1. Programs with production facilities (Korea High Protein Food, Inc. at Chunchon [Chun Chon]) began making protein-rich MPF in June, 1970. Director is Yong Soo Pyun, "ably assisted by Mark Sterner, former production chief for Meals for Millions in Santa Monica, California." The plant has a capacity of making 40 tons per day of MPF. Ecuador will start producing MPF in 1971. 2. Independent production facilities, making MPF in India, Mexico, and Japan. Plans in South Vietnam and Pakistan. 3. Domestic feeding programs with MPF enriching and packaging. 4. Feeding programs with nutritional education (Brazil, Mexico). 5. Disasters aided in 1970 with relief shipments (Biafra / Nigeria, The Congo, Peru). U.S. programs, by Helene Carey, director. Regional headquarters (western region, midwest area, south-west area). Research and development, by Lawrence Lipman, director. Training school, by Eva-Maria Kadiev. Public relations, by Adine Lough, Director.



MFM's logo shows two hands gripping the handle of a horizontal spoon, with its mouth to the right facing upward– in white on a dark background.

Photos show: (1) Aerial view of the large, impressive plant in Chunchon, Korea. (2) The R&D team.

Note: No financial information is given, nor information on shipments of MPF for the year. Address: 1800 Olympic Boulevard (P.O. Box 1666), Santa Monica, California 90406. Phone: 870-0451.

235. Chamberlain, Ernest R. 1971. Re: History of the Meals for Millions Foundation and of Multi-Purpose Food. Letter to Mr. H. Jayasena, Surfriders Hotel, 1700 Ocean Ave., Santa Monica, California, April 23. 4 p. Typed, with signature on letterhead. [Eng]

• *Summary:* "I sort of 'promised' you that I would write a history of the Meals for Millions Foundation and the MPF concept's origin... since I am perhaps the only one left

qualified (by personal participation) to do so... [I] I have done considerable preparatory work among the voluminous files which Florence [Rose] rescued in 1964." Starts with a few definitions.

"Preliminary-personal: Prior to my contacts with Clifford Clinton (1939) my education and experience were unrelated to food or nutrition or biochemistry. I did not know what a soybean looked like. I had received academic education in liberal arts, a law degree from George Washington Univ. (Washington, DC)-Service in the 1st World War (Intelligence Headquarters, 1st Div., 1st Corps and 1st Army) (Feb. 18, 1918 to Nov. 13, 1919). Prior to discharge I was with American School Detachment, Univ. of Paris, faculty of laws... was employed by Clifford Clinton in his municipal campaign to recall Mayor Shaw and elect Fletcher Bowron. [After that] I went to Washington again and was able (through connections there) to help Clinton get assigned to Quartermaster General as a Civilian Consultant on military problems. In 1944 Clinton worked out a big plan for national restaurant operation-which led me into contact with American food operations (General Foods, General Mills, etc.) but more and more my political direction became redirected into helping carry forward Clinton's restaurant operation idea-through a Food Service Training School he operated at Clifton's [cafeteria] for a year or more.

"In the course of his work while in Washington [DC] (during the depression years and prior to the development of government relief programs) Clinton noted various articles in the press and special publications that dealt with the possibility of developing new foods from materials less costly than those that prevailed in the American diet. In his restaurants he had experimented successfully with serving pre-prepared meals for 25ϕ and then for 5ϕ -using largely conventional low-cost foods, distress food from the markets-day-old bread. He even had a 1ϕ meal which was subsidized by himself and others and by 'meal tickets' sold to Service Clubs and Church members who would buy the tickets for 25ϕ each and then donate them to needy people who would use them at Clifton's restaurant to pay for their meal.

"But this was obviously a make-shift adaptation of conventional 'charity.' Clinton's reading had led him to repeated comments that a completely balanced and nourishing meal could be provided at very low cost by using abundant vegetable proteins, synthetic vitamins, minerals from 'non-food' sources. It was well known that during war shortage in England calcium from the chalk cliffs of Dover had replaced the calcium found in milk. Principles long recognized in the feeding of animals were receiving attention as a source of human nutrition.

"So after much talk and correspondence, Clinton wrote to me (from Washington) in 1944 to see if I could find a biochemist who could (and would) develop a food product which would provide complete nutrition (protein, vitamins, minerals, calories) in a compact form that would cost no more than 5ϕ -and which could be added to normal deficient diets (rice, wheat, roots, etc.) without changing their accustomed flavor-which would be 'acceptable' and not be contrary to anyone's religious belief or social 'taboo.'

"So I started out-saw a few commercial chemists who were so busy and disinterested that I about gave up until I noted a new book [1940] on Vitamins by Dr. Henry Borsook, Professor of Biochemistry at Calif. Inst. of Technology.

"Borsook read Clinton's specifications and told me they could easily be met-that they had been met in animal feeds for many years-that such food items had been experimentally developed in laboratories for many years but that the obstacle was the American Food Industry-such institutions as the Meat Institute, the Dairy interestsorganized to protect the market for producers of their special products. He said that Science had for a quarter century been able to provide adequate nutrition at costs far below what people adequately paid for foods... The Dept. of Agriculture pleaded *farmers' income* first and let human nutrition become secondary to income interests of food merchandisers and producers.

"If Clinton will serve this food in his restaurants I will develop it here at Cal-Tech... He will have to provide about \$10,000-convert a laboratory into a kitchen, enable me to hire a cook and a laboratory assistant and buy some materials for developing the type of food he wants-but, he warned, you will waste effort and time by trying to introduce this kind of food through normal channels of trade in the American wholesale and retail market.'

"I wrote the results of this interview to Clinton, in Washington. He returned to Los Angeles with his wife [Nelda] and restaurant associates signed the agreement with Cal-Tech.

"The laboratory at Cal Tech became a kitchen. A French cook (Mme. Soulange Berczeller) was employed and Josephine Williams (Now, I believe one of the home demonstration personnel in the U.S.D.A.) was the lab assistant.

"After some experimentation with various vegetable proteins (alfalfa etc.) Borsook decided that soybean meal offered the best and most abundant vegetable protein available at a price low enough to enable Clinton to serve his '5¢ meal' without losing money."

A few key dates:

1944 Jan. 1–Clinton writes Chamberlain outlining 12 essential characteristics for the proposed new food.

1944 May 22–Clinton signs the agreement with Cal-Tech to develop the new food with the proviso that the formula should be free to the world. Borsook called the product Multi-Purpose Food. Thereafter MPF was served at Clinton's cafeterias in Los Angeles. 1944 Dec.–Two MPF type products had been developed. One was a soup mix made by the Boltz Mfg. Co. (Los Angeles). The other was made by the Gentry Company of Los Angeles. Clinton tried both products in his restaurants–chose the Gentry product because it was more versatile and economical. Address: Residence: 1335 Indiana Ave., South Pasadena, California 91030.

236. Calloway, D.H.; Hickey, C.A.; Murphy, E.L. 1971.
Reduction of intestinal gas-forming properties of legumes by traditional and experimental food processing methods. *J. of Food Science* 36(2):251-55. March/April. [18 ref] *Summary:* Tofu and tempeh have little flatus activity, i.e. they cause little gastrointestinal gas.

The two basic types of bean sprouts, soybean and mung bean, gave almost identical reactions. Both cause slightly more breath hydrogen, total flatus and bacterial gases in the flatus than the baseline treatment but somewhat less than the 100-gram doses of beans.

MPF [Multi-purpose food] is a high-protein food (containing 50% protein) with toasted soy grits as the only protein source. The size of the test dose (136 gm) contained the same amount of protein as 20 gm of soybeans. This amount of MPF contains only one-third the carbohydrate content found in soybeans (21 vs. 67 gm) a very little fat (1.4 gm). The gas forming property of the soybean was found to be "retained in proportion to the amount of carbohydrate present and was otherwise unchanged by the processes applied." Address: Dep. of Nutritional Sciences, Univ. of California, Berkeley.

237. Meals for Millions Foundation. 1971. Wanted: Vacation from hunger (Leaflet). Santa Monica, California. 4 panels each side. Front and back. Each panel: 22 x 9 cm. Undated.

• *Summary:* On the cover is a photo of a boy holding an empty bowl, looking back over his right shoulder. Printed black and blue on white.

On one panel is printed "Summer Newsletter" above MFM's logo showing two hands gripping the handle of a horizontal spoon, with its mouth to the right facing upward–in white on a black background.

On another panel: Chairman of the board: Dr. Reginald H. Helfferich. President: Charles E. Sweeney. Executive director: Neil J. O'Donnell. Among the many photos is one of "Sister Theresa" [later Mother Theresa] of Calcutta holding a baby.

One panel states that Bangladesh has recently declared its independence from Pakistan, and that food for large numbers of refugees is urgently needed. This leaflet can be dated approximately from this fact, since Bangladesh declared its independence on 26 March 1971. The Bangladesh Liberation War lasted nine months, ending in victory on 16 Dec. 1971. Address: 1800 Olympic Boulevard, P.O. Box 1666, Santa Monica, California 90406.

238. Meals for Millions Foundation. 1971. Two ways to starve (Leaflet). Santa Monica, California. 4 panels each side. Front and back. Each panel: 22 x 9 cm. Undated. • Summary: On the cover, printed black on light blue, is an empty bowl above a full bowl. Contents: The empty bowl stands for no food. The full bowl stands for the wrong kind of food. The way to conquer starvation (MFM is made from soybeans). The Meals for Millions one-two punch (Americans helping other nations to help themselves. "Since its inception in 1946, the foundation has shipped 15 million pounds of high-protein foodstuffs to 129 countries and territories"). And where it strikes at hunger (The Foundation has helped the farmers of Duale, Ecuador, set up cooperatives to grow rice and soybeans). Meals for Millions operates at home and abroad ("Korea: In 1969 a new Multi-Purpose Food plant was opened in Chun Chon under the management of Yong Soo Pyun, a former student of the Meals for Millions Training Program. The plant is capable of producing tons of protein-rich MPF a day and is operated by the people of the province." A photo shows the outside of the plant). The far-reaching effects of self-help ("Selfhelp programs are the only permanent solutions to the world's critical hunger problem").

At the top of the rear panel is MFM's logo showing two hands gripping the handle of a horizontal spoon, with its mouth to the right facing upward–in white on a black background. Below that: Chairman: Dr. Reginald H. Helfferich, D.D., Vice-President, Church World Service. President: Charles E. Sweeney.

Board of Directors (starts with): Morris Asimow, Ph.D. Executive director: Neil J. O'Donnell. Contains 6 photos. Address: 1800 Olympic Boulevard, P.O. Box 1666, Santa Monica, California 90406. Phone: (213) 829-5337. Cable address: mealfomil.

239. Meals for Millions Foundation. 1971? You are changing statistics–Meals for Millions: 10 million hungry in U.S. Brain damage, retarded growth result of malnutrition (Leaflet). Santa Monica, California. 3 panels each side. Front and back. Each panel: 21.5 x 9.5 cm. Undated. *Summary:* On the cover is an illustration of a woman holding a tray of food, a teenage girl taking a piece of food off the tray, and a small boy eating something. All are standing, and white against the black background of a wide arrow pointing downward toward the large bold word "You."

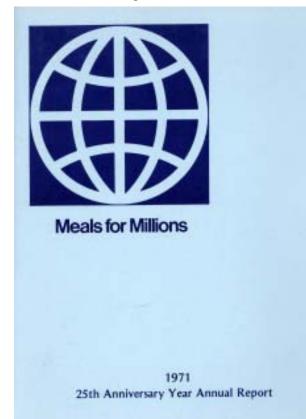
Contents: Migrants in the Southwest. A definition of MPF (Multi-Purpose Food). Indians on the reservation (Navajo). Poverty–self-help programs (in Mississippi). Meals for Millions is today shipping MPF to Biafra (which came into existence on 30 May 1967 and which experienced serious famine from 1968-1970). School lunches. Homemakers' service. MPF (about).

At the top of the back panel is MFM's logo showing two hands gripping the handle of a horizontal spoon, with its mouth to the right facing upward—in white on a black background. Below that: Chairman [of the board]: Morris Asimow, Ph.D., Professor of Engineering, University of California at Los Angeles.

President: Russel Z. Eller, Formerly Director of Advertising, Sunkist Growers.

Vice presidents: Edmond J. Clinton, Charles E. Sweeney... Executive director: Neil J. O'Donnell. Includes many photos. Address: 1800 Olympic Boulevard, P.O. Box 1666, Santa Monica, California 90406. Phone: 970-0451 or 451-0777.

240. Meals for Millions Foundation. 1972. Annual report 1971. 25th anniversary year. Santa Monica, California: MFM Foundation. 16 p. 25 x 19 cm.



• *Summary:* Submitted by Neil J. O'Donnell, the new Executive Director. On the cover, printed in dark blue ink on light blue, is a stylized globe with equator and the two tropics on a dark blue square. The pages are unnumbered.

Contents: Introduction ("The year of 1971 was a year of shifting gears for Meals for Millions, a time of self evaluation and progress. It was the year in which the Board of Directors re-assessed the goals of the Foundation and made important changes"). History. Program, by director Donald Ebright, PhD (India, Mexico, Ecuador, Korea. In late 1971 the MPF plant in Korea suspended operations "in order to reorganize under new management"). 1971 Multi-Purpose Food distribution report: 201,304 lb were sent to 15 countries overseas and 47,424 lb were sent to locations in the USA for a grand total of 248,720 (as of 18 Jan. 1972). U.S. programs. Training school ("The sixth session of the Meals for Millions Training School began on January 18, 1971." It was demanding: 13 weeks, 7 hours a day, 5 days a week). Research and development. The new executive director.

Photos (in blue) show: (1) Mr. and Mrs. Clinton seated side by side. (2) Trainees seated at a table in the MFM classroom. (3) Lawrence Lipman, Director of Research and Development, and Ea-Maria Kadiev, Administrator of the School, examine a Wenger extruder with a group of students. (4) Neil J. O'Donnell seated at his desk smiling, with his signature below. Address: 1800 Olympic Boulevard (P.O. Box 1666), Santa Monica, California 90406. Phone: 870-0451.

241. Jayasena, H. 1972. Feasibility of making weaning food in Ceylon (Brochure). Ceylon: Mimeographed leaflet. 4 p. April 22.

• *Summary:* Contents: Summary. Introduction: Background information. Weaning food formulation (Soya meal 36.0%. Rice flour 53.35%. Skimmed milk 10.27%, pre-mix of vitamins and minerals, etc.). Pack size. Mode of manufacture. Capital cost for pilot plant equipment required for an output of 100 lbs. per 8 hours (APV ribbon mixer, filling machine, etc.). Cost of raw materials (incl. soya meal, locally produced). Raw materials required for pilot plant project. Estimated cost of locally produced soya meal taking the proposed guaranteed price of Rs. 1,200 per ton of undecorticated seed. Cost estimate per ton of product (ingredients, packing materials, overhead costs {labour, equipment, rent and utilities}, summary and total). Address: Sri Lanka.

242. Orr, Elizabeth. 1972. The use of protein-rich foods for the relief of malnutrition in developing countries: an analysis of experience. *Tropical Products Institute Report* No. G73. 71 p. Aug. Summary in PAG Bulletin (1973) 3(2):59. 28 cm. [17 ref]

• *Summary:* Contents: Acknowledgements. Foreword. I. Introduction: the protein problem and approaches to it. II. Protein-rich food schemes (69 schemes are described): Introduction, schemes no longer in operation—and which ceased within a year of inception or after a market trial period, schemes no longer in operation—but which ran for more than one year before termination, schemes operating irregularly, schemes currently in regular production (beverages, other products), schemes at exploratory stages. III. Some aspects of protein-rich food schemes: Location, source of the idea, ownership of the enterprise, characteristics of the products (ingredients, composition, type of product), promotion, external assistance. IV. Evaluation of the protein-rich food approach: Summary of the outcome of the various schemes: Operational status, sales volume (the largest are Bal-Ahar, Vitasoy, and Pronutro), sales trend, distributive outlets. Reason for the outcome (success or failure). Impact on the protein problem: Production capacity, sales of Incaparina in Guatemala, income levels, prices of protein-rich foods (Bal-Amul is the most expensive since it is canned, followed by Pronutro), prices in relation to incomes, prices of competing products, distribution of protein-rich foods in rural areas. Impact made by protein-rich food schemes on the protein problem: Summary (very small). Future contribution of protein-rich foods to the protein problem. V. Initiation of protein-rich food schemes: guidelines for Government Administrators. References. Statistical appendix.

List of tables: Text: I. Daily protein requirements. II. Protein contents and protein biological values. III. Protein products/enterprises. IV. Cost of product allowances per child at retail prices. Appendix: I. Ownership of enterprise. II. Ingredients of protein-rich foods. III. Composition of protein-rich foods. IV. Outlets for protein-rich foods. V. Capacity of plant/sales. VI. Retail prices/protein prices. VII. National income in selected countries.

The following foods containing soya are discussed (see Table II, p. 66, for full list of ingredients, and Table III, p. 67, for nutritional composition). The percentage of soya in the product, when known, is shown in parentheses: Brazil: Incaparina (38%), Golden Elbow Macaroni (30%), Fortifex (47.5%), Solein, Cerealina, Saci (3% protein). Colombia: Incaparina Blanca (30%), Colombiharina (30%), Incaparina (20.9%), Duryea, Pochito (20.0% protein). Ethiopia: Faffa (18%). Guyana: Puma. Hong Kong: Vitasoy (3% protein). India: Bal-Amul (20-25%). Indonesia: Saridele (18-19% protein). Madagascar: Weaning Food (38%). Malaysia: Vitabean (2.75% protein). Mexico: Conasupo products (30%), Protea (24.0% protein). Mozambique: Super Maeu (10%). Singapore: Vitabean (2.75% protein). South Africa: Kupangi Biscuits, Pronutro. Taiwan: Weaning Food (30%). Thailand: Noodles, Poluk, Kaset Cookies, Kaset Protein. Turkey: Weaning Food (20%). Uganda: Soya Porridge (38%; 21.0% protein), Soya Maize (16.0% protein), School Porridge (15.0% Protein). U.S.A.: WSB (Wheat-soya blend, 20%), CSM (Corn-soya milk, 25%). Venezuela: Incaparina (19%). Zambia: Milk Biscuit (7.1%). Address: Foreign and Commonwealth Office (Overseas Development Administration), TPI, 56/62 Gray's Inn Rd., London WC1 8LU, England.

243. Liener, I.E. 1972. Nutritional value of food protein products. In: A.K. Smith and S.J. Circle, eds. 1972.

Soybeans: Chemistry and Technology. Westport, CT: AVI Publishing Co. xiii + 470 p. See p. 203-77. Chap. 7. [417 ref]

• Summary: Contents: 1. Introduction. 2. Protein and amino acid requirements of man: Protein requirements, amino acid requirements. 3. Evaluation of protein quality: Amino acid composition, biological techniques involving animals, protein efficiency ratio (PER), N-balance studies, plasma amino acids, experiments with human subjects, amino acid availability, in vitro techniques (physical tests, available lysine, tests for biologically active components [urease, trypsin inhibitor], enzymatic and microbiological techniques). 4. Nutritional significance of other soybean constituents: Available energy, vitamins (fat-soluble vitamins, water-soluble vitamins), minerals (calcium, phosphorus, zinc, other minerals), unknown growth factor(s). 5. Factors affecting the nutritive properties of soybean protein: heat treatment, supplementation with amino acids, storage, germination, effect of antibiotics, dietary source of carbohydrate. 6. Soybean products used for human consumption: Soybeans as a vegetable, soybean flour (incl. Multi-Purpose Food (MPF)), soybean milk, soybean curd, other fractions, protein concentrates, protein isolates (use in infant foods, use in textured foods), fermented products (tempeh, natto, miso). 7. Use of soybean products as protein supplement: As supplement to wheat protein (bread, other baked goods), as supplement to corn, as supplement to rice, use in vegetable protein mixtures, peanut and other oilseed proteins, blends containing corn, other cereals and legumes. Address: Univ. of Minnesota.

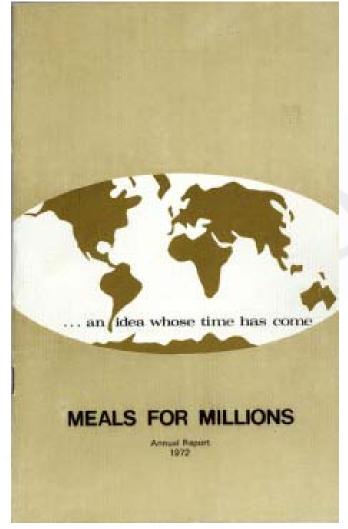
244. Smith, Allan K.; Circle, Sidney J. eds. 1972. Soybeans: Chemistry and technology. Vol. 1. Proteins. Westport, Connecticut: AVI Publishing Co. xi + 470 p. Illust. Index. 24 cm. [500+ ref]

• *Summary:* One of the best and most comprehensive reviews on the subject, with extensive information on modern soy protein products. Each of the 12 chapters is written by an expert on the subject. Volume 2 was never published. Address: 1. PhD, Oilseeds protein consultant, New Orleans, Louisiana; 2. PhD, Director, Protein Research, W.L. Clayton Research Center, Anderson Clayton Foods, Richardson, Texas.

245. Meals for Millions Foundation. 1973. Annual report 1972. Santa Monica, California: MFM Foundation. 16 p. 22 cm.

• *Summary:* Submitted by Mark M. Sterner, the new Executive Director. Cover is printed in beige, gold, and dark brown ink showing a stylized Mercator projection map of the world on a white background. The pages are unnumbered.

Contents: A letter from Charles Sweeney, President. Meals for Millions–an idea whose time has come [a phrase later used by the Hunger Project, founded by Werner Erhard, 1977]. Technical assistance: Ecuador (including growing soybeans), Sri Lanka (grow soybeans, make a soy beverage), Korea (developing a soy beverage in Santa Monica). Education: Training school, nutritional instruction. Nutritional programs: United States, overseas. MPF distribution during calendar year 1972: 145,395 lb were sent to 16 countries overseas and 31,215 lb were sent to locations in the USA for a grand total of 176,610 lb [71% as much as last year]. MFM in the news. Balance sheet (as of 31 Dec. 1972): Contributions and other revenues \$399,147. Expenses \$380,000. Assets and liabilities. History. Volunteers support MFM. Northern California advisory board. Bay Area committee. Board of Directors. A letter from Mark M. Sterner, Executive Director.



Photos show: (1) Charles Sweeney, President. (2) Mark M. Sterner. Plus many small photos. Address: 1800 Olympic Boulevard (P.O. Box 1666), Santa Monica, California 90406. Phone: 870-0451.



246. Silva, C.C. de. 1973. Re: An agricultural & food substitutes exhibition–In 1st week Feb. 1974. Letter to The Managing Director, A. Baur & Co. Ltd., Colombo 1, Ceylon, Nov. 6. 1 p. Typed, with signature.

• *Summary:* "You know there is a national crisis caused by a temporary shortage of rice and flour."

"Your participation in this important Exhibition is earnestly requested. There are broadly, four categories open to participants: A. Exhibition of subsidiary food crops. B. Description or demonstration of how they can be grown, and cared for. C. Description or demonstration of how new foods could be prepared and used. D. Exposition of nutritive values of these foodstuffs."

For more information please feel free to telephone Mr. Nelson Wijayanayaka, Secretary, Ceylon Meals for Millions Foundation at 26111 or 22331. Address: Prof., President, Ceylon Meals for Millions Foundation (An approved charity), 4 3/1 Regent House Flats, Parsons Road, Colombo 2, Sri Lanka.

247. Ceylon Meals for Millions Foundation. ed. 1973. All about soya bean. Ceylon. 29 p. Nov. 11. 22 cm. • *Summary:* In the middle of the cover a photo shows the upper part of a soybean plant with the pods and leaves. In the bottom one-third are illustrations of a bottle of [soya] milk, a can of condensed milk, a loaf of bread, a round cheese [tofu], and a tall glass with a straw and clear liquid in it.

Contents: Ad (full page) by Ceylon Oils & Fats Corporation. "We Purchase Soya Beans of Rs. 2000/- per ton delivered Seeduwa, subject to the following specifications:-Moisture 14% maximum. Damaged seed 1% maximum. Extraneous matter 3% maximum.

Preface, by Dr. C.C. de Silva, President, Ceylon Meals for Millions Foundation (dated 20 Nov. 1973). "The Ceylon Meal For Millions Foundation was organised in 1965. In its earlier form it stood as the Meals for Millions Council of Ceylon which was formed on the occasion of the meeting convened by the Junior Chamber of Commerce of Colombo on September 22, 1964 when the former Executive Director of the Meals for Millions Foundation, the late Miss Florence Rose, was on a brief visit to Sri Lanka to promote the use of locally available protein food sources for the betterment of the nutritional status of the population." The three objectives of the Foundation are given.

"Through every available means from the time of its inception in 1965 it has endeavoured to promote and popularise the cultivation of protein food crops, especially soya beans..." Florence Rose provided initial gift supplies "through the Indian Freedom from Hunger Campaign. An additional supply of 5000 lbs. of multi-purpose foods was purchased by the Foundation from India for this purpose. With part of this food available a pilot survey... was conducted with the assistance of M/s Lever Bros. (Ceylon) Ltd... The public showed a favourable response to the food. The successful breeding of several varieties of soya-beans for cultivation in Sri Lanka through the indefatigable efforts of the officers of the Agricultural Dept. at the Dry Farming Research Station at Maha Illuppallama represents a partial fulfillment of the aims of this Organisation.

"A special word of thanks goes to the Hony. [Honorary] Secretary of the Foundation, Mr. N.D. Wijayanayake for his efforts to get the publication through the Press."

Soya bean: The miracle crop of the 20th century, by Dr. G.W.E. Fernando, Assistant Director of Agriculture (Research), Maha-Illuppallama (p. 13-20, cited separately).

Soya bean recipes: A new trend in the preparation of "Thosai." Soya bean as a substitute for black gram in preparing delicious "Thosai" [Dosai].

Soya–The miracle bean (Extracts taken from the issue on soya bean by the Nutrition Society of India 1971). Address: Sri Lanka.

248. Chen, Philip S.; Chung, Helen D. 1973. Soybeans for health and longer life. New Canaan, Connecticut: Keats Publishing, Inc. (A Pivot Health Book). xii + 178 p. Index. 18 cm.

• *Summary:* A revised and condensed pocketbook version of Chen and Chen 1956. Contents: Preface. Foreword. Introduction. Part I: Nutritive value of the soybean. 1. Protein. 2. Fat. 3. Carbohydrates and caloric value. 4. Minerals. 5. Vitamins. 6. Soybeans and world population. 7. Soybeans and disease.

Part II: Soy products. 8. Soybean oil: Phosphatides, margarine. 9. Soybean oil meal: Gelsoy, Multi-Purpose Food. 10. Soy flour. 11. Concentrated soy protein products: Soy protein concentrates (Griffith Laboratories makes Isopro and GL-301), soy protein isolates, and textured or spun soy proteins. 12. Soy milk. 13. Soy cheese (tofu). 14. Soy sauce. 15. Soybean sprouts.

Part III: Soybean culture and preservation. 16. Soybean culture. 17. Preservation of soybeans (preserving green soybeans by canning, freezing, and dehydration).

Part IV: Recipes. 18. Soybeans and soybean pulp. 19. Soy flour: Breads, cakes, cookies, pies, soups, other recipes. 20. Soy grits and soy flakes. 21. Soy milk. 22. Soy cheese. 23. Soybean sprouts. Appendix: Soybean utilization (chart). References. Address: USA.

249. Fernando, G.W.E. 1973. Soya bean. The miracle crop of the 20th century. In: Ceylon Meals for Millions Foundation, ed. 1973. All about Soya Bean. Ceylon. 29 p. See p. 13-20. Abstract in: Ceylon Assoc. Advancement of Science, Proceedings, 29(1):69.

• Summary: Contents: Introduction. Recommended varieties: Hernon, Tainung (RI), Bragg, TK No. 5, Improved Pelican. Soya bean in multiple cropping programmes ("It produces two to three times more protein per acre per day than most other pulse crops"). Soil, climate and areas of production ("All well drained soils of the Dry Zone are suitable for the cultivation of the soya bean." "Soya bean can withstand short periods of drought and is not affected by excessive moisture in the soil compared to most other pulse crops"). Seed rate and spacing. Yields of soya bean. Oil and protein content (of 5 varieties. The protein content is over 40% and the oil content over 20%). Efficiency of land use for protein production. Fertilizers. Inoculation. Pests and diseases. Weed control. Storage. Uses of soya bean (defatted meal for animal food, oil for industrial uses as a paint vehicle or by condensation to alkyd resins, and for human food). Production of soya bean milk (summary of research by Malcolm C. Bourne). Crop budget: One acre of soya bean (Cost of inputs, outputs, and gross surplus [gross profit]). The irrigated output is 2,200 lbs worth 90 cents per lb = 1,980. Irrigated input costs = 565. Gross surplus = 1415 per acre.

"Experiments in Taiwan have shown that infants fed on soya milk gained body-weight and height at a rate comparable to that achieved by infants on cow's milk..."

In 1967 a programme was initiated "at the Agricultural Research Station, Maha-Illuppallama, where over 90 varieties were screened for their productivity under dry zone [irrigated] conditions." Five varieties are recommended.

Tables show: (1) Yields of six recommended varieties of soybean from 1966/67 Maha Rainfed to 1972/73 Maha Rainfed. The highest yields were all obtained during the 1969 Yala Irrigated season, ranging from 2708 to 2766 lbs / acre.

(2) Efficiency of land use for protein production (Source: Roy E. Martin, *Soya Bean Digest Blue Book Issue*, March 1970, p. 27). Three columns give the name of the crop or animal, average yield per acre, and pounds of protein per acre.

Soya bean, 24.2 bu, 508 lb. Other legumes, 20.7 bu, 293 lb. Maize, 64.2 bu, 323 lb. Wheat, 25.1 bu, 180 lb. Milk, 2,780.0 lb, 97 lb. Beef, 342.0 lb, 58 lb. Address: Asst. Director of Agriculture (Research), Maha-Illuppallama.

250. Wineinger, Irma Hendricks. 1973. Dietary practices and preferences prior to introduction of Multi-Purpose Food. MSc thesis, Texas Tech University. 93 leaves. 28 cm. *

• *Summary:* This is the 3rd PhD thesis published about Multi-Purpose Food. Address: Texas.

251. Jayasena, Hewage. 1973? Curriculum vitae. Colombo, Sri Lanka. 1 p. Unpublished typescript. Undated.

• *Summary:* "Been active with a number of NGOs for now nearly 3 decades. These included the Young Men's Buddhist Association and the All Ceylon Buddhist Congress, among others.

"Was Secretary of the National Development Enquiry of the All Ceylon Buddhist Congress for about 12 years and helped organize its Health Enquiry Committee which published my report entitled 'A National Health Plan for Ceylon.'

"Also organized the Ceylon Meals for Millions Foundation with Florence Rose of the Meals for Millions Foundation USA. Served as Secretary / Treasurer for over 10 years from about 1958 or so.

"Underwent training in soya food preparation at Meals for Millions training school at Santa Monica, California, in 1971" [for 5 months].

"In practically all these roles I have been serving as a volunteer rendering honorary service."

"Through my association with Meals for Millions I was able to pioneer along with the others in the popularization of soy beans in Sri Lanka."

Handwritten note on attached sheet: "He was also a member of the Freedom from Hunger campaign, appointed by the Jaycees in late 1960s, where he worked 5-6 years with Dr. Mrs. Beatrice V. de Mel (now nutritionist with CARE responsible for distribution of Thriposha)." Address: Formerly government record keeper, Dept. of National Archives, no retired.

252. Sterner, Mark M. 1974. Low-cost protein foods: Increasing their supply and acceptance in developing countries. *Cereal Science Today* 19(1):14-17. Jan. [2 ref] *Summary:* Contents: Introduction. Poverty and hunger. Population factors. Inexperienced leadership. Cultureoriented protein foods. Soy products. A total-development approach. New solutions needed. The tragedy of protein deficiency. Technical assistance and training.

World population is growing at about 1.5% each year while world agricultural production is increasing at the rate of about 2% annually. However, the heart of the problem of world protein supply is not what is happening on average or on the whole. "It is the fact that there are great differences in the consumption of proteins between countries, between socioeconomic groups within a country, and between family members in the home."

Today 64% of the world's population are "protein hungry." They do not consume enough protein. Sterner lived in Korea until 5 months ago and has seen the problem first hand. To his surprise, he was told by the administrator of a college in Sri Lanka, Ceylon, that the school's small soy-milk plant (put there by the father of soy milk, Dr. Harry Miller) is kept running at full capacity, when soybeans are available, to keep up with the demand of the college cafeteria. He explained that the students much prefer this unsophisticated form of soy milk to the dried soy milk (DSM) provided by CARE.

The article discusses the work of Meals for Millions and contains four photos related to that organization. Address: Exec. Director, Meals for Millions Foundation, Santa Monica, California.

253. Meals for Millions Foundation. 1974. Annual report 1973. Self-help for a hungry world. Santa Monica, California: MFM Foundation. 6 p. 28 cm. *Summary:* Submitted by Mark M. Sterner, Executive Director. Cover is printed in orange and black ink on white, as if this were one issue of the *Meals for Millions Newsletter*. In the upper left corner is MFM's new symbol [logo], a plant growing out of mounded soil in a bowl which is half of a globe. Below that: "Self-help for a hungry world." The pages are unnumbered.

Contents: Introduction, by Mark M. Sterner ("As most people the world over now recognize, any long-range view of a solution to the world's global hunger problem must rest on the premise of *improvement through self-help*. To reflect this commitment more precisely, MFM looks with pride to its new symbol image adopted formally by its Board of Directors this past fall" [of 1973]). MFM converts goals into action! Vigorous four point program stresses: technical assistance, through education, through on-going programs & emergency relief, through research and development. MFM reaches out in Friendship (To Mexico {Mexican MPF is named *Protea*], Mississippi, Brazil, American Southwest). Board of Directors.

How MFM spent its donor dollars in 1973. Income: \$377,000. Expenses: \$446,000 of which 4.64% for administration, 19.29% used for fund raising, 12.58% for public relations, and 81.95% [sic, 63.49%] for programs.

Photos show: (1) Drilling a well in Ecuador with MFM's mobile well-drilling rig. (2) Mark Sterner with students around a Wenger X-5 extruder–as part of a 4month intensive training program at MFM's International Institute of Protein Food Technology (IIPFT) (R). Plus many other photos. Address: 1800 Olympic Boulevard (P.O. Meals for Millions NEWS CLEP



MEALS FOR MILLIONS FOUNDATION 1800 olympic blvd. • p.o. box 1866 santa monica, ca. 90406

SELF-HELP FOR

1973 ANNUAL REPORT w recognize, any cld's global hunger provement through me precisely, MFM Self-Help for a Hungry World

As most people the world over now recognize, any long-range view of a solution to the world's global hunger problem must rest on the premise of *improvement through* self-help. To reflect this commitment more precisely, MFM looks with pride to its new symbol image adopted formally by its Board of Directors this past fall. In Ecuador, in Sri Lanka (Ceylon), in Korea, at MFM's International Institute of Protein Food Technology, in the American Southwest, Meals For Millions in 1973 both continued its existing programs and expanded others to translate this broad goal of self-help into tangible results. Many examples of these efforts are visualized throughout the pages of this report.

In 1973 Meals for Millions also maintained its pledge of providing aid in times of national and international emergencies. Shipments of Multi-Purpose Food (MPF) were sent to Nicaragua, West Pakistan, and to those countries bordering the Sahara. The Foundation also continued its support of many on-going programs of nutritional assistance in the United States and abroad.

Meals For Millions is committed with all the skill, enthusiasm and experience at its disposal to implement its goals as far as possible in 1974. The active concern and dedication of our supporters will enable us to continue the vigorous programs we now have underway as well as to set into motion new projects which provide realistic solutions and a basis for hope for many of the world's hungry and malnourished.

"Self-Help for a Hungry World" is more than a slogan, more than a clever catch phrase-it is a statement of who Meals For Millions is and what we do.

Mark M. Sterner, Executive Director





Gary Irvine (foreground), Peace Corps volunteer attached to MFM'S Project Ecuador, works with campesinos using MFM's mobile well drilling rig to install hand pumps, also provided by MFM. Gary and the campesinos are installing the pumps to ensure a potable water in 40 locations. Contaminated water is a prevalent source of intestinal parasites, sapping the health and strength of the poor.

Closeup of Ecuadorian children watching installation of hand pumps in MFM's project area in the Daule Valley, Ecuador. By providing vitally needed technical assistance and equipment, MFM helps make possible a healthier life and more nutritionally adequate diet for many malnourished children. photos by German Lopez, U.S. Information Service, Guerraul, Ecuador. Box 1666), Santa Monica, California 90406. Phone: 870-0451.



254. Chandrasekhara, M.R. 1974. Vegetable proteins for combatting protein malnutrition in developing countries. In: Proceedings Fourth International Congress Food Science and Technology. Madrid, Spain: International Union of Food Science & Technology. 6 vols. See vol. 5, p. 257-66. Held 23-27 Sept. 1974 at Madrid, Spain. [14 ref] *Summary:* Edible peanut flour is used in India to help the hungry and malnourished. Bal Ahar ("children's food") is a dry blend of flours from cereals, oil seed meals, and pulses; several formulas have been used, including one (Formula IV) containing 15% soya flour. Miltone, a milk-like preparation containing peanut protein isolate, has been produced at the Bangalore Dairy for the past six years; production has increased from 5,180 liters in 1966-67 to 1,047,797 liters in 1973-74.

Aflatoxin is a problem in peanut meal. In India, edible peanut protein concentrate is mostly used in child feeding programmes. Soya flour has recently been introduced, however large quantities are not yet available for feeding programmes. Yet the CARE organization in India is importing CSM (85% bulgar wheat flour and 15% solvent extracted soya flour) as well as soya flour, and using both in its programmes. Sesame flour is still in the developmental stage. A high protein food named India Multipurpose Food was used in school feeding programmes as a supplement to staple food; it was a blend of 75 parts edible peanut flour and 25 parts of chick pea flour-fortified with vitamins and minerals. Address: Project Administrator and Coordinator, Miltone Project, (Ministry of Agriculture) Bangalore Dairy, Bangalore-560029, India. Present address: 53, 13 Cross Road, Malleswaram, Bangalore, 560003, India.

255. Silva, C.C. de. 1974. The Ceylon Meals for Millions Foundation and the Poshanaya Exhibition, February 1974.

Paper presented in Ceylon. 4 p. Undated. Unpublished manuscript.

• *Summary:* In August 1971 the Ceylon MFM Foundation started a vigorous campaign to popularize the cultivation of soya on a large scale; "a memorandum was submitted to the Minister of Agriculture and Lands. A feasibility report was prepared and given to the Ministry, which was followed by an interview with the Secretary of the Ministry and a visit to the Agricultural Research Station at Maha Illuppalama... arrangements were made to have a public seminar on soya cultivation as well as utilization in 1972 and 1973, but this had to be postponed several times due to lack of planting material [soybeans]. In September, 1973, however, we decided not to have the Seminar.

"The Prime Minister inaugurated the Food Production War on 20th September 1973 with the appointment of 22 Political Authorities and it was decided to launch a campaign for the cultivation of subsidiary crops, which included cereal, pulses, roots and tuber crops on an islandwide basis, with a special co-ordinating Secretariat of the Planning Ministry at its helm."

The exhibition was sponsored and organized by the Sri Lanka MFM Foundation. Dr. Walter Fernando is director of the Soya Bean Project of the Ministry of Agriculture. Address: Prof. de Silva is President, Sri Lanka Meals for Millions Foundation.

256. Meals for Millions Foundation. 1975. The question is not whether we will help, but how [Annual report 1974].
Santa Monica, California: MFM Foundation. 6 p. 28 cm. *Summary:* Mark M. Sterner is Executive Director. Cover is as if this were one issue of the *Meals for Millions* Newsletter. In the upper left corner is MFM's logo (slightly redesigned) of a plant growing out of mounded soil in a bowl which is half of a globe. Below that: "Self-help for a hungry world." The pages are unnumbered.

Contents: MFM provides the "how" in Korean beverage plant (The plant began regular operation in July 1974, producing Super D soy beverage, bottled and inexpensive enough to compete with soft drinks. Mr. Jong-Yoon Chun is president of Sam Yang Foods). MFM sends seeding machine to Ecuador for planting soybeans. MFM moves into new self-help project in Midwest (Bootheel, Missouri). MFM's International Institute of Protein Food Technology (Patricia Stevens, program director, says "the course will bear the official title of 'Low-Cost, High Protein Foods'"). Tennessee. Uganda. New Mexico. Shipments of MPF to drought victims in countries bordering the rainless Sahara.

How MFM spent its donor dollars in 1973. Income: \$486,544 (up 28.9% from last year) of which 3.4% used for general administration, 9.5% for public relations, 17.5% for fund raising, and 69% for programs. Photos show: (1) Mark Sterner with Mr. Chun in Korea. (2) Korean woman operating bottling equipment. (3) Two Korean boys holding bottle of Super D beverage. Hank Sterner, MFM's Pilot Plant Supervisor, loading agricultural equipment for shipment of Ecuador. (4) Starving African children. Address: 1800 Olympic Boulevard (P.O. Box 1666), Santa Monica, California 90406. Phone: 870-0451.

257. Meals for Millions. 1975? Meals for Millions presents: A case for hope. Slide presentation (Leaflet). Santa Monica, California. 3 panels each side. Front and back. Each panel: 21.5 x 9.5 cm. Undated.

• *Summary:* On the cover a film strip runs diagonally. Printed black on pink. Panel 1: "Available now–A new dramatic audiovisual presentation. 'A case for hope.' World hunger and what you can do about it explained. Great for teachers, school study units, Sunday schools, women's clubs, civic organizations. Concerned citizens... Subscribe to the entire series. 'A Case for Hope" is the first of a series of 4 shows available from MFM, reporting exactly how MFM uses contributor support in its projects.

"By subscribing to the series you will receive a new program every quarter, Automatically!" The "self-contained 20-minute presentation kit has: (1) Narration on cassette tape. (2) Beautiful color slides in carousel." Six of the slides are shown as photos.

On the rear panel: "What famous Americans say about Meals for Millions." Substantial quotations by Christopher Bond, Governor of Missouri; Alan Cranston, U.S. Senator; Robert F. Drinan, Congressional Rep. (Massachusetts). Below these is MFM's logo of a plant growing out of mounded soil in a bowl which is half of a globe. "Self-help for a hungry world." Address: P.O. Drawer 680, Santa Monica, California 90406.

258. Meals for Millions. 1975? Meals for Millions presents: In their own way. A dramatic presentation of MFM's current work in Africa, Egypt, Korea (Leaflet). Santa Monica, California. 3 panels each side. Front and back. Each panel: 21.5 x 9.5 cm. Undated.

• *Summary:* On the cover is a photo of an African woman seated, preparing food. Printed black on light blue.

"This slide show presentation... also focuses on a soy beverage plant in Korea which is making possible a lowcost, high-protein drink for the poor."

"This free 20 minute slide show comes complete with: (1) Narration on reel-to-reel tape and cassette tape. (2) Carousel with color slides. (3) Script with complete directions for handling on any standard projector (4) Literature for audience distribution." One panel is an order form. Address: P.O. Drawer 680, Santa Monica, California 90406. Phone: (213) 829-5337. 259. Meals for Millions Foundation. 1976. Highlights of 1975–A case for hope [Annual report]. Santa Monica, California: MFM Foundation. 6 p. Jan. 28 cm. *Summary:* Mark M. Sterner is now Executive Vice President (head). Cover is as if this were one issue of the *Meals for Millions Newsletter*. In the upper left corner is MFM's original logo of a plant growing out of mounded soil in a bowl which is half of a globe. Below that: "Selfhelp for a hungry world." The pages are numbered.

Contents: Point of view: Self-help can and is working! MFM awarded grant for R&D from PACT (Private Agencies Collaborating Together). Unique marketing study will result in low-cost, high-nutrition foods for the hungry in Guayaquil, Ecuador. MFM celebrates US AID program grant ("Marking the first time in MFM's history, the foundation received a Grant from the United States Agency for International Development to expand its program staff and facilities. By the end of 1975 MFM's laboratory was completely expanded and equipped from the Grant Funds"). 1975 MFM program highlights from India, Egypt, and Africa (Kenya, Nigeria, Ghana, Tanzania). Meals for Millions celebrates its 30th anniversary. USA-Missouri, New Mexico, Arizona. MFM gives hats off to its hardworking corps of volunteers. MFM's new audio-video shop titled "A Case for Hope" showcases its two major projects in Ecuador. IN and about MFM '75.

Photos show: Hank Sterner, Supervisor of MFM's Pilot Plant. Mark Sterner receiving a financial gift from young people in Santa Monica.

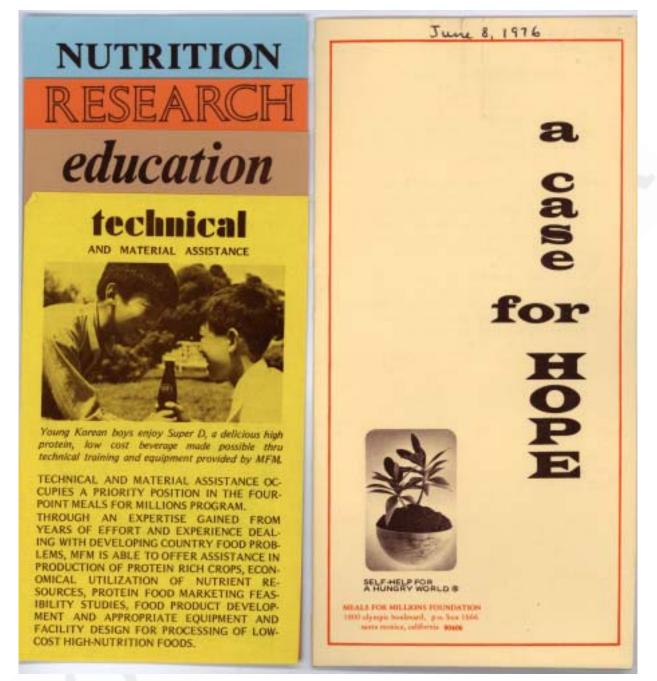
Note: This report, unfortunately, contains no income or expense figures. Address: 1800 Olympic Boulevard (P.O. Box 1666), Santa Monica, California 90406. Phone: 870-0451.

260. Sterner, Mark; Sterner, Hank. 1976. 2 techniques cut costs of vegetable protein. *Food Engineering* 48(3):59-61. March. [2 ref]

• *Summary:* Contents: Introduction. Meals for Millions. Solving vapor control in Extrusion. Non-extrusion texturizing: A Korean prototype (Feb. 1973), it works on full fat. Five photos show extrusion equipment and products. Address: Meals for Millions Foundation, 1800 Olympic Blvd., Santa Monica, California 90406.

261. Caruso, Robert V. 1976. Profitable soy based foods marketing. *Soybean Digest*. May. p. 20I-20L.

• *Summary:* "Most of the developing countries that are producing soybeans are utilizing the bean primarily for oil products. They have not developed industries capable of producing other soybean food products for human consumption. Animal feed industries have also been slow to develop in these countries because of the low internal demand for such products. As a consequence, the soybean producing countries are forced to look at the export market



as a means of selling their soybean production." Address: Former Director, Meals for Millions Project, Guayaquil, Ecuador.

262. Meals for Millions Foundation. 1976. A case for hope (Portfolio). Santa Monica, California. 4 inserts. 21 cm. [2 ref]

• *Summary:* The cover (above) of this mini-brochure is brown letters with a hairline orange border on beige. In the lower left is the logo of a plant growing out of mounded soil in a bowl which is half of a globe. Below that: "Self-help for a hungry world," plus the organization name and address in orange. Contents (printed on the portfolio): Why hunger? Why help? What is Meals for Millions? What are MFM's objectives? Board of trustees. Regional offices. How does Meals for Millions implement its objectives? Linking past and present. Affiliations and memberships. For further information (Mark M. Sterner).

The four small inserts, each a different height and color, printed on both sides, are: (1) Nutrition education: Where are you on the protein chain? (blue). (2) Research and development: Textured vegetable protein foods (orange). (3) Education and training: The International Institute of Protein Food Technology (IIPFT) is a division of MFM. Photo of man with Wenger Extruder (brown). (4) Technical and material assistance. Photo of farmers in Ecuador admiring their second crop of soybeans (yellow).

Note: Two versions of this little portfolio were issued. The content and size of the two is identical, but the design and use of colors is somewhat different. The 2nd one is printed on brown paper. Concerning the cover: It is divided vertically into two, the logo (on the lower left half) is brown on orange, the name of the organization is printed in much larger letters, vertically, beige on dark brown, on the right half and the title is printed horizontally, on 4 lines, dark brown on brown, on the left side. Address: 1800 Olympic Boulevard, P.O. Box 1666, Santa Monica, California 90406. Phone: (213) 829-5337.

263. News Briefs (Meals for Millions, Davis,

California).1976. Peter J. Davies appointed president. June. p. 1.

• *Summary:* "After a two year search, the MFM Board of Trustees' Executive Committee has appointed Peter J. Davies to the position of MFM president. Davies has a wealth of experience in economic development and administrative skills having worked in India, Thailand and Brazil.

"He will have headquarters in the new MFM office in New York City where many of the board members and related agencies are located, but will spend considerable time in California."

Note: This newsletter (see next page) is printed with green and black ink on one sheet of white paper, front and back, 8½ by 14 inches. Address: 1800 Olympic Blvd., P.O. Box 680, Santa Monica, California 900406.

264. Sterner, M.M.; Sterner, M.H.; Zeidler, G. 1976. Nonextrusion texturizing of soy meal. *PAG Bulletin (Protein Advisory Group, WHO / FAO / UNICEF)* 6(2):33-34. June. [2 ref]

• *Summary:* Contents: Introduction. Textured vegetable proteins in developing countries. Non-extrusion cooked textured vegetable proteins. Operation of a simple texturizer. A unique MFM breakthrough: Texturizing full fat soy flour. Short and long range results.

In Feb. 1973 Meals for Millions (MFM) began testing the practicability of texturizing protein in a simple apparatus used for many years in Korea. Address: Meals for Millions Foundation, 1800 Olympic Boulevard, P.O. Box 60, Santa Monica, California 90406.

265. Sterner, Mark. 1976. Exploration of potential for lowcost extrusion cooker–worldwide. *LEC Report* No. 1. p. 97-99. D.E. Wilson, ed. Low-Cost Extrusion Cookers: International Workshop Proceedings. (Fort Collins, CO: Dep. of Agric. and Chemical Engineering, Colorado State Univ.). • *Summary:* Contents: Introduction. Deterrents to the cooking-extruder in LDC's (high capital cost). How to stabilize the operation. Testing the new design. MFM's new low-cost cooking extruder. Transferring the technology. The need for an historical perspective. "Second generation" food–A must in LDC's. The key: Market testing. Applications for the future.

Historical perspective: "Multi-Purpose Food, although less well known, predated by 10 years or more other lowcost protein concentrate meals such as Incaparina, Fortifex, Arlac, and CSM and the like. In 1966, 20 years after Meals for Millions' charter and an equal number of years' experience in worldwide donor-supported distribution of the product, we began serious efforts to transfer appropriate technology to produce MPF from existing local resources. That was the same year that our pilot plant, laboratory, and training school facilities were constructed in Santa Monica, California."

"In the classic American tradition–blinded by wealth, optimism and altruistic motivation–we failed to take seriously the fact that none of the above-mentioned products was a commercial success on its own merits. Without massive government and private voluntary organizations' (PVO's) efforts, product distribution languished."

Nowhere has MPF ever had a commercial value.

Elizabeth Orr, of Tropical Products Institute, has been diligently tracking the results of efforts to introduce such foods into developing countries. "She has come to the conclusion that the reason these products have failed to meet the target of wide acceptance is because there is no effort to find out the basic eating habits and preferences of the target population." Address: Meals for Millions Foundation, Inc., Santa Monica, California.

266. Wilson, David E.; Stumpf, Peggy. ed. 1976. Low-cost extrusion cookers: International Workshop Proceedings. *LEC Report* No. 1. vii + 173 p. June. Illust. 28 cm. Held 2-5 June 1976 at Colorado State University (Dept. of Agricultural and Chemical Engineering, Colorado State Univ., Ft. Collins. CO). [35 ref]

• *Summary:* Contains about 29 papers by various authors; at least 17 of these are cited separately. Also contains two sets of opening remarks, numerous discussions, and a directory of 51 workshop participants from many countries. The workshop was sponsored by: (1) U.S. Agency for International Development, Technical Assistance Bureau, Office of Nutrition; (2) USDA Economic Research Service, Nutrition and Agribusiness Group; (3) Dept. of Food Science and Nutrition, Dept. of Agricultural Engineering, Colorado State Univ., Fort Collins, Colorado. The Preface is by Judson M. Harper, Paul R. Crowley, G. Richard Jansen, and Irwin Hornstein. Judson M. Harper and G. Richard Jansen were technical editors. Address: Colorado State Univ., Fort Collins, Colorado State



After a two year search, the MFM Board of Trustee's Executive Committee has appointed Peter J. Davies to the position of MFM president. Davies has a wealth of experience in economic development and administrative skills having worked in India, Thailand and Brazil.

He will have headquarters in the new MFM office in New York City where many of the board members and related agencies are located, but will spend considerable time in California and visiting MFM programs in the U.S. and abroad.

"Meals for Millions is indeed in the forefront of the fight against world hunger, as an institution devoted to providing technical assistance to produce low-cost, high-protein foods and through nutrition education. I am delighted to be associated with a dynamic organization that has so much potential in such a key development field. Unless we can find ways to produce not only more, but nutritionally better foods, using simplified intermediate technology, we will not win the battle against widespread malnutrition.

"I eagerly look forward to working with the fine MFM staff and the excellent board; and especially with Mark Sterner, our executive vice president, who is doing so much to introduce these newer protein food technologies in Ecuador, Korea and by developing the International Institute of Protein Food Technology.

"I also look forward to developing close relations with the other development institutions affiliated with Private Agencies Collaborating Together (PACT), CODEL, Church World Service, and Catholic Relief Services. Together, with community institutions locally in Asia, Africa and Latin America, we can win the fight to improve the quality of life – especially that of children," said Davies.

Before joining MFM Davies was director and program coordinator for the Western Hemisphere Region of the International Planned Parenthood Federation.

He also served with the Agency for International Development (AID) for 10 years in various capacities in different parts of the world.

Davies received his MPA degree from Harvard University and his A.B. degree from St. John's College in Annapolis, MD.



Rev. Michael McFadden

Another fine addition to the staff of MFM is the Rev. Michael McFadden of the Columban Fathers. As Asian program director Rev. McFadden is developing a program in Korea dealing with high protein, low-cost food for preschool age children, pregnant and lactating women.

Before joining MFM, Rev. McFadden was working in Korea where he was appointed pastor of St. Peter's Parish in 1969.



MEATLESS RECIPES AVAILABLE

"How much are you paying for your protein?" is the theme of MFM's current campaign introducing Americans to meatless main dish recipes. MFM is offering five taste tested recipes, free to the public. A serving from each dish provides one-third the daily protein requirements for an adult.

Since it takes eight pounds of vegetable protein to produce one pound of animal protein, MFM believes that Americans should be encouraged to consume less meat for humanitarian as well as economic and health reasons.

If you would like to receive these recipes please send your name and address to MFM indicating your interest in "meatless main dish eating." They will be sent to you promptly. 267. Mustakas, Gus C. 1976. Trip report on visit to Meals for Millions (MFM) Foundation, 1800 Olympic Boulevard, Santa Monica, California 90406, on June 21-22, 1976. Peoria, Illinois. 3 p. July 16. Typed, with signature on letterhead. [1 ref]

• Summary: This is a report for the ED [Engineering and Development Laboratory] files. Contents: Personnel contacted: Mark Sterner, Hank Sterner, and Gideon Zeidler. What is MFM? Examples of six projects in various countries: (1) Soy milk project in Korea; (2) Soy beverage project in Cairo, Egypt; (3) Weaning food in Ghana; (4) Leaf protein in India; (5) Food processing project in Jamaica; (6) Soy beverage project in Ecuador. NRRC cooperative program with MFM-Soy beverage in Ecuador. Training institute: International Institute of Protein Technology (IIPFT; offers two 4-week courses in Santa Monica roughly twice each year). Extruder and texturized soy protein research. Patent policy. Future research at MFM. Future research cooperation with NRRC. Address: USDA ARS Northern Regional Research Center, Peoria, Illinois 61604.

268. Bookwalter, G.N. 1976. Trip report on lectures and demonstrations at Meals for Millions (MFM) Foundation, 1800 Olympic Boulevard, Santa Monica, California 90406, on November 1-4, 1976. Peoria, Illinois. 3 p. Dec. 6. Typed, without signature. [1 ref]

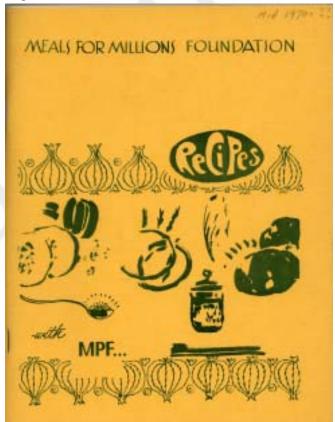
• *Summary:* This is a report for the ED [Engineering and Development Laboratory] files. Contents: Personnel contacted: Mark Sterner, Hank Sterner, and Gideon Zeidler. Student participants in training program (name and country of 7 students from India, Costa Rica, Chile, Malaysia, Nigeria, Korea, Turkey). Preparation of instantized corn meal. Preparation of mixed weaning food. Taste panel. Texturized soy protein research. Equipment development.

Bookwalter concludes: "My general impression of both the MFM and student participants was extremely high. MFM has a highly productive research program with a small staff. The student participants were all intelligent and well educated. I've never seen so much friendliness, enthusiasm, discussion, and dedication, both within MFM personnel and the student participants. I left with the feeling that a great deal of good would come from this." Address: USDA ARS Northern Regional Research Center, Peoria, Illinois 61604.

269. Caruso, Robert V.; Moore, Richard. 1976. Marketing research to develop soy based food products: A study in Guayaquil, Ecuador. California. *

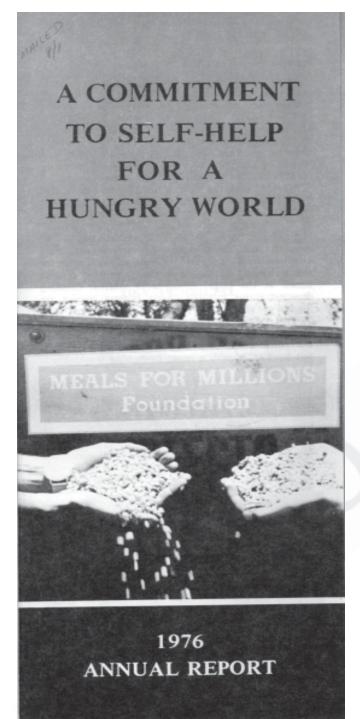
270. Sterner, Mark M. 1976. Re: Matchaka in Ecuador. Letter to H.L. Wang and associates at Northern Regional Research Center. 2 p. * • *Summary:* "According to information obtained from Meals for Millions workers, who were doing field work in Ecuador, a group of Ecuadoreans living in the Sierras have adopted home-grown soybeans as a daily food prepared in their home. The food product called Matchaka consists of whole soybeans that are toasted then ground in hand coffee mills. Coarse sugar is added and the mixture is eaten as a dry snack. Previously corn was used to prepare this product." (Cited by H.L. Wang, et al. 1979. Soybeans as human food–Unprocessed and simply processed. p. 33). Address: Executive Director, Meals for Millions Foundation.

271. Meals for Millions Foundation. 1976? Recipes with MPF. 2nd ed. Santa Monica, California: MFM Foundation. 35 p. Undated. 22 cm. [3 ref]



• *Summary:* Contents: Acknowledgements. General information about MPF. Weights and measures. Bread, biscuits. Breakfast foods. Soups, sauces. Main dishes, meat & fish dishes. Meatless dishes. Desserts, snacks. Address: 1800 Olympic Boulevard, Santa Monica, California 90406.

272. Meals for Millions Foundation. 1977. Annual report 1976: A commitment to self-help for a hungry world. Santa Monica, California: MFM Foundation. 9 panels. Each 9 x 23 cm. Complex folding.



• *Summary:* Peter J. Davies is now President and Chief Executive Officer; he resides at the New York office. On the black and white cover is a photo of two pairs of cupped hands overflowing with soybean seeds. MFM's former logo is absent.

Contents: Message from the president (Davies). Highlights of 1976: New president (Davies) appointed in April 1976 after a two-year search, additional grants from US AID and PACT, financial summary. The commitment. MFM meets its commitment through self-help programs: Technical and material assistance (Ecuador, Korea, Bootheel, Missouri, Africa {Ghana, Kenya}, the Caribbean {Jamaica, Haiti}). Technical and professional training (India, International Training Institute in Santa Monica; two 8-week training sessions were held during 1976). Transfer of technology (Research & Development, MFM extruder and village texturizer). Nutrition education.

Income for 1976 by source: \$756,028 (total). Statement of functional expenses for the year ended Dec. 31, 1976 (\$353,202). Board of Trustees. A portrait photo shows Peter Davies. Address: 1. Western office–IIPFT, 1800 Olympic Boulevard (P.O. Box 680), Santa Monica, California 90406; 2. Eastern office, 815 Second Ave., Suite 501, New York City, NY 10017. Phone: (213) 829-5337 or (212) 986-4170.

273. MacNaughton, Nancy; Castro, Roberto. 1977. Procesamiento de soya en Honduras [Soybean processing in Honduras]. Tegucigalpa, Honduras: Secretaria de Recursos Naturales, Dirección de Planificación Sectorial, Departamento de Proyectos. iii + 69 leaves. Feb. Illust. 28 cm. [37 ref. Spa]

• Summary: Contents: Summary and conclusions. 1. Introduction. 2. Antecedents: Work conducted (in the rest of the world {USA, Dr. Harry Miller in Shanghai}, China, Philippines, Rhodesia, Sierra Leone, Mauritania, Ethiopia, Ruanda, Nigeria, Nepal, Sri Lanka, Brazil, Bolivia & Maisoy, Paraguay, Chile, Ecuador {Meals for Millions}), in Mexico and Central America ({INCAP in Panama, Dr. Steven Youngberg, Guatemala, Belize, Costa Rica, Nicaragua}, in Honduras), the role of soya in human nutrition. 3. The project: Objectives, goals, development of the study (processing of soymilk {in the home, at the level of an organized group, at the semi-industrial level}, processing of other derivatives of soya / soyfoods {Queso de soya / tofu, harina de soya / soy flour, Brady Crop Cooker}, investments required {in the home, at the level of an organized group, at the semi-industrial level}). 4. Conclusions and recommendations: Conclusions. Recommendations. Bibliographic references (leaves 63-65). Appendix: Nutritional aspects of soya.

Figures show: (1) Flow diagram, with equipment, for the production of Vital soymilk. (2-3) Flow chart for the processing of full-fat soy flour by a simple village process. (4) Flow chart for the processing of full-fat soy flour to make soymilk. (5) Flow chart: Traditional process for the production of soymilk. (6) Flow chart: Process for the production of soymilk on the level of organized groups of farmers; INTSOY process. (7) Construction of a sock filter (INTSOY). (8) Flow chart: Process for the production of soymilk using the Unidad Portatil miller. (9) Flow chart: Process for the production of soymilk [with coco] used in the soymilk factory of Stephen Youngberg, in Peña Blanca, Honduras. Note: Dr. Youngberg is a Seventh-day Adventist. (10) Three flow diagrams: Process for the production of whole soy flour in the home-simple, toasted, and blanched.(11) Koehring Brady 206 Crop Cooker; 2-page brochure insert.(12) Koehring Brady Extruder Cooker; 2-page brochure insert.

Tables show: (1) Equipment needed for processing defatted soy flour; capacity 136 kg (300 lbs.) of soy flour in 8 hours of operation. (2) Characteristics and nutritional composition of soy beverage after filtration. (3) Initial investment in equipment used in making soymilk at the factory of Dr. Stephen Youngberg, in Peña Blanca, Honduras. (4) Cost estimates for the production of soymilk as made at the factory of Dr. Stephen Youngberg, in Peña Blanca, Honduras (in Lps. = lempiras). (5) Equipment and costs of the proposed Maisoy project in Honduras.

Page 20: Work with soy in Africa is relatively recent if compared with early recorded work with soy in Asia. Many of the developing African nations recognize the nutritional needs of their population and have started to experiment with the soybean and soy products. Soybean variety trials have been conducted in the Ivory Coast, Rhodesia, Sierra Leone, and Mauritania. Ethiopia has incorporated soy flour and soybeans into traditional dishes. Ruanda and Nigeria have introduced soybean cultivation technology and local consumption, on account of the severe malnutrition that exists in those countries. Nigeria is producing soybeans for export."

Note: Looking at endnote 5 in this bibliography, which cites the source of this information about soy in Africa, it seems quite clear that the word "Mauritania" was accidentally and incorrectly substituted for the word "Mauritius" in the "Country Reports" (see p. 218 of these Reports).

Page 20: In Honduras. The Ministry of Natural Resources, in cooperation with other organizations, has conducted soybean cultivation / production trials in selected areas in Honduras. In Comayagua, the company named Compañía Mejores Alimentos [Best Foods Company] initiated commercial soybean production within the last few years. Small projects of soybean production and consumption are prospering in communities in the following areas: Sonaguera, Colón; Tela, Atlántida; Buena Fé, Santa Bárbara; Las Animas, El Paraíso; Olanchito, Yoro y Barrancho, Choluteca.

The goal of these projects is to introduce soya as a nutritional supplement in the local diet. These projects are carried out within homemaker's clubs, schools, child dining halls, and various communities, with the support of CARE, CARITAS, The National Board of Social Comfort, like our communities and local agronomics. The largest area for cultivating soybeans is five blocks and the smallest is a quarter block. The majority of these projects can be found in the first stages of experimentation but the participants foresee good results. These small-scale projects are important to note because they consist of cooperative efforts and are self-sufficient. On the other hand, the participants will manage their time and labor, and will be twice as motivated to incorporate soy into their daily menus. Address: Honduras.

274. Meals for Millions Foundation. 1977. The village texturizer: A low-cost machine for preparing texturized food products at the village level. Santa Monica, California; Mt. Rainier, Maryland: Volunteers in Technical Assistance. viii + 76 p. Sept. Illust. No index. 22 cm. [18 ref] *Summary:* Contents: Introduction. 1. An introduction to texturized products. 2. Construction and assembly of the village texturizer. 3. Product experimentation and machine operation. Appendixes: 1. Designing a nutritious human food. 2. Use of the village texturizer in a small business. 3. Meals for millions. Bibliography.

275. Hafner, Fred. 1977. A tribute to Dr. Henry Borsook-An account of a man, a product, and a project. Unpublished manuscript. 6 p. Oct. 14. Unpublished manuscript. • Summary: In 1942 (during World War II) when Clifford Clinton needed help in developing a nutritious food from non-rationed materials to feed non-paying "customers" in his cafeteria on Olive Street in downtown Los Angeles, he contacted Dr. Henry Borsook, a biochemist at Cal-Tech. Mr. Clinton offered Dr. Borsook a monetary grant if he would undertake the project; Dr. Borsook accepted. Borsook used partially defatted soy grits or soy flour plus essential vitamins and minerals as the basic formula, then added salt, spices, and hydrolyzed vegetable protein. "The resulting product when mixed with water and heated in an oven formed a high protein, nutritious and tasty mush. This product was served from the steam table of the Clifton Cafeteria to those who had no money but were hungry and deserving of care. The product was well received by the destitute vagrants who looked to Mr. Clinton for a "hand out"; the developmental work of Dr. Borsook had met the need of the emergency created by the war.

"Mr. Clinton was able to contract with Gentry, Inc. of Oxnard, California, to manufacture the product; Gentry was selected because they had available the spices needed for the product, as well as the blending facilities."

In 1946 when World War II came to an end the Meals for Millions (MFM) Foundation was born and the Borsook formula, renamed MPF, became the key component of a program to fight hunger throughout the world. Among the many fine people associated with the Foundation were Dr. Borsook, Clifford Clinton, Edmond Clinton, Florence Rose, Ernest Chamberlain, Hazel Hopkins, Bea Azedo, Reg Helfferich, Elsie Russell, Lloyd Bellisime, Gerlad [sic, Gerald] Miller, Col. "Sandy" Saunders, Larry Lyvman, Neal O'Donnell, Mark Sterner, Don Ebright and Peter Davies to name a few. In 1958 General Mills relieved Gentry as the manufacturer of MPF. Eventually partially defatted soy grits were replaced by fully defatted soy grits, giving the product a higher protein content. And the following essential vitamins were added to the formula: Vitamin C, vitamin E, vitamin B-6, and vitamin B-12.

"Back in the days of the 3ϕ postage stamp, the Foundation promoted MPF as 'the 3ϕ meal'; 2 ounces of MPF, costing only 3ϕ , provided 1/3 of the MDR for many valuable nutrients likely to be lacking in the diet of low income families in developing countries."

Dr. Albert Schweitzer [who died in 1965] used MPF extensively at his hospital in Lambarene, Gabon. Dr. Tom Dooley [who died in Jan. 1961] used MPF in his MEDICO hospital in Laos. 80,000 lb of MPF were used in the Biafran war in Nigeria. During the prisoner exchange with Cuba's Castro in the mid-1960s, over 800,000 lb of MPF were shipped to Cuba and converted into MPF sausage. After earthquakes in Morocco, Turkey, and Central and South America, MPF was donated in time to relieve severe cases of protein shortage. In 1960 it was flown to needy orphanages in Morocco.

276. Meals for Millions Foundation. 1978. Annual report 1977: A commitment to self-help for a hungry world. Santa Monica, California: MFM Foundation. 9 panels. Each 9 x 23 cm. Complex folding.

• *Summary:* Peter J. Davies is President and Chief Executive Officer; he resides at the New York office. On the orange, black and white cover is a photo of a little girl. MFM's former logo of the plant growing in the upturned bowl is now at the bottom of the cover.

Contents: Message from the president (The "trickledown" theory of investing in infrastructure does not work). Highlights of 1977: The Borsook Fund was established, the National Committee of Sponsors was formed, with Mrs. John Steinbeck as chairperson, generous grants were received from a long list of organizations, starting with US AID and PACT. Since 1974 MFM has emphasized self-help programs. moving away from distribution of MPF. Technical and material assistance (Ecuador, Honduras, Egypt, Korea, Jamaica, Kenya). Transfer of technology (Village texturizer, India–Robert and Jeanne Nave). Multi-Purpose Food (sent to Syracuse, New York). Technical and professional training (IIPFT, Bolivia). Nutrition education (Tucson, Arizona. In June 1977 MFM held its first Nutrition Education Workshop for 28 field nutritionists).

Income for 1977 by source: \$893,765 (total). Statement of functional expenses for the year ended Dec. 31, 1976 (\$529,028). Board of Trustees. National Committee of Sponsors. MFM officers. A small portrait photo shows Peter Davies. Address: 1. 1800 Olympic Boulevard (P.O. Box 680), Santa Monica, California 90406; 2. 815 Second Ave., Suite 501, New York City, NY 10017. Phone: (213) 829-5337 or (212) 986-4170.

277. Chen, Philip S.; Chung, Helen D. 1978. Soybeans for health and longer life. New Canaan, Connecticut: Keats Publishing, Inc. xii + 178 p. Index. 18 cm. (A Pivot Health Book).

• *Summary:* A revised and condensed pocketbook version of Chen and Chen 1956. Contents: Preface. Foreword. Introduction. Part I: Nutritive value of the soybean. 1. Protein. 2. Fat. 3. Carbohydrates and caloric value. 4. Minerals. 5. Vitamins. 6. Soybeans and world population. 7. Soybeans and disease.

Part II: Soy products. 8. Soybean oil: Phosphatides, margarine. 9. Soybean oil meal: Gelsoy, Multi-Purpose Food. 10. Soy flour. 11. Concentrated soy protein products: Soy protein concentrates (Griffith Laboratories makes Isopro and GL-301), soy protein isolates, and textured or spun soy proteins. 12. Soy milk. 13. Soy cheese (tofu). 14. Soy sauce. 15. Soybean sprouts.

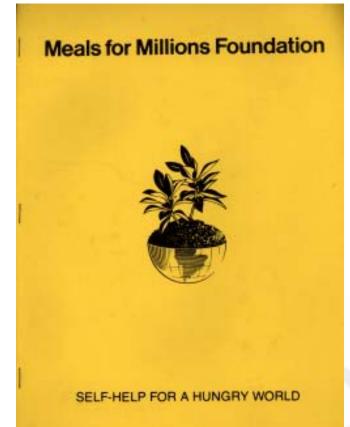
Part III: Soybean culture and preservation. 16. Soybean culture. 17. Preservation of soybeans (preserving green soybeans by canning, freezing, and dehydration).

Part IV: Recipes. 18. Soybeans and soybean pulp. 19. Soy flour: Breads, cakes, cookies, pies, soups, other recipes. 20. Soy grits and soy flakes. 21. Soy milk. 22. Soy cheese. 23. Soybean sprouts. Appendix: Soybean utilization (chart). References. Address: 1. PhD; 2. M.S. Both: USA.

278. Smith, Allan K.; Circle, S.J. eds. 1978. Soybeans: Chemistry and technology. Vol. 1. Proteins. Revised. Westport, Connecticut: AVI Publishing Co. xiii + 470 p. Illust. Index. 24 cm. [500+ ref]

• Summary: This revised edition contains relatively few, unimportant changes from the original, classic 1972 edition. The following changes have been made: Addition of a 7line preface to the "revised second printing" dated 4 Oct. 1977, updating of a graph of U.S. soybean production (p. 1). Updating (to 1976) of a table on U.S. and world production of important oilseeds (soybeans, cottonseeds, peanuts, sunflower, rape, sesame) (p. 2). Minor textual changes on pages 18-19. Addition of a table showing distribution of the 3 leading soybean varieties in 14 major states and the percentage of acreage harvested for each variety in 1976 (e.g., in Illinois, Williams accounted for 25.1% of harvested acreage, Amsoy 17.3%, and Wayne 12.8%). And updating of a table on U.S. soybean production by state showing acreage harvested, yield per acre, and production for 1974, 1975, and 1976 (p. 32).

The foreword, chapter titles, and index have not been changed at all. Note: Vol. 2 was never published. Address: 1. Oilseeds protein consultant, Hot Springs, Arkansas; 2. Oilseed protein consultant, Protein Technology, Richardson, Texas. 279. Meals for Millions Foundation. 1978? Self-help for a hungry world. Santa Monica, California: MFM Foundation. 8 p. Undated. 28 cm.



• *Summary:* The front and back covers of this short report are goldenrod yellow. The back cover is blank. Across the top of the front cover is printed "Meals for Millions Foundation." In the center is the logo of a plant growing out of mounded soil in a bowl which is half of a globe. Below that: "Self-help for a hungry world"–all in dark brown ink. The 4 pages between the covers are not numbered. The whole is held together by 4 staples.

Contents: Introduction. Goal. Approach ("MFM focuses on self-help, to effect beneficial change, as contrasted to a simple transfer of knowledge"). Programs ("MFM has two basic programs which support its development approach. They are: the Applied Nutrition Programs (ANP) and the Food and Nutrition Institute (FNI)"). Food and Nutrition Institute (Training, transfer of technology, resource center). Applied nutrition program (Technical support, material assistance, nutrition education).

Program, technical and staff support (no numbers are given). Program criteria and development ("Before making a commitment to a program, MFM considers the following items." Nine items are given, e.g., "2. Has a request for assistance been received by Meals for Millions?"). Financial support for programs (MFM does not charge for its services. The Foundation, of course, must pay its own staff and operational costs. Funds to cover these costs have traditionally come from these sources: 1. Individual donations {mail solicitations}. 2. Philanthropic foundations, churches, corporations. 3. Service clubs, special activities").

"The usual process followed by MFM for obtaining funds for projects is to develop a strategy between MFM and the institution or group requesting the program support. The funding strategy usually involves preparing a program document which can be submitted to a funding source."

Note: No names of people are mentioned in this document. MFM seems to be struggling to remake itself. In retrospect, the loss of Clifford Clinton (the founder) and Florence Rose (executive director), both in 1969, and the decreasing need for famine relief foods (MPF), seem to have been major blows for MFM that set it adrift, seeking a new direction. Address: Box 680, Santa Monica, California 90406.

280. Bray, Walter J. 1979. The Wonseong County, Korea Project. *LEC Report* No. 7. p. 107-09. D.E. Wilson, ed. Low-Cost Extrusion Cookers: Second International Workshop Proceedings (Fort Collins, CO: Dept. of Agric. and Chemical Engineering, Colorado State Univ.). Held in Dar es Salaam, Tanzania.

• *Summary:* In the early 1970s existing extruders presented a number of problems. So "by 1974 Meals for Millions had initiated work on an extruder of its own.

"A grant from U.S. AID in the following year made possible comprehensive design and development work, and a prototype unit was ready by 1976. This machine and its later developments are described in the paper by H. Sterner.

"At this time the Foundation was active in Korea and Ecuador and was planning to use extrusion cooking in projects in both countries. The potential for this type of cooking seemed particularly high in Ecuador, since the use of soy to enrich foods was a logical extension of an existing project to teach farmers to raise soybeans.

"An extruded mixture of soy and rice was developed as the base for a strawberry flavored drink." Unfortunately the project was terminated in mid-1977."

"Meanwhile, plans were developing for a project in Korea. It was now decided to make and market highlynutritious low-cost extruded foods, starting with snack foods and progressing to weaning foods and powdered food bases. These activities were to be focused on Wonseong County, a rural area about 100 km east of the capital [Seoul], with a specific target of nutritionally at-risk groups, such as infants, young children, pregnant and lactating women–about 10,000 people in all.

"The main objective of the project was to find ways to induce the poorer at-risk members of the community to purchase and consume highly nutritious foods." Three secondary objectives are listed. "The Wonseong County was from the very beginning a joint effort involving Meals for Millions, the Korean Institute of Science and Technology (KIST), ASI" (a leading market and research firm), and nutritionists from the Korea University and the Korean Government. "I will explain this project and its status by reviewing the work done by each of these groups.

Tables show: (1) Composition of snack food products (18% protein; containing 68% corn and 20% defatted soy flour). (2) Product raw material cost (\$0.90 per kg). (3) Product selling cost: \$2.31 per kg or \$0.09 per 40-gm bag-incl. 39% raw materials, 22% manufacturing expenses, 15% administrative expenses, 15% sales expenses (incl. packaging), 10% Value Added Tax (VAT) 9%.

Figures show: (1) Flow chart for the production of HN/ LC foods. (2) Organizational chart. Address: PhD, Meals for Millions Foundation, Santa Monica, California.

281. Fillip, Janice. 1979. Refabricated soy protein. *Whole Foods (Berkeley, California)* 2(1):26-28, 30. Jan. *Summary:* Contents: STP, LTD, TVP, QED–Uh, what is it? From soy to flour. Isolating the isolate. Extruding textures. If it's fab, is it food? A small step for soy, a giant step for proteinkind. Address: California.

282. Hong, Sik Cheigh. 1979. The LEC program in Korea. *LEC Report* No. 7. p. 115-20. D.E. Wilson, ed. Low-Cost Extrusion Cookers: Second International Workshop Proceedings (Fort Collins, CO: Dept. of Agric. and Chemical Engineering, Colorado State Univ.). Held in Dar es Salaam, Tanzania. [4 ref]

• *Summary:* Contents: Introduction. The Wonseong County Comprehensive Nutrition Program in Korea. The MFM-KIST extruder. Development of high-nutrition low-cost (HNLC) food with a LEC system for the Wonseong Country program. Partial cooking of rice and corn for a pasta program with the MFM-Kist extruder. Experiments for rice bran stabilization by the extrusion process. Future program.

"Extrusion cooking is now practiced widely in the production of snack foods, blended foods, textured vegetable protein and inactivation of enzymes (Crowley, 1976). The Korean Institute of Science and Technology (KIST) has had several years of experience in the development of a high-nutrition low-cost (HNLC) food utilizing barley, soybean and sesame (BSS) and corn, soybean sesame (CSS) compositions through the extrusion process."

The MFM-KIST extruder is 1½ [2½] inch diameter single-screw unit, and the screw has constant pitch. It is driven by a 30-Hp [horsepower] motor whose speed can be changed with a 3-speed gear box. The barrel is divided into three sections without any cooling or heating jacket." It "is capable of producing 100 kg of product per hour. Tables show: (1) Specification of MFM-KIST Extruder. (2) Trials for test production of proposed formulas with MFM-KIST extruder. (3) Chemical composition of proposed products. (4) Amino acid composition of proposed formulas. (5) Protein Efficiency Ratio (PER) and adjusted PER of proposed products. The PER ranges from 3.37 to 3.64. The adjusted PER (relative to casein, which has a PER of 2.5) ranges from 2.33 to 2.53. (6) Results of sensory evaluation of products (based on flavor, taste, texture, and color). (7) Effect of extrusion temperature and retention time on moisture content and residual peroxidase [enzyme] activity in extruded rice bran.

Figures show: (1) Graph of effect of extrusion temperature on free fatty acid development in rice bran during storage at 30°C and 87% humidity. (2) Photo of dryer, enrober and packaging machine at KIST. Address: Korea Inst. of Science and Technology, Seoul, South Korea.

283. Sterner, Hank. 1979. Panel presentation: Characteristics of LEC's and manufacturing experiences. *LEC Report* No. 7. p. 163-64. D.E. Wilson, ed. Low-Cost Extrusion Cookers: Second International Workshop Proceedings (Fort Collins, CO: Dept. of Agric. and Chemical Engineering, Colorado State Univ.). Held in Dar es Salaam, Tanzania.

• *Summary:* "During 1975, while on the staff of Meals for Millions Foundation (MFM), I was assigned to develop a low-cost extruder cooker for the production of structured vegetable protein (SVP). Other imposed design objectives were that the machine could be manufactured and repaired in developing countries. The first was built in MFM's machine shop which was equipped with a Bridgeport milling machine, an engine lathe and a welder. Automobile parts, available the world over, were used in the power train. The first attempt at dissemination of this technology took place in Korea at the Korean Institute of Science and Technology (KIST). Performance of this machine is reported in other papers."

An illustration (line drawing) shows AEMC's Model 303 extrusion cooker with feeder and cut-off. Address: Appropriate Engineering and Manufacturing Co., Corona, California.

284. Wilson, David E. ed. 1979. Low-cost extrusion cookers: Second International Workshop Proceedings. *LEC Report* No. 7. vii + 288 p. Jan. Illust. 28 cm. Held 15-18 Jan. 1979 at Hotel Kilimanjaro, Dar es Salaam, Tanzania (Available from: Department of Agricultural and Chemical Engineering, Colorado State Univ., Ft. Collins, CO 80523). [100 ref]

• *Summary:* Contains about 34 papers by various authors; at least 19 of these are cited separately. Also contains four sets of opening remarks, numerous discussions, and a directory of workshop participants (45 representatives of 18

countries). The workshop was co-hosted by: (1) the Dept. of Food Science and Nutrition, Colorado State Univ., Fort Collins, Colorado; (2) National Milling Corporation, Dar es Salaam, Tanzania. It was sponsored by: (1) U.S. Agency for International Development, Development Support Bureau, Office of Nutrition; (2) USDA Office of International Cooperation and Development, Nutrition and Agribusiness Group. The Preface is by G. Richard Jansen and R.E. Tribelhorn of Colorado State Univ. R.E. Tribelhorn was technical editor. Address: Research Associate, Dep. of Agricultural and Chemical Engineering, Colorado State Univ., Fort Collins, Colorado 80523.

285. Meals for Millions Foundation. 1979. Annual report 1978: A commitment to self-help for a hungry world. Santa Monica, California: MFM Foundation. 12 panels. Back to back. Each panel 22 x 9.5 cm.



• *Summary:* Submitted by Peter J. Davies, President; he works at the New York office. Hugh J. Roberts, Ph.D., is vice president for program. Alfred C. Bartholomew, D.D., Ph.D., is chairperson, board of trustees. On the cover, printed with red and black ink on white paper, is a photo of a Latin American man standing behind his wife against a black background. Contents: Message from the president. Highlights of 1978. Financial highlights of 1978 ("To fund its expanding programs, MFM's income broke the \$1 million barrier in 1978. General support from the public continued to be the backbone. Generous grants were received from the U.S. Agency for International Development (A.I.D.),...").

"As we went to press [March 1979] the MFM Board of Trustees approved our becoming successor to the American Freedom from Hunger Foundation and changing our name to Meals for Millions / Freedom from Hunger Foundation."

Contributions made to Meals for Millions are tax deductible. It is a 501(c)(3) corporation. Los Angeles Social Service Permit #2108.

Statement of income and expenses. Where the money comes from. Where the money goes (Programs and services 77.3%). Board of trustees. National committee of sponsors. Meals for Millions / Freedom from Hunger Foundation (officers and addresses).

Technical and material assistance: Ecuador, Honduras, the Caribbean (Jamaica), Korea, Philippines. Transfer of technology. Village Texturizers are being field tested in Colombia, Ghana, India, Jamaica, the Philippines, Samoa, and Trinidad. India: SPRA in Bareilly, Uttar Pradesh. Multi-Purpose Food (sent to Brazil and Haiti; no statistics are given). Nutrition education: U.S. Southwest, Papago Indians, Child and Youth Nutrition Education, Urban Community Gardens & Self-Care Health Program, Healthy Lifestyle for Seniors. Food and Nutrition Institute. Research and Development. Contains 10 photos without captions, one showing a Village Texturizer at work. Address: 1800 Olympic Boulevard (P.O. Box 680), Santa Monica, California 90406. Phone: (213) 829-5337.

286. Borsook, Henry. 1979. Henry Borsook–How it was: Oral history. *Engineering and Science (Caltech)*. March/ April. p. 23-39.

• *Summary:* This outstanding interview by Mary Terrall covers a wide variety of subjects, including the early history of multi-purpose food and Meals for Millions. "Borsook, noted for his work in protein synthesis and for his contributions to the field of nutrition, was born in London, England, in 1897, and came to Caltech in 1929. After retirement from Caltech in 1968, he continued his research until 1978 at the University of California at Berkeley. The Borsooks are now living in Santa Barbara.

MT (p. 27): Let's go back to the 1940s when you started to develop multipurpose food. HB: Yes, and the

beginning of that story is really about Clifford Clinton, who was the son of missionary parents. In "China, as a child, he had seen famine, and he'd made a boyhood resolve that if he could ever do anything about helping hungry people, he would. So it was not surprising that when he grew up he went into the restaurant business." During the depression, starting in 1931, "he advertised that anyone who came to his cafeteria between 2:00 and 4:00 [in the afternoon] could get a free meal." Later he felt the offer was being taken advantage of, "so he charged a nickel for a meal. The last time I ate there, which was more than ten years ago, the menu said, 'You can order what you like–and you can pay what you like.'

"When the war came, with the enormous expansion of the armed forces from a couple of hundred thousand to twelve million, the army needed advice on how to feed a lot of people in camps quickly. And so they called in consultants from the restaurant business, and Clinton was one of those consultants.

"Then, one afternoon in early 1945–he'd phoned firsthe and his wife and his public relations man [Ernest Chamberlain] came to see me. And before he began to talk his wife intervened and said, 'I want to apologize because my husband is coming here with a perfectly ridiculous proposal. I tried to dissuade him from coming but he's very stubborn, and so I want you to know that I feel a bit ashamed.' So I said, 'Well, you needn't be. You're here. Make yourselves comfortable and let's listen.'

"So Clinton began to talk, and he said that anybody who thought about it could see the war coming to an end, that in the countries where the war had been going on a lot of people were going to be hungry, and that there was going to be a shortage of food in Europe and Asia, and he wanted to do something about it. And he said he wanted me to do this-I was to devise a food where a meal would provide one-third of the Recommended Daily Allowances of everything, but it was to weigh not more than two ounces and it was to cost not more than three cents, it was not to offend any religious taboo, there should be an abundant supply of all the ingredients, and it wouldn't draw on the kinds of food Americans are accustomed to eat. (I said, 'You needn't worry-at that price."). Also it had to have an indefinite shelf life, be possible to eat in a variety of ways, and not take any special equipment to cook-a can of water and a stick of wood underneath should do it.

"And so we went on. I turned to his wife and I said, 'Well, it's not so wild as you may think, but there are two restrictions I would put on it. It's scientifically impossible to provide a third of the Recommended Daily Allowances in two ounces of anything. It is just not possible. We need about 700 or 800 calories as a minimum, and the most that two ounces would supply would be about 140 or 150 calories.' Secondly, I said, "I don't think it would be practical to put vitamin C in because we really don't know how to keep it.' At that time we didn't. But I said, 'Otherwise we could provide protein that's as good as meat or milk, and we could add all the vitamins and minerals that they need in two ounces, and I don't think it need cost more than about 3 cents a meal.' So he agreed and gave Caltech the sum of \$5,000, which I was to use to develop this food.

"The food itself was no problem. I had a pretty good idea how to do it. It had to be a vegetable protein; animal proteins were too dear [expensive]. The best vegetable protein was soybean protein, and I knew that during the war we-the government-had greatly expanded the growth of soybeans for their oil. But after the oil was extracted, what was left over [the cake or meal] was thrown down the sewer. It was just wasted. So I knew this would be very cheap, and I knew it was available in large quantities. The vitamins and minerals I knew were also very cheap and there would be no problem about adding them.

"What I wanted the money for was to hire a cook who could develop recipes on how to use the food, how it should be cooked in different ways. And that was done. At the end of a year it was all ready, and we had a whole lot of recipes. One of the fruit and vegetable dehydrator companies in Los Angeles undertook to make it according to the recipe I had drawn up, and that was done. We decided to call it 'multipurpose food': MPF.

"Neither Clinton nor I wanted to patent this food, and we agreed that we would give the information to anybody who asked for it. But that wasn't going to get the food to hungry people, so Clinton, who was a religious man, set up this Meals for Millions Foundation, a nonprofit organization. I was one of the cofounders with two or three others. He hired a woman by the name of Florence Rose and his publicity man, Ernest Chamberlain, was the other, who really were the foundation. They sent out the appeals for money, they raised the money, bought the food, and so on.

MT: "So they raised the money from other sources. It wasn't just his money?

HB: "No, I don't think he put in much money after that, but it was certainly his idea, both to get such a food and then to set up the Foundation to give the food to people who needed it. And I know that when we had the food ready we thought it would be useful if the Food and Nutrition Board [of the National Academy of Sciences] would approve of it. We sent some to them, and they said, 'No, we believe that a good diet consists of meat, milk, fresh fruit, fresh vegetables, and this is not that.' So for more than ten years [1946-1956], we had no government support-in fact, government opposition. So the money was raised from private groups. Two large charitable organizations very soon began to give us large sums of money-\$50,000 to \$100,000 at a time-and we would send the food where they told us to. They were Catholic World Relief and Church World Service."

MT: "So other organizations made the arrangements with countries where the food was going?"

HB: "Yes, After we had the food, we arranged for the shipping." It was a very gratifying experience. "From the beginning I had insisted... that the formula was only one example." Other nutrients, such as peanut meal, could be used in countries were soybeans are not available. "The actual director of the Foundation was Florence Rose, and we sent her around the world. She had no trouble getting the Japanese to make a Japanese equivalent, and they did a very good job. And then in India she got the head of their Central Food Technological Research Institute to put together an Indian version of MPF, and he [V. Subrahmanyan] did a first-class job.

"I think we gave this man about \$5,000 and he put together-out of peanut meal and chick pea meal, adding vitamins and minerals-a food that was every bit as nutritious as ours. He did a very good job of testing first on mice and rats, then on children who were malnourished. Then he persuaded an Indian businessman who had some money to put up a pilot plant near Madras [in southeast India; renamed Chennai in 1996], and the city of Madras undertook to buy the whole production for use in their school lunch program. They got going, and the Minister for Agriculture for India from New Delhi told people from the provinces [states] to come down to Madras, look, and copy it.

Then along came some representative from CARE, who said to the City Council of Madras, 'Look, we'll give you all the dry skim milk you want for nothing. Why do you spend your money on this food?' That killed the project for quite a long time, but it has started up again. Two missionaries in northern India, where they have soybeans, have arranged for the manufacture, and they're beginning to get it used and widely distributed.'

MT: "Now?"

HB: "Yes, they did this entirely on their own, without any connection with us at all. But now, to come back a little, it was clear that charity would only go so far, and it would be much better if these people learned how to help themselves. So we set up a school at the Meals for Millions Foundation in Santa Monica, where we teach three classes a year. It runs for 12 weeks with about a dozen students from different parts of the world, on scholarships of one kind or another, and they learn how to make food like MPF from what they have. We do more than that..."

MPF was always made with soy grits as the main ingredient, not with soy flour. Grits are a better material and a better word.

"The Meals for Millions Foundation was founded in 1946 and miraculously is still going, stronger than ever, really." Address: Prof. of Biochemistry, Emeritus, Caltech. 287. Meals for Millions / Freedom from Hunger
Foundation. 1979. Strengthening the capabilities of
developing communities to solve their own food and
nutrition problems. Santa Monica, California: MFM / FFHF.
16 panels. Back to back. Each panel 22 x 9.5 cm. June. *Summary:* Dated June 1979, this is not an annual report
but a sort of redefinition of the newly named organization—
in part to introduce it to members of the former Freedom
from Hunger Foundation. Printed with green ink on yellow-gold paper.

Contents: Introduction to Meals for Millions ("In the late 1960s, the Board of Trustees and professional staff recognized that a relief feeding program was essentially a stop-gap response to problems of hunger and malnutrition. Since then, MFM has emphasized self-help programs– involving technical and material assistance, applied nutrition, community development and training field workers.

"In March 1979, the Board of Trustees to become successor to the American Freedom from Hunger Foundation [of Washington, DC]...").

Our goals today. Approach. Programs ("To achieve its goals, MFM has two primary programs, Food and Nutrition Institute and Applied Nutrition Programs"): FNI, a training center, is located in Santa Monica, California. Program, technical and support staff. Program criteria and development. Financial support for programs (no statistics are given). Contact information. Officers. Board of Trustees. National Committee of Sponsors.

On page 1 is a detailed, exploded view drawing (or technical drawing) of The Village Texturizer. Address: 1800 Olympic Boulevard (P.O. Drawer 680), Santa Monica, California 90406. Phone: (213) 829-5337.

288. Product Name: Multi Purpose Food.
Manufacturer's Name: Henkel Corporation.
Manufacturer's Address: 4620 W. 77th St., Minneapolis, MN 55435.

Date of Introduction: 1979.

New Product–Documentation: *Soybean Digest Bluebook.*. 1979. p. 99. They have apparently taken over from General Mills, but plant is at same address.

289. Imasuen, Itohan William. 1979. Nutritional improvement of cassava-gari (eba) with fish protein concentrate (FPC), Multi-Purpose Food (MPF) and groundnut flour. MSc thesis, North Dakota State University. xi + 106 leaves. 28 cm. * Address: North Dakota.

290. Meals for Millions / Freedom from Hunger Foundation. 1980. Annual report 1979: A commitment to self-help for a hungry world. Santa Monica, California: MFM Foundation. 16 panels. Each 9 x 22 cm. March.



Meals for Millions/ Freedom from Hunger Foundation

Annual Report

A Commitment to Self-Help for a Hungry World

• *Summary:* Peter J. Davies is president; he works at the New York office. Alfred C. Bartholomew, Ph.D., D.D., is chairman of the board of trustees and executive committee. On the green, black and white cover is a photo of a two children. MFM's logo of a plant growing in an upturned bowl is at the bottom of the cover.

Contents: Message from the president. Overseas programs: Ecuador, Honduras, Caribbean (Barbados, Jamaica), India, Korea ("The new food processing plant in Wonseong County was dedicated on March 31, 1979 and began processing a high protein, vitamin and mineral enriched snack food called Wooryang-a for young children") Philippines. Transfer of technology. Multi-Purpose Food (small quantities sent to Haiti, Brazil). Domestic programs: Papago Indians, Tucson seed bank, reaching the oldest-and the youngest. Training in food and nutrition (Training school, nutrition training in Central America, Fiji). Research and development (leaf protein). Resource center. Highlights of 1979 ("Early in 1979, we were asked by the American Freedom from Hunger Foundation to assume their limited remaining assets. Our Board supported the move... Freedom from Hunger is perhaps a more apt description of our role today than Meals for Millions, a name by which we have become well known to many of you. We are considering a name change to MFM / Freedom from Hunger Foundation. Is it a good idea?"). Financial highlights: Contributions from nearly all sources amounted to \$1.295 million in 1979, up from \$1 million in 1978. Individual donors across the country provided the largest share (36.7%), followed by USAID (23.2%), foundations (22.3%), churches 8.7%, host governments 5.4%, etc. The many agencies that made generous grants are listed. Where the money goes: Program services 75.0%, administration 10.2%, public support [fund raising] 14.8%. Total expenses: \$1.278 million. National Committee of Sponsors. Board of Trustees and executive committee. MFM officers. Address: 1. 1800 Olympic Boulevard (P.O. Box 680), Santa Monica, California 90406; 2. 815 Second Ave., Suite 501, New York City, NY 10017. Phone: (213) 829-5337 or (212) 986-4170.

291. Shurtleff, William; Aoyagi, Akiko. 1980. Soyfoods America Tour: May 5 to June 10; July 25 to Aug. 3, 1980 (Log–unpublished, including Itinerary with map). Lafayette, California: New-Age Foods Study Center. Unpublished log. • *Summary:* This trip had five purposes: (1) To introduce tempeh to America; (2) To promote the authors' newly published *Book of Tempeh*. Harper & Row, the publisher, paid most of the trip expenses; (3) For William Shurtleff to attend the University of Illinois Short Course in Soybean Processing; (4) To visit and study soyfoods companies in America; (5) To introduce people to the many advantages of a meatless/vegetarian diet.

Includes the name and address of 37 people and organizations visited. Many of these were pioneers in the soyfoods and natural foods movement: April 25–Optimum Foods (Napa, California). April 27–David Burns (Sebastapol, CA). May 5–Jeremiah Ridenour of Monterey Bay Soyfoods (Santa Cruz, CA). May 6–Thelma Dalman, Foodservice Director for the Santa Cruz City Schools, Monterey Peninsula Herald, Ted & Marie Fehring (Carmel), Paula Welch Terui of Jack and the Beanstalk (Carmel Valley, CA). May 8-Al Jacobson of Garden of Eatin', Mr. Kaye Dunham of Tumaro's, Hugh Roberts of Meals for Millions. May 9-Eddie Okita of Okita Enterprises, and Noritoshi Kanai of Mutual Trading Co. (Los Angeles, CA). May 10-Kay Glass (La Canyada, CA). May 11-Frazier Farms natural foods supermarket (Escondido, CA), Bill Walton vegetarian and basketball star (San Diego, CA; we stay with Craig Wright and Andrew Solony of TriLife; they hope to market Bill Walton's tofu under the TriLife brand). May 12-Clare Quinn of The Farm (Tucson, Arizona; her check bounced so we never got paid). May 13-Kathryn Bennett of Southwest Soyfoods (Santa Fe, New Mexico), Tracy McCallum, Taos. May 14-Leslie Wertz (Alamosa, Colorado). May 16-Stay with Christie and John Baker (Boulder, Colorado). May 17-Steve Demos of White Wave Soyfoods and Good Belly Deli. May 18-Sanford and Rebecca Greenwood of East West Center (Boulder, Colorado). May 19-Judson Harper and the low cost extrusion cooker program at Colorado State Univ., Carol Hargadine of Nupro Foods & Soywaze Tofu (Fort Collins, CO). May 21-Gale Randall of the Indonesian Tempeh Co. (Palmyra, Nebraska). May 22-David Tucker of New Pioneer Co-op Society (Iowa City). May 23-George Strayer of Edible Soy Products (Makers of Pro-Nuts, May 23) and Agricultural Exports (Hudson, and Cedar Falls, Iowa). May 24-Cedar Falls (Iowa) and Minneapolis media. May 25-Pat Aylward and Jamie Stunkard of Joy of Soy Tofu (Minneapolis, Minnesota). May 27-Richard Cihoski (Duluth, MN). May 28-Chris Burant of Bountiful Bean Plant and Jehan Ziegler of Higher Ground Cultured Foods (Madison, Wisconsin). May 29-Danji Fukushima of Kikkoman Foods (Walworth, Wisconsin), Diane Loomans of The Magic Bean Co-op (Milwaukee, Wisconsin). May 30-Susan Dart (Lake Forest, Wisconsin), Research staff of Kraft Foods (Glenview, Illinois), Brian Schaefer of It's Natural (Evanston, Illinois). May 31-Paul Obis of Vegetarian Times magazine (with Brother Ron Pickarski) (Oak Park, Illinois). June 2-Lou Richard of Fearn Soya Foods, Leonard and Irene Stuttman of INARI, Ltd. June 3-John Gingrich of The Soy Plant. June 4-Tim and Carol Ann Huang of Yellow Bean Trading Co. (Detroit, Michigan). June 5-Glen Blix and Charles D. Howes of Loma Linda Foods (Mt. Vernon, Ohio; furthest point east on tour). June 6-Warren Hartman of Worthington Foods (Worthington, Ohio). June 7-Mick Vissman and Bill Lutz of Hip Pocket Tofu Deli and Rain Star (Columbus, Ohio), Ed Willwerth of Soya Food Products (Cincinnati, Ohio). June 8-Jay McKinney of Simply Soyfoods (Bloomington, Indiana). June 9-Lynn Adolphson and Bob Thompson of Archer Daniels Midland Co., and Grant Smith of A.E. Staley Mfg. Co. (Decatur, Illinois). June 10-11-Les Karplus of Corn Country Foods and Strawberry Fields. June 11-William

Thompson and John Santa of INTSOY (Champaign, Illinois).

During the INTSOY Short Course: July 6–We did a program hosted by Patricia Mutch at Andrews University (Berrien Springs, Michigan). July 9-13–Third Annual Soycrafters Association of North America conference was held at the University of Illinois, produced by Richard Leviton. There were 270-285 attendees, and it made good money.

People at the University of Illinois we met during the course: Dr. William Thompson, Frances Van Duyne, Harold Kauffman, John Erdman, L.S. Wei, A.I. Nelson, M.P. Steinberg, Munir Cheryan, Ted Hymowitz, Woody Yeh.

Return trip after course: July 28–Bob Davis of Light Foods (St. Louis, Missouri). July 30–James Lowrie of Iowa State University (Ames, Iowa). Aug. 2–Lake Tahoe. Aug. 4– Home in Lafayette, CA.

At most of the public classes/lectures on this trip, Shurtleff and Aoyagi served their favorite tempeh and tofu dishes. They wanted to find out how Americans liked tempeh, so they asked for a show of hands as to which the attendees liked best. The tempeh dish was usually Tempeh Cacciatore, and the results were, on average, that the tempeh was preferred by a ratio of 2 to 1 over the tofu.

On this trip, Shurtleff and Aoyagi did 27 public programs, had 28 media interviews and appearances, traveled 9,000 miles, earned \$13,000 gross income and \$8,500 net income. Address: P.O. Box 234, Lafayette, California 94549.

292. Meals for Millions / Freedom from Hunger Foundation. 1981. Annual report 1980: A commitment to self-help for a hungry world. Santa Monica, California: MFM Foundation. 20 panels. Each 9 x 22 cm. One large sheet folded.

• *Summary:* Peter J. Davies is president; he works at the New York office. Alfred C. Bartholomew, Ph.D., D.D., is chairperson, board of trustees. On the red, black and white cover is a photo of a boy. MFM's logo of a plant growing in an upturned bowl is on the cover.

Contents: Message from the president. Food and Nutrition Institute, Santa Monica. Overseas training courses: Sierra Leone and Antigua. Caribbean Community Food Technology Program. Nutrition education training program in Central America. Fiji community education workshop. Korea nutrition education program. Transfer of technology: Africa, India leaf protein fractionation project, India village texturizer project, Thailand. Information resource center. Kampuchea (Cambodia).

Multi-Purpose Food "is no longer being manufactured, therefore MFM / FFH will no longer be shipping it." The end of an era; a strange way to express it! Highlights of 1980. Financial highlights of 1980: Contributions from all sources amounted to \$1.5 million in 1980, up 10% from the previous year. Where the money comes from: General public 33.4%, USAID 25.3%, churches 18.1%, foundations 16.9%, host governments 3.5%, etc. The many agencies that made generous grants are listed. Where the money goes: Applied nutrition programs 43%, food and nutrition institute 26%, fundraising 13%, management and administration 8%, etc. National Committee of Sponsors. Board of Trustees and executive committee. MFM officers.

As of 1980, MFM has largely discontinued its work with soy. Therefore, we will give less detailed summaries of annual reports from now on. Address: 1. 1800 Olympic Boulevard (P.O. Box 680), Santa Monica, California 90406; 2. 815 Second Ave., Suite 501, New York City, NY 10017. Phone: (213) 829-5337 or (212) 986-4170.

293. Clifton's Cafeterias. 1981. Celebrating 93 years in California, 50 years in Los Angeles (Leaflet). Los Angeles, California. 3 panels each side. Front and back. Each panel: 9.5 x 21.5 cm. Undated.



• *Summary:* "Clinton's Cafeterias were established in July, 1931, in the heart of a major, nationwide depression. The founders were Clifford and Nelda Clinton, parents of the present owners, Donald H. Clinton and Jean Clinton Roeschlaub." They "established a foundation for self-service dining in an atmosphere of warm, colorful surroundings.

"Today, the six Clifton Cafeterias serve over 15,000 guests daily."

"The Clinton family's involvement in the restaurant business actually dates back to 1888. That year, Don and Jean's great grandfather, David Harrison Clinton of Missouri, arrived in Los Angeles with his family at the River Depot. After a night at the adjacent Pacific Hotel, he purchased the hotel's dining room. This event marked the beginning of the family's five generations in California restaurants.

David's only son, Edmond, after a stint with the local railroad, served in the Salvation Army in San Bernardino. He met and married Gertrude Hall, later settling in San Francisco where they became co-owners of a group of restaurants named 'Dennets.' This investment was profitable enough for them to leave the operation to managers while they answered 'the call to missionary fields in China, selfsupported under the auspices of the Salvation Army."

Tells the story of young Clifford Clinton in China, then in his father's cafeteria business with two partners in San Francisco.

"He was compelled to relinquish [sell] his ownership to his partners and in 1931 made the move to Los Angeles to test his innovative business concepts. The nation was in the depths of the Great Depression, many businesses were failing and it was a most precarious time to try his totally revolutionary Golden Rule approach to the self-service restaurant business.

"It did not take Clifford long to find a landlord willing to lease a distressed cafeteria location. Nor did it take long to use up the meager \$2,000 capital saved for his new commitment. Of all those working by his side 14 hours a day those first six months, none contributed more than his wife, Nelda [who had three young children, ages about 5-8].

Having sold his interest in the Clinton Cafeteria Co. "in San Francisco, and needing a new name for the Los Angeles cafeteria, he compounded the first half of CLIF-ford and the last half of Clin-TON to produce the name Clifton's.

"Customers became 'guests' and none were ever turned away hungry, even though they had no money. During one 90-day period, 10,000 ate free before Clifford could open an emergency 'Penny Cafeteria' a few blocks away to feed, for pennies, the two million 'guests' who came during the next two years. He could have gone bankrupt honoring his childhood promise were it not for faithful suppliers, generous vendors, and the grace of God who saw him through those difficult days.

"Employees became 'associates' and the Golden Rule personnel policies proved workable and profitable. With the help of his capable, willing staff, a second Clifton's opened in 1935. It was named Clifton's Brookdale and its interior was reminiscent of the California Redwood groves with waterfalls and brooks and remains today the largest public cafeteria in the world. These two became the foundation stones for Clifford's leadership in a major political clean-up of Los Angeles in the late 1930s and early 1940s.

"In addition to her long days at the cafeterias, Nelda Clinton raised three children, Edmond, Jean and Don grew up working summer vacations at Clifton's. They learned the business from the steam tables up, just as their parents had.

"After World War II [in 1946] Clifford founded Meals for Millions, a non-profit organization... As this endeavor required his full attention, Clifford and Nelda retired [from the cafeteria business] in 1946, selling their cafeteria interests to the three younger Clintons allowing them to take over the full reigns [reins] of management and ownership."

In 1956, the three new principals, feeling it wise to expand into the suburbs, opened their first new Clifton's in the Lakewood Shopping Center.

"In 1958, they opened another Clifton's in West Covina [now in the West Covina Fashion Plaza]. The decision was well timed as business in downtown Los Angeles was declining in favor of suburban shopping centers.

"In 1960, the original Clifton's Pacific Seas was closed. This three-story structure with a cascading waterfall facade had become a landmark and the closing was a painful process because of the many fond memories associated with the famous location."

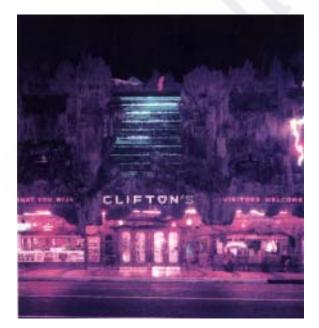
In 1963 Clifton's Midtown was opened in the Wilshire area. "It has subsequently been sold.

"In 1966 a new Clifton's was constructed in the Century City Shopping Center in West Los Angeles. This beautiful restaurant has become the busiest cafeteria in any shopping center in the United States.

"By 1975 a resurgence of building activity had revitalized the downtown area which prompted the opening of the Silver Spoon in the old Brock Jewelry building at 515 W. 7th St. near Olive, providing a second central city location.

"In November 1978, Clifton's The Greenery was opened in West Covina, replacing the earlier location whose lease had expired.

"In the spring of 1981, the latest Clifton's was opened in the Whittier Quad, bringing the family cafeteria chain to six locations.



"Clifton's is still very much a family business." They "strive daily to maintain the 'quality foods at a reasonable price' image.

"Their overriding philosophy is still 'make a friend of every guest' and allow them to 'dine free unless delighted.' They still feed the hungry who can't afford a meal and they still link arms with the Salvation Army in providing food for body and soul to those who hunger throughout this vast world."



Color photos show: (1) Donald H. Clinton, President, and Jean Clinton Roeschlaub, Vice President. (2) Clifton's Pacific Seas Cafeteria: Facade of rocks, waterfalls, and tropical plants. (3) Pacific Seas: Main dining room looking toward the waterfalls. Address: Los Angeles, California.

294. Meals for Millions / Freedom from Hunger Foundation. 1982. Annual report 1981: Self-help for a hungry world. Santa Monica, California: MFM Foundation. 16 p. 18 x 26 cm.

• *Summary:* Peter J. Davies is President; he works at the New York office. Alfred C. Bartholomew, Ph.D., D.D., is chairperson, board of trustees. On the orange, black and white cover is a photo of a two women hoeing. MFM's logo of a plant growing in an upturned bowl is on the rear cover.

Ecuador (p. 5): "In 1981, a group of farmers asked for our help. Because of a four-year drought, they could no longer grow soy, a cash crop we helped to introduce on the peninsula in 1974." So they are raising other crops and chickens.

"The multiplier effect: Training families; training trainers" (p. 8). "The decision made in 1980 to carry Meals for Millions training overseas was a sound one. Our first full year in the field produced an accelerated training program and an unprecedented multiplier effect that is reflected in the food and nutrition projects established by participants in their own countries.

"In June, in Kenya, we convened 12 nutrition planners and supervisors to involve them actively in the design of the two-week training of field level workers scheduled for late 1981. This cooperative advance planning resulted in a November course for 25 field workers, all hand-picked by their supervisors and described by Meals for Millions' staff as 'the best group we ever had.""

"Our food technology transfer program" (p. 10) shows a photo of a village texturizer being used in Lampang, Thailand.

"Connections," a "twice-a-year newsletter to establish communication links among our widely dispersed overseas training participants," is now being published. A photo shows the cover of two issues.

"1981 financial support" (list of major donors). 1981 financial highlights. Total income: \$1.576 million. The entire last page (p. 15) lists: Executive staff. Regional directors (Africa, Latin America / Caribbean. Asia / South Pacific, U.S. Southwest). Technical staff. Field offices (Kenya, Sierra Leone, Antigua, Ecuador, Honduras, Korea, U.S. Southwest). Honorary trustees (Henry Borsook, M.D., PhD, Willard E. Baier, Dr. Gladys Emerson). Board of trustees. National committee of sponsors.



Photos show: (1) Nelda Clinton (with signature). (2) Peter J. Davies.

Note: Included with the annual report is MFM / FFH "Highlights of 1981: Self-help for a hungry world." It is one sheet folded into 8 panels. Address: 1. Western office: 1800 Olympic Boulevard, Santa Monica, California 90406; 2. Eastern office: 815 Second Ave., Suite 501, New York City, NY 10017. Phone: (213) 829-5337 or (212) 986-4170.



295. Meals for Millions / Freedom from Hunger Foundation. 1983. Annual report for 1982. Davis, California: MFM/Freedom from Hunger Foundation. 16 p. Back to back. Each panel 22 x 9.5 cm. *Summary:* Printed with black and green ink on white paper. Philip E. Barton is chairperson, board of trustees. On the cover is a photo of African children holding foods. Across the bottom: Self-help for a hungry world.

Contents: Board of Trustees' Annual Meeting held in Davis, California on March 20-21, 1982 ("Alfred C. Bartholomew, D.D. [Doctor of Divinity] retired as Chairman of the Board and of the Executive Committee after six years of outstanding leadership. His portrait photo and excerpts from his final address are given. Meals for Millions has "moved naturally from relief to development"). President's message, by Peter J. Davies ("1982 was a watershed year for your Foundation. MFM launched Applied Nutrition Programs in Antigua, Sierra Leone, and Thailand." "On March 20, 1983, the Board, Staff, Nutritional Committee of Sponsors, the University and Davis communities jointly dedicated (releasing a cluster of balloons) our new international center at Davis, California. To pay for this greatly needed, new functional headquarters, the Board commenced a capital campaign to raise \$1.2 million over a three year pledge period").

Meals for Millions philosophy (800 million men, women and children worldwide suffer from malnutrition and nutrition related diseases. "Freedom from Hunger... means attacking the root causes of hunger and malnutrition– poverty, poor sanitation, low levels of productivity, inadequate knowledge about good nutrition, minimum education and overpopulation–to create lasting change"). Ecuador (on the Santa Elena Peninsula; the fields "bloomed once more with corn and soy"). Honduras (ANP program now in its 5th year). Sierra Leone. Kenya. Korea ("In 1979 MFM, in partnership with Wonseong County, built a plant to produce nutritious snack foods for distribution to schools and day care centers, and for commercial sale. In 1982, 90 metric tons of this low-cost soy, corn and wheat flour product were produced in the plant").

Thailand (In Lampang Province of northern Thailand, projects include growing of nutritious soya beans). Antigua. U.S. Southwest (native Americans). Papago Applied Nutrition Program (now in its 4th year). Solutions through appropriate technology. MFM Resource Center in Davis, California. Financials: For the year ended December 31, public support and revenue increased by 16.6% to \$1.837 million. Pie charts show: Sources of support. Distribution of funds. People: Executive staff, regional directors, field officers, honorary trustees, Board of trustees, National committee of sponsors (headed by Mrs. John Steinbeck).

Note: What happened to the training center at 1800 Olympic Blvd., Santa Monica and its training programs which, until quite recently, were at the heart of MFM's activities? Address: 1. 815 Second Ave., New York, NY 10017; 2. P.O. Box 2000, Davis, California 95617. Phone: (212) 986-417 or (916) 758-62000.

296. Shurtleff, William; Aoyagi, Akiko. 1983. Dr. D.W. Harrison and Africa Basic Foods: History of work with soyfoods. Soyfoods Center, P.O. Box 234, Lafayette, CA 94549. 10 p. Nov. 22. Unpublished typescript. • Summary: A comprehensive history of the subject. D.W. Harrison is an African-American physician and a Seventhday Adventist. Contents: Introduction. Early years: Birth and education, army, first trip to Africa, attraction of Ghana's Nkrumah, Meals for Millions. Work in Ghana (1960-63): contract as surgeon, start of farm machinery company, start of bakery and small school, return to U.S. in 1963. Work in Uganda (1964-71): Attractions of Uganda, hired by Uganda government, establishment of Africa Basic Foods (ABF, 1965), 3 objectives, expansion of soybean production, early food production, home-roasted soy flour, grants, equipment, church ties, 3 early products, marketing and demonstrations, end of government contract, start of private medical practice, Worthington Foods purchase of ABF stock and loan of Sam Yoshimura, new tofu and soymilk products, soynuts and soynut butter, Wenger's extruder, speech to United Nations Industrial Development Organization (1969), balance of business and service, Idi Amin and 1970's instability to present. Work in Kenya (1974-82): Move to Kisii, work with soybean production, start of New Soya Enterprises. Summary. Address: Lafayette, California. Phone: 415-283-2991.

297. Kahan, Ben. 1983. Recollections of the early health foods industry in Los Angeles: Bill Baker, Mildred Lager, El Molino Mills, Harold Hain, Henry Borsook, Gayelord

Hauser, Clark Irvine (Interview). Conducted by William Shurtleff of Soyfoods Center, Dec. 4. 3 p. transcript. • Summary: Ben, age 69, was one of the founders of Kahan & Lessin. He has been in the health foods industry since 1932. He became involved with soyfoods through Bill Baker (of Ojai), who pioneered the use of soy flour in Los Angeles bakery products. Bill had the flour ground by El Molino Mills, by elder Vandercook. Starting in about 1936 he developed and started to sell soybean bread. At about the same time he started to make soybean cookies, cereal, pancake flour, and related products. Ben Kahan was the first distributor of Bill Baker's soybean products. Before this, he developed lima bean flour, bread, and pancake and waffle flour, then he switched to soybean flour. Bill Baker got El Molino interested in soybeans. El Molino started in about 1927 with whole-wheat flours. Mr. Vandercook came from Holland, worked for Sperry Mills, was disenchanted, left Sperry and came to Alhambra, where he set up a stone burr just as he had known as a child in Holland. Kahan was also the first distributor for El Molino.

Mildred Lager had one of the first free-standing health food stores (i.e., not in a department store) but she also did promotional work for the health food industry direct to consumers via radio. She was retained by a number of pioneer health food organizations which sponsored here, including Bill Baker. Ben knew here and distributed products to her. Mildred was a slight woman, medium height, former school teacher from Wisconsin, arthritic since youth [about age 16]. Doctors told her to go to California since the weather might help her. She decided to help herself through nutritional means. She was enthused in discovering the relationship between nutrition and health, and she wanted to spread this knowledge to the public. So she started a store, radio broadcast, and classes. She would hire a hall in the Royal Pals Hotel (at 6th and El Dorado), invite people to lectures and cooking classes, and publicize it through her radio program. Bill Baker would bake fresh soybean breads and cookies for the demos.

Bill Baker entered America as a poor immigrant from Prussia. He worked as a baker at some of the most prestigious hotels and restaurants in America. His last jobs were as chefs in the White House [sic] for many years. The last administration was the Harding administration. After that each Christmas he would send the official holiday fruit cake, continuing until Franklin Roosevelt's 3rd administration. After retirement in the early 1930s he was in Ventura, then he moved to Ojai; he baked conventional breads and pies for the Thatcher School and other schools in the Ojai Valley.

Then a group of doctors at the Cottage Hospital in Santa Barbara asked him to try to develop an alkaline bread for nutritional treatment of patients with hyperacidity. Baker researched the problem and came up with lima bean bread, using flour from dried immature baby limas. Also lima bean pancake and waffle flour. He then tried to get this out to the doctors' patients. It was the middle of the Great Depression so it was hard to introduce new products. Kahan, a new distributor in need of products, tried to get the new bread into stores, but only health food stores were interested. Others laughed him out of the store. Mildred Lager was one of his first customers. Bill Baker did his promotions through her.

Bill Baker died in about 1945. The heyday of his baked goods was during World War II. Kahan distributed 1,200 loaves a day. Baker probably also sold through many other distributors in other regions. He shipped his bread to San Francisco, Seattle, and as far east as Colorado. The formula was a secret but probably 16-20% soy flour and the rest a high-gluten unbleached white flour.

The Los Angeles health food movement originated in the late 1920s and early 1930s. Clark Irvine was one of the founders. He published *Health Food Digest* [sic, *California Health News]*, which later became Let's Live. Kahan, Irvine, and a few others founded the Health Food Dealers Association, which later became the National Dietetic Foods Association.

The key health food people in Los Angeles were Clark Irvine, Bill Baker, Mildred Lager, Van Gundy, Vandercook, La Sierra Industries (founded by T.A. Van Gundy in Arlington, California), and Loma Linda Foods. Kahan knew of T.A. Van Gundy, and he knew Dorothea Van Gundy well. Harold Hain canned the first commercial soybeans in about 1924. His Hain Health Foods company later became today's Hain Food Group. Dr. Fearn was a pioneer but not a mixer in the industry; not at the National Health Food Dealers Association.

Vitamins: Dr. Henry Borsook, a biochemist at the California Institute of Technology (commonly referred to as Caltech) pioneered vitamins in the early 1940s. He attended health food meetings. This is one reason for the rise of the health food industry in Los Angeles. Borsook was the first on the West Coast to do this. The first U.S. vitamins in a health food store were sold by Joe Bishop, manager of the Vegetarian Cafeteria in San Diego, in about 1941. He sold those made by W.T. Thompson Co.-powdered vitamin B-1 sold in little envelopes. The Seventh-day Adventists also played a big role in Los Angeles. In the early days, many stores were marginal operations in private homes, run by women. The manufacturers were primitive. They catered to poor, marginal people, during the Depression, who couldn't afford to go to doctors, so they tried health foods. They also catered to diabetics, people with allergies, and the teachers who preached against salt. Some of the earliest out-of-thehome health food stores were concessions in markets. So, in this sense, now its not new for health food stores to be in supermarkets. Some of the leaders were those disenchanted with the medical profession. Gayelord Hauser played a leading role in making health foods acceptable; before him

they were associated with the nuts, kooks, and freaks. Hauser, who associated with Hollywood and Greta Garbo, gave health foods a big image boost. He created the first big chain, the forerunner of the modern health food industry, in the late 1940s. He and his books and charisma gave the industry a new image. Suddenly health foods were seen as being used by people in the know–not just by nuts.

He recalls four stages of health food stores: (1) In private homes run by women. (2) Concessions in larger food markets or stores. (3) Small stores in secondary retail stores, out of the way, because they couldn't afford stores in main shopping districts. (4) A handful of free-standing health food stores. Mildred Lager's store was not a prime place by any means, but it was pretty good. She had a friend named Gilbert Thayer who backed her. He was an early chiropractor interested in nutrition. She worked for him originally, then branched out on her own. Before that she was a primary school teacher in Wisconsin. Address: 5530 Goodland Ave., N. Hollywood, California 91607. Phone: 818-701-6632.

298. Howes, Eric. 1983. Meals for Millions (MFM) Foundation (Interview). SoyaScan Notes. Dec. 19. Compiled by William Shurtleff of Soyfoods Center. • Summary: MFM was doing good work when Mark H. Sterner was directing it; then when Peter Davies came in, it went down hill. Hank Sterner, Mark's son, has his own extruder company. Hank has much longer experience at this than Mark. Peter got MFM much more involved in working with governments and not necessarily doing the field work themselves. Mark is a very knowledgeable man, with very wide experience. Mark would be a good person to interview about Meals for Millions. A business card shows that Mark H. Sterner is President, Appropriate Engineering & Mfg. Co., P.O. Box 40, Norco, CA 91760. Phone: (714) 784-5877. Mark manufactures a low-cost extrusion cooker that makes 300 lb per hour-of CSM or textured soy protein.

When Mark was director, MFM ran a school training people from overseas in both soymilk production and soy extrusion. In Santa Monica, MFM had a Sprout-Waldron extruder and also a small Wenger X-15 extruder. It was a practical, hands-on program. To make soymilk, they used the traditional Asian water extraction method.

299. Widner, Patrick T. 1983. Meals for Millions
Foundation (Interview). Conducted by William Shurtleff of Soyfoods Center, Dec. 19. 1 p. transcript. *Summary:* Mark Sterner left in 1976. He is now in

Oregon. Phone: 503-672-2047. In Davis they have a library and resource center, incl. some old logs of MPF shipments. Their documents on their history are in boxes and closets. They have quite a few statistics and a large log book of shipments. One good history paper is by Patti Butzer Larsen. For more historical information call Mrs. Clinton in Los Angeles at 213-663-3838. Mark Sterner might know the history best. Or try Borsook: 805-682-1006.

MFM / FFHF moved to Davis in Sept. 1982, then moved into a new million dollar building in Feb. 1983. They chose Davis primarily for its university which had an interest in nutrition, food science and technology, and agriculture. They have a mutual exchange with the university. They help foreign students prepare for work overseas; it is an innovative community.

They no longer distribute MPF (multi-purpose food); CSM (Corn-Soy-Milk), introduced in Sept. 1966 by USDA's Food for Peace Program (P.L. 480) made it unnecessary.

They moved away from Santa Monica since they were no longer as heavily involved with food technology. The Santa Monica facility was set up for food processing and teaching–mostly foreign students.

Their main work now is "applied nutrition" abroad–a wholistic program including nutrition education. They started their first applied nutrition program in Honduras in 1978–at one stage they were making foods outside the USA. Much of this work was based on the work of Michael Latham at Cornell and on FAO; in the 1960s they defined "applied nutrition." They do integrated rural development programs, community development, etc. Nutrition is their primary interest and focus, and they have applied this to Honduras.

They are no longer doing much work with soy, although they planted a little in Ecuador. Lou Ziskin is Latin American director. Talk with him. MFM's push to grow soybeans was in the early 1970s.

Peter Davies, who is now president of the Foundation, came in May 1976. The main countries where they now work are described in the recent MFM annual report. The work with soy is most active in Korea.

The budget is now close to \$2 million. Most of it (36%) is from the general public, generated through mailings. 25.7% of their income is from USAID; most of the rest (27%) is from foundations and corporations. Churches give 9%. MFM is now also doing radio ads. The New York office does mailings. Address: Director of Public Education, Western Office: 1644 DaVinci Court, P.O. Box 2000, Davis, California 95617. Phone: (916) 758-6200.

300. Sterner, Mark H. 1983. Work with Meals for Millions Foundation, 1966-1973 (Interview). Conducted by William Shurtleff of Soyfoods Center, Dec. 20. 2 p. typed transcript. • *Summary:* Mark Sterner joined MFM in 1966. He initiated technology transfer, moving away from distribution of MPF. He was executive director in 1972 and 1973. Florence Rose was the executive director of MFM for roughly 20 years, from the inception until just before Sterner arrived–when she retired. In 1965 the Board decided to wind down distribution and to focus on technology transfer.

The first MPF was made by Gentry Foods, a food dehydrating company. General Foods began to make and market multi-purpose food on 1 Dec. 1959; before that it had been made by Gentry Foods in the Los Angeles area. The formula was changed when General Foods started making MPF. The peak year for MPF distribution was about 1965; roughly 60 to 100 tons were made and distributed each year at that time. It was never an impressive amount when measured by weight. 2,000 tons would be 100 tons a year for 20 years. The U.S. government said the amount of MPF distributed was "fairly small." After about 1955, most of it was sent to missionaries and the like who operated soup kitchens, hospitals, etc. They used it properly and it was well accepted as a protein fortifier. Virtually all of it was sent in sealed #10 cans. General Mills continued to make MPF until it stopped being distributed in about 1980.

Florence Rose tried to get USAID to distribute MPF but they were not interested.

Incaparina was the first cereal-soy blend.

Mark's most significant accomplishment was the development of an extruder or extrusion cooker that could be built and used in less developed countries. Most such countries could not afford to purchase one of these from the USA. He made design changes, such as interrupting the flights. Later a number of these changes he made were adopted by other manufacturers of extruders. About six of the MFM extruders designed by Mark went into the field, two in Korea and 1 each in Thailand, Puerto Rico, and Africa. Mark will be with Hank Sterner until about May; he would love to look over the draft manuscript on the history of MFM.

Mark left MFM in a situation he was not happy with; he has not kept track of it afterwards. It's a "heritage room" history.

Before he arrived, MFM had a certain air about it (little credibility) that it was run by "that woman who was in menopause." The same woman was executive director for the first 20 years; she had no endowment funds. Clifford Clinton apparently funded it for the first two years and provided it with office space above one of his restaurants. It was a private foundation, publicly funded. Then the Board disowned Clinton, but amends were made in about 1972.

"Florence Rose was kind of laughed at. She trotted around the world with a carpet bag full of Meals for Millions literature, elbowed her way in to see heads of governments and top officials, and encouraged them to work with her" (and MFM). She had much the same presentation and reputation in Washington, DC. People hated to see her come around. So MPF and MFM, primarily because of her personality, found little favor with the government. She died in 1969. When Mark Sterner came in to MFM it took on a whole new tone. It became reputable internationally, professional, listened to, welcomed by cereal chemists and with credibility in Washington, DC, as with Rod Crowley's office and with USAID. MFM was getting \$1.3 million a year for a few years (1972-1973) before he left. This funding indicated real confidence and it made a big difference in operations. Plus, MFM got additional money to construct a laboratory and classrooms in Santa Monica. Address: Formerly technical advisor and executive director, Meals for Millions Foundation, Norco, California 91760.

301. Widner, Patrick T. 1983. Re: Printed materials concerning Meals for Millions / Freedom from Hunger Foundation. Letter to William Shurtleff at Soyfoods Center, Dec. 21. 1 p. Typed, with signature on letterhead. *Summary:* "Dear Bill, As a follow-up to our telephone conversation I have enclosed a number of printed materials which you will find helpful in writing your History of Soya Bean and Soy Food."

The first is a 1969 interview with Clifford Clinton and his wife Nelda. The second was written by Adine Travis Lough. Also the 1982 Annual Report.

Note: The distinctive letterhead is printed with brown ink on beige paper. Across the bottom are the addresses of the Western Office and the Eastern Office (815 Second Ave., Suite 1001, New York City). Down the left side are the name of the President (Peter J. Davies), Honorary trustees, members of the Board of Trustees, and members of the National Committee of Sponsors. In the upper left corner is the Foundation logo of a plant growing out of mounded soil in a bowl which is half of a globe. To the right of that: "Self-help for a hungry world." Address: Director of Public Education, Western Office: 1644 DaVinci Court, P.O. Box 2000, Davis, California 95617. Phone: (916) 758-6200.

302. Shurtleff, William; Aoyagi, Akiko. 1983. History of soy flour, grits, flakes, and cereal-soy blends. Soyfoods Center, P.O. Box 234, Lafayette, CA 94549. 128 p. Dec. 24. Unpublished typescript.

• *Summary:* A comprehensive history of the subject. Contents: Part I: What are soy flour, grits, flakes, and cereal-soy blends? Introduction: Developed in the West, difference from roasted soy flour. Soy flour. Soy grits and flakes. Cereal-soy blends = soy-fortified blended foods. Etymology and nomenclature: German, French, U.S. English, U.S. whole soy flour, British English. Overview of world soy flour history.

Part II: History of soy flour, grits, and cereal-soy blends in Europe and Australia. The early years (1767 to 1899). 1900 to 1919. Between two wars (1920-1939). 1940-1959. 1960 to 1983.

Part III: History of soy flour, grits, flakes, and cerealsoy blends in the USA. The early years (1767-1919). 1920 to 1939. The 1940's and World War II. Meals for Millions and multi-purpose food. 1960 to 1980's. Food for Peace Program. Low-cost extrusion cookers. Soy flour, grits, and flakes in America.

Part IV: History of soy flour, grits, and cereal-soy blends in Canada.

Part V: History of soy flour, grits and cereal-soy blends in Asia. Introduction. Bangladesh. China. India. Indonesia. Japan. Korea. Philippines. Sri Lanka (Thriposha). Taiwan. Thailand. Vietnam.

Part VI: History of soy flour, grits, and cereal-soy blends in Latin America. Introduction. Bolivia. Brazil. Chile. Colombia. Costa Rica. Ecuador. Guatemala. Guyana. Mexico. Paraguay. Peru. Venezuela.

Part VII: History of soy flour, grits, and cereal-soy blends in Africa. Introduction. Ethiopia. Ghana. Kenya. Nigeria. Rwanda and Burundi. South Africa. Tanzania. Uganda. Zimbabwe.

Part VIII: History of soy flour, grits and cereal-soy blends in the Middle East.

Note: This is the earliest English-language document seen (July 2003) with the term "cereal-soy blends" in the title. Address: Lafayette, California. Phone: 415-283-2991.

303. Swaminathan, Mahadeva. 1983. Oilseed and nut proteins. In: Miloslav Rechcigl, ed. 1983. CRC Handbook of Nutritional Supplements. Vol. I. Human Use. Boca Raton, FL: CRC Press. 564 p. See p. 3-27. [147* ref] • Summary: Contents: Introduction. Production: Soybeans, cottonseed, sesame seed, copra, sunflower seed. The chemical composition and nutritive value of the proteins of certain oilseeds and nuts: Chemical composition, essential amino acid composition and nutritive value of proteins, amino acid supplementation of the proteins of oilseeds and nuts. Deleterious constituents present in oilseeds and legumes. Effect of processing on the nutritive value. Processed foods based on oilseeds and their meals: Preparation of edible meals, protein isolates from oilseeds and nuts. Infant foods and milk substitutes from oilseeds and nuts: Infant foods and milk substitutes from soybeans (soy milk, dried soybean milk, large-scale production), nutritive value of soybean milk and soybean milk proteins (animal experiments, treatment of protein malnutrition in children), feeding experiments with infants and children, milk substitutes and infant foods from peanut, nutritive value of peanut milk and its proteins, feeding trials with infants and children, coconut milk and products based on coconut milk. Milk substitutes based on other nuts and oilseeds: Almond milk, cashewnut milk. Protein foods based on oilseed meals and isolates: Supplements based on soybean meal, on peanut meal, on cottonseed flour, on sesame flour, on coconut meal, on sunflower seed meal. Other processed products based on oilseeds and nuts and their meals: Products based on peanut and peanut flour,

enriched tapioca flour and macaroni products, products based on soybean and soybean meal (baked products, macaroni products, tofu, natto, tempeh), foods based on protein isolates from peanut and soybean, products based on peanut protein isolate, products based on soy protein isolate (infant foods, textured food products). Conclusion.

Table 13 (p. 18) lists "Supplementary foods for weaned infants and preschool children." The following contain soya (usually defatted soy flour): Protein Food I and II (India). Fortifex (Brazil). Cerealina (Brazil; with full-fat soy flour). Multipurpose Food, CSM, WSB (USA). Pronutro (South Africa).

Note: On pages 156-57 is a brief description of quark, a non-fermented edible milk protein product widely used in Germany. It is a fresh, uncured cheese, usually sold in bulk form. Versatile and easy to use, it is made by coagulating the milk exactly like cottage cheese, "but instead of cutting, cooking, and washing the curd particles, the whole coagulum is passed through a specially designed centrifuge" to separate the whey from the solidified protein curd, which is then cooled and packaged in bulk. When made under sanitary conditions, the quark has a good shelf life under refrigeration. Some 30-40 different food products based on quark (such as spreads, dips, and desserts) are now sold in western and eastern Europe. A survey concluded that quark has considerable potential in the USA if (like yogurt, the most newly accepted dairy food in the USA) it is well advertised and promoted. Address: Retired, Applied Nutrition and Dietetics Discipline, and Emeritus Scientist, CFTRI, Mysore, India.

304. Shurtleff, William; Aoyagi, Akiko. 1984. The Meals for Millions Foundation and Multi-Purpose Food: History of work with soyfoods. Soyfoods Center, P.O. Box 234, Lafayette, CA 94549. 7 p. Jan. 15. Unpublished typescript. • Summary: A comprehensive history of the subject. Contents: Early years (1900-39): Clifford Clinton's years in China, Clifton's Cafeteria in Los Angeles, California, to feed the needy during the Depression. A way to feed the world (1940-1965): Grant from Clintons to Dr. Henry Borsook to find food for postwar Europe, Mme. Berzceller's / Berczeller's Multi-Purpose Meal (primarily defatted soy flour) ready in late 1944, the initial formula, first use in Los Angeles, Clintons founded Meals for Millions Foundation in Los Angeles 1946, all-soy formula in 1950's (now called Multi-Purpose Food, MPF) made by General Mills until 1980, celebrities praise MPF (Eleanor Roosevelt, Albert Schweitzer, Pearl Buck-a director), Executive Director Florence Rose creates poor professional image, amount distributed, historical significance. 1966-76: From distribution to technology transfer, Mark Sterner new program head 1966, move to Santa Monica 1967, overseas manufacturers, early 1970's new self-help philosophy, phrase, and logo, USAID (U.S. Agency for International

Development) funding in 1973 launched a new era, training center and classrooms in Santa Monica headquarters, developed own low-cost extrusion cookers, major work with soy done in Korea and Ecuador. 1976-1980's: Peter Davies replaced Sterner 1976, last MPF distributed 1980, first training overseas, applied nutrition programs, 1982 move to Davis, CA, 1982 budget of \$2 million. Address: Lafayette, California. Phone: 415-283-2991.

305. Borsook, Henry. 1984. Re: History of work with Multi-Purpose Food and Meals for Millions. Form filled out by his daughter, Eva, plus edited draft of chapter, Jan. 20. 4 p. With handwritten letter by Eva.

• *Summary:* Eva writes that her father is recovering from an operation. "I hope you will be able to decipher my handwriting taken down as Daddy talked. The letter came just at the right moment-to get his mind off his various physical ills.

"I have no idea if Mme. Berczeller was related to Laszlo Berczeller. We knew her well and she never mentioned this. She was simply a friend who was a good cook and who was willing to work for a low salary."

True: For the first 20 years Clifford Clinton was the unsalaried president of the Meals for Millions Foundation. He was very active as far as general direction was concerned but he left the details to the officers [Florence Rose and Ernest Chamberlain].

Soy flour was never used in the formulation of MPF; only soy grits which were a better product, nutritionally superior, more versatile, less processed, less expensive and more available.

The early reputation of MFM and Florence Rose in Washington, DC: "Opinion varies. Jealously of Washington officials who disliked her non-observation of bureaucracy and protocol. Jealousy of others as well. She was responsible for Dr. Subrahmanyan's establishment [in India] of what was one of the best nutritional establishments in the world. Also keep in mind the opposition of the proagriculture lobbies in Washington, DC.

"For 10 years the Food and Nutrition Board, then dominated by agricultural interests, made life somewhat difficult for MFM because not only was it a sort of menace (they thought in terms of fresh food sales, which of course were too costly for the poor) and thus they liked to mutter than MFM was a misleading name in one sense of the word 'meals'-because it was low in calories."

For more information, Dr. Borsook suggests that Shurtleff speak to Mrs. Clinton [Nelda] and her sons as well as to Ernest Chamberlain.

Dr. Henry Borsook, who died later in 1984, is widely considered a major pioneer in the field of nutrition. Address: 2663 Tallant Rd., Santa Barbara, California 93105. 306. Kuzins, Rebecca. 1984. Clifford Clinton's food fantasies: You could safely say he's fed more people than anybody but the army. He's provided, so to speak, Meals for Millions. *Los Angeles Reader* 6(18):1, 8-13. Feb. 24. *Summary:* A long, excellent overview article. Sometime during World War II, on a typical workday in downtown Los Angeles, you come trudging down Olive Street until you "reach a building at 618 S. Olive St. that, by only the utmost understatement, could be described as 'unusual.' A waterfall runs down from the roof a few feet toward a collection of rocks and foliage above the door. Smaller waterfalls and other trees and rocks are placed on either side of the central waterfall.

"Once inside you see a tropical decor many times more garish than the scene that accosted you on the street. You can sit at table among caged canaries, a dozen more waterfalls, and gigantic palm trees. The walls are sheathed in bamboo and the place is lit by neon lights in the shape of lilies and other flowers. Daring guests sit in a rain hut where a simulated monsoon is recreated every 20 minutes."

"This is actually a cafeteria, but you'd never guess it, because the path to the food counter is a long, dark cavern in back of the building, illuminated only by lighting from fish tanks placed along the path.

You're right-this is not just any cafeteria. It's Clifton's Pacific Seas Cafeteria, a legendary eatery that has staked out its place in the city's history." But in 1960 it was demolished to make room for a parking lot. Two years ago, when the writer started conducting tours of Broadway, she found that as they walked past the place where Pacific Seas used to be, her "charges would describe with perfect clarity meals they ate 30-40 years ago at Clifton's. Their interest in Clifton's piqued my curiosity and led me on a year-long odyssey into the heart of the cafeteria." In the process she "came to know one of Los Angeles's truly great promotersthe late Clifford E. Clinton, the founder of the chain of restaurants bearing a composite of his first and last names. Clinton understood as well as anyone that Los Angeles is one part reality and the rest pure invention.

"He was trying to do something way out of the ordinary,' said his youngest son, Donald Clinton, who, with his sister Jean Clinton Roeschlaub, now owns the Clifton Cafeteria chain.

"This was before Disneyland,' agreed Jean. 'He was trying to make something memorable, something to appeal to tourists.'

"Clifford was born into the restaurant business. His grandfather, David Harrison Clinton, arrived in Los Angeles in 1888 and soon purchased the dining room of the old Pacific Hotel. David's son, Edmond, moved to San Francisco, where he and his wife Gertrude, became owners of a chain of dining rooms called Dennets. Edmond and Gertrude had nine children, including Clifford, who was born in Berkeley on August 3, 1900. "In what became a significant event in young Clifford's life, his parents temporarily left the restaurant business to become Salvation Army missionaries in China. Clifford was ten years old when his family made the trip; they stayed for two years. He would later say the sight of starving Chinese people remained in his mind all of his life, profoundly affecting the way he conducted his business.

"Returning the United States in 1912, Edmond Clinton opened another chain of cafeterias in San Francisco called Clintons. Clifford Clinton left high school in 1915 to be storekeeper one of the restaurants, rising to supervising manager of all six restaurants by 1925. He eventually became one of the three partners of the Clinton Cafeteria Co., though Clinton differed with his partners on how to best manage the business.

"His ideas were just a little to wild for San Francisco," said Jean Clinton Roeschlaub. 'His partners were more conservative and they forced him out of the business.'

"San Francisco's loss was Los Angeles's gain. Moving here in 1931, Clinton found the perfect city in which to enact his cafeteria fantasies.

Note: The word "cafeteria" is Spanish for "coffee shop." Some, including the writer, claim that Los Angeles is the home of the cafeteria or of the "modern cafeteria;" she cites two sources. But the majority opinion disagrees.

In 1931 Clifford Clinton purchased what was already a cafeteria at 618 S. Olive St. According to Jean Clinton Roeschlaub it already "had a couple of palm trees and a little fountain in the dining room. But in no way did it resemble what my father did with the 1939 remodeling."

Clinton "could not have picked a less opportune time, for the city was beginning to feel the effects of the Depression... Clinton responded to the economic situation with a combination of evangelical zeal and business acumen. He dubbed the business 'The Cafeteria of the Golden Rule.'" He established a policy that no guest would be turned away hungry for lack of funds. But during the Depression this policy made it hard for the restaurant to run profitably. Moreover, as Donald Clinton recalls: "'Many of these people were dirty, drunk and smelly and it wouldn't be right for them to sit down with paying guests. My dad was enough of a realist to know there were going to be problems.'

"Clinton solved this problem by opening the Penny Cafeteria in the basement of a building at Second and Hill streets on October 10, 1932. Patrons at his Olive Street store could purchase tickets for a penny a piece and hand these tickets to a hungry person who would stop them on the street. For the price of a ticket, a diner at the Penny Cafeteria received a complete meal from soup to dessert. Merchants donated produce, meat, and day-old bread to the project. The Penny Cafeteria closed after two years but Clinton continued to serve nickel and quarter meals to needy persons throughout the thirties." Nelda Clinton was very gregarious and enjoyed being and talking with customers. Her husband, Clifford, however, "found it difficult to converse with patrons. 'He was really a shy person, very timid,' said Donald about his father. 'Uncomfortable with small talk, uncomfortable with dinner parties, uncomfortable if he wasn't surrounded with people he knew well,' agreed Jean.

The next long and colorful section tells of Clifford Clinton's work to clean up Los Angeles's politics. He was deeply involved in the 1938 recall of Mayor Frank Shaw and the election of Fletcher Bowron. "Los Angeles in the thirties had become a haven for East Coast mobsters running gambling, bookmaking, and bootlegging operations." Clinton's clientele despised such activities. A grand jury committee (which the DA's tried to thwart) on which he was very active released their highly publicized findings in June 1937. Clinton proclaimed "evidence of 1,800 bookies, 342 houses of miscellaneous gambling, 603 houses of prostitution, and 23,000 pinball and slot machines" in Los Angeles County.

"The pressure really got to him,' said Donald. He suffered from ulcers and other stomach problems. In 1947 he traveled to the East Coast for an operation. The doctor removed two-thirds of his stomach and said he would never be well again. Yet he beat the odds. For the next ten years he traveled on behalf of the Meals for Millions Foundation. However in 1947 he retired from operation of the cafeterias, "delegating management to his assistant, Ransom Callicott, who owned one-quarter of the business, and to his three children..." Clifford Clinton died of a heart attack at age 69. "He was buried at Forest Lawn."

Photos show: (1) A large, superb, panoramic overhead view of the inside of Clifton's Pacific Seas Cafeteria (ca. 1940). (2) The outside front of the same cafeteria. (3) Clifford Clinton seated at a desk (ca. 1947). (4) Many pots on the stove at one of the cafeterias,

A sidebar is titled "Legends never die (and Clifton's never closes)." The 3-story Brookdale Cafeteria on Broadway near Seventh street can seat as many as 835 patrons. It has a staff of 170 employees and serves 4,500 to 6,500 meals a day. Big holidays, such as Mother's Day, Easter, and Christmas are all big days. Address: Los Angeles.

307. Sterner, Mark H. 1984. More on work with Meals for Millions Foundation, 1966-1973 (Interview). Conducted by William Shurtleff of Soyfoods Center, March 13. 2 p. typed transcript.

• *Summary:* A major change in Meals for Millions took place on 14 Sept. 1964 when Florence Rose was replaced by Jerry Miller as executive director. In about 1965 the new officers at MFM began to lay plans for a new building. Clifford Clinton provided moral support from the wings. Funds for the Santa Monica building came from Morris Asimow, PhD (who was president of MFM at the time) and Jerry Miller; they co-signed a note with a Santa Monica bank, which was later converted to a mortgage. The mortgage was paid off over the years by contributions to MFM during Sterner's period there. There were no land grants. Construction started in 1965 and MFM moved into the new building in April 1966. They wanted a building of their own located outside of Los Angeles where they could have a pilot plant and offices.

In India, the original MPF-type food was developed at Mysore based on peanut meal and Bengal gram. It was later manufactured by Gopi Agarwal and his brothers in J.B. Protein Food Industries. They had a peanut pressing operation in northeast India. They started making it in about 1965 and called it Multi-Purpose Food; it did not contain soy. MFM, instead of sending MPF from the United States, sent money to India to help pay for distribution.

Bob Nave and SPRA of the Methodist Mission, sometime after that, put in a soy extrusion operation. At a later date, just before Mark left MFM, there was an effort with Nave to produce second generation foods. Nave's mission had received MPF from the USA then bought it from the Agarwals. Then Nave got an extruder and started to make a similar product. So MPF sparked Nave's interest; eventually he went into second generation foods. Also, someone in the south of India made a little MPF using peanut meal, but no soy. Lots of peanuts were available, but aflatoxins were a problem.

MFM was more involved in image building than in truth; it was a big problem in the early days. Everyone wanted to embellish the story to help raise funds. For example, the early newsletters said that one meal of MPF cost only 3 cents. No! That was the cost to manufacture it in Los Angeles, not the cost when it arrived for a hungry person in Europe.

Adine Laugh was a promotion person, employed by MFM to promote the organization. When Mark arrived he worked a lot to bring truth back into the picture. Clifford Clinton was a very dedicated man, but there were several years in about 1963-64 when he was alienated from MFM. He got involved with a chiropractic doctor or healer [Dr. Omar Fareed] who sort of mesmerized him. That doctor was flamboyant and lived in Beverly Hills. He threatened to take over MFM but the board would not allow it. Clinton resigned, but soon returned. After Clifford Clinton died, his wife and son were on the board.

The original MPF was based on uncooked soy grits, but early on it became available in both soy flour and soy grit form. This lasted until the 1970s, whereafter it was based entirely on toasted soy grits. Note: General Mills, Inc. began to make Multi-Purpose Food in Dec. 1959; it was based on toasted soy grits.

Mark visited the United Rescue Mission (URM) in Taiwan; they helped care for refugees from mainland China.

They may well have received MPF.

In 1966 Mark was hired by MFM (not as new program head) to develop the protein food technologies that would use indigenous third world ingredients and to develop a technology transfer curriculum. That led to a more professional reputation for MFM. Mark worked in that position from 1966 to 1972, when he went to Korea. During that time, Jerry Miller was executive director, followed by Irvin Saunders, a retired colonel, followed by Mark.

In about 1973 USAID in Washington, DC, began to give MFM \$1.3 million a year. Some of this money was earmarked for building a workshop, and for enlarging labs and classroom facilities and the program itself.

This month the Korean MFM project [based on extrusion cooking] is being turned over to a Korean MFM foundation to be funded by Koreans for work in Korea. When Mark was director of technology transfer, soymilk equipment was donated by Sam Tubin. A Chinese banker in Los Angeles wanted to set up a soymilk plant there. In 1967-68 he set it up to make soymilk to be bottled in soda pop bottles. He never got it off the ground, although he had all the equipment–which lay around unused for a year or so. Sam Tubin bought the equipment to produce a beverage from fish meal using the Viobin process for making fish meal. That didn't work out, so Sam donated the equipment, worth \$250,000 to MFM.

While Mark was in Korea he made connections with the Sam Young Co., a large manufacturer or ramen (instant noodles). They wanted to start making soymilk, so Mark installed MFM's soymilk equipment at their plant outside Seoul and they paid MFM for it in installments in Korean money. Using that money, MFM set up a program in Korea with an in-country director. And they set up an extruder and project in Wanju funded by payments from the soymilk plant.

The soymilk plant began operating in about 1973. They did it in a big way, made 5,000 bottles a day, and soon expanded the plant. Mark thinks the soymilk product was named Super-D; it came in plain (sweetened) and chocolate flavors. MFM's Korean project became self-supporting when one province took on the program to provide infant and weaning foods, as well as commercial foods that were sold. On 20 March 1984 (in about a week) the project will be officially turned over to the Koreans. MFM has been putting a little money into the project. The extrusion project is also very alive. Now the provincial government is trying to persuade other provincial governments to build their own LEC (low-cost extrusion cooker) plants.

Starting in about 1966, at the Santa Monica center they used to demonstrate all the state of the art methods of making soymilk including hot grind, whole raw bean, using soy protein isolates, etc. Mark does not know if any of that work took hold and was applied anywhere. It was all pretty academic. The tuition of most students was paid by MFM or by a commercial company.

MPF was an important, pioneering idea and food. History is partly the result of huge, impersonal forces, and partly the work of particular remarkable men and women, who are often pioneers. They have a vision and an idea and are willing to take a risk and to work hard to manifest that idea.

A good historian should be able to trace great movements and ideas back to the men and women whose ideas and vision started them, and then to give them life and to give them credit for what they have seen and done. Clifford Clinton was clearly one such man. Address: Former director, Meals for Millions Foundation.

308. Borsook, Eve. 1984. History of her father's work with Meals for Millions (Interview). Conducted by William Shurtleff of Soyfoods Center, March 18. 1 p. transcript. • Summary: This is an interview with Dr. Borsook's daughter. She knew Madam Soulanger Berczeller, who lived in Pasadena (near Lake Avenue) for 40 years. She lived throughout the 1930s in that house; she was not a refugee. She was living in Pasadena when Dr. Borsook hired her; he knew her well and she never mentioned Laszlo Berczeller. She was known as a good cook and she spoke with a strong French accent. The daughter thinks Madam Berczeller was a widow, and that if Madam B. had been married to a well-known European she would have heard about it. She doubts Madam B. was ever Laszlo Berczeller's wife. She became an American citizen. She was a dressmaker, kept house, took a few boarders, was indeed a marvelous cook, and a very loving person. She died in early 1950.

To find out more about her, one could go to a "public records office." The city hall in Pasadena should have those records. Or one could write or call the clerk of the records and ask for her vital statistics. All good historians go to such archives.

Clifford Clinton was generous, but he was not rich and he was not a philanthropist.

Meals for Millions kept ledger books showing details of every shipment of MPF ever made. From these they compiled several comprehensive reports.

Gentry Foods is at 648 South Broadway, Los Angeles 14, California. Walter Bray is still technologist at MFM. Address: 2663 Tallant Rd., Santa Barbara, California 93105.

309. Clinton, Nelda. 1984. History of work with Meals for Millions (Interview). Conducted by William Shurtleff of Soyfoods Center, March 18. 1 p. transcript.

• *Summary:* Together with her husband, Clifford Clinton, and Ernest Chamberlain, Mr. Clinton went on the first visit to Dr. Henry Borsook (pronounced bor-SOOK) at Caltech (California Institute of Technology) in Pasadena. When

Clifford returned from World War II, he felt that the cafeterias must do more to feed the hungry in Los Angeles. He asked Dr. Borsook if there were any way to create a nourishing meal for a nickel (\$0.05). The first goal for such a meal was in Los Angeles–later the world. Clifford told Dr. Borsook the various specifications for such a food to make it universally acceptable. Nelda thought Clifford was asking too much–to meet all these requirements for just a nickel.

Dr. Borsook replied: "All my life I have wanted a challenge like this." So he accepted a cash grant. Caltech gave him a little room that he could use for a kitchen–to develop recipes and conduct experiments.

"He then hired Madame Soulange Berczeller. He knew that oleomargarine presscake was loaded with nutrients; animals thrived on it in mixed feeds and chickens produced more eggs. Presscake could be used if it were made palatable. Then Madame Berczeller came in with her French background and introduced seasonings; so they ended up with three forms or flavors of multipurpose food. One was flavored with seasonings to taste like sage dressing for turkey or fowl. One was completely unseasoned. The third contained powdered milk for nursing mothers or infants. Nelda only met Mme. Berczeller once–briefly at the kitchen. She recalls her being European–maybe French or German or even Austrian.

Dr. Borsook's food was named "multi-purpose food" right from the beginning.

Nelda does not know much about the United Rescue Mission. It is a Christian organization founded in the 1940s to help those who are homeless, hungry, addicted–basically down on their luck. It gives comprehensive care to those in crisis. Nelda remembers some kind of mission on Main Street in Los Angeles.

Note: The United Rescue Mission (URM) in Los Angeles was a place where homeless men could receive food and a bed for a few nights. It is still active there. It does have a religious focus, and it probably received Multi-Purpose Food.

Clifford, the son of Christian missionaries in China, left China when he was 12. China was not open to missionary activity after the Communists came to power in 1949.

Early documents about Meals for Millions (MFM) are in many places. Clifford's sons would have many at the cafeteria in Los Angeles–The Silver Spoon, 515 West 7th St., Los Angeles, California 90014. They have many files of documents there. Nelda's son, Donald Clinton (213-485-1814) will be leaving for Southeast Asia in a few days. Nelda's daughter, Jean Roeschlaub, will be there. Donald has a complete file on the history of MFM. Also, the UCLA research library as lots of files from Ernest Chamberlain, who was the first major secretary. Edmond Clinton (213-796-3618), another son in Pasadena, also has a great knowledge of the early days; he was one of the founders and a director for 20 years. He now works for Badle's cafeteria in Pasadena.

Nelda gave UCLA 7 cardboard boxes of clippings in scrapbooks. Her husband, Clifford, also fought crooks and corruption in the Los Angeles government.

In the early 1940s [outside the Midwest] the soybean was largely unknown in the United States. Address: 4411 Los Feliz Blvd., Apt. 1001, Los Angeles, California 90027. Phone: 213-663-3838.

310. Meals for Millions / Freedom from Hunger Foundation. 1984. Annual report 1983: Self-help for a hungry world. Davis, California: MFM / FFH Foundation. 16 p. 21.5 x 9.5 cm.

• *Summary:* Peter J. Davies is President. Philip E. Barton is chairperson, board of trustees. On the brownish-red, black and white cover is a photo of a mother smiling at her child. MFM's logo of a plant growing in an upturned bowl is on the front cover.

There is a 1-page message from Barton and a 2-page message from Davies. The latter notes: "In 1983 your foundation started two new Applied Nutrition Programs in Sierra Leone and Kenya."

"A milestone was achieved when our staff moved into our new International Center at Davis last March. And we were especially excited to receive a magnificent check for \$225,000 from the Kresge Foundation in April; full payment of their challenge grant." Meals for Millions philosophy. MFM has "Applied Nutrition Programs" (ANPs) in Ecuador, Honduras, Sierra Leone, Kenya, Korea, Thailand, Antigua, U.S. Southwest, Papago Applied Nutrition Program (on the Papago Indian Reservation near Tucson). Solutions through appropriate technology.

"Korea: At the end of 1983 MFM phased out its direct participation, turning over its programs to an independent local body;... MFM began to work in Korea just after the Korean War, helping a company to produce a high protein soy beverage for schoolchildren. In 1976 we began an Applied Nutrition Program in Wonseong County, which has grown tremendously."

Thailand: "Last July the men, women and children in 53 villages and 29 schools began planting the 753 kilograms of soybeans distributed by MFM. Villages which were previously quiet and listless, 'seem to have come alive.'"

Total income: \$1.894 million. Address: P.O. Box 2000, Davis, California 95617. Phone: (916) 758-6200.

311. Widner, Patrick T. 1984. Re: Printed materials concerning Meals for Millions / Freedom from Hunger Foundation. Letter to William Shurtleff at Soyfoods Center, April 3. 1 p. Typed, with signature on letterhead. *Summary:* "Dear Bill, Enclosed are responses to your questionnaire about MFM and multi-purpose food. The



photo-copy of the label we discussed was done in several sections but perhaps it will be helpful to you.

"I have also enclosed three other information pieces: (1) A copy of the original 'Miracle of Meals for Millions' article written by Adine Travis Lough. (2) A tribute to Henry Borsook written by Fred Hafner. You can write to Fred for more information at 3212 Jonquil Lane, Plymouth, MN [Minnesota] 55441 or 12631 Limewood Drive, Sun City West, AZ [Arizona] 85375. (3) Excerpts from a copyrighted interview with Henry Borsook by Mary Terrall.

"Bill, if we find anything else that might be helpful to you we will send it along.

"Good luck with your project. Sincerely." Note: The distinctive letterhead, printed with brown ink on beige paper, is the same as for his 1983 letter. Address: Director of Public Education, Western Office: 1644 DaVinci Court, P.O. Box 2000, Davis, California 95617. Phone: (916) 758-6200.

312. Roeschlaub, Jean Clinton. 1984. Re: Enclosing historical materials about Meals for Millions Foundation. Letter to William Shurtleff at Soyfoods Center, April 19. 1
p. Typed, with signature on letterhead. [Eng] *Summary:* Contains a remarkable assortment of valuable, early documents, most originals, some photocopies. Address: Executive Vice President, Clinton's Restaurants Incorporated, General Offices, 515 West Seventh St., Los Angeles, California 90014. Phone: (213) 485-1814.

313. Steinbeck, John (Mrs.). 1984. Re: Dear Friend. Letter to MFM Supporters. 2 p. Back to back. Typed, with signature on letterhead. Undated.

• *Summary:* This fundraising letter, printed with black and brownish-red ink on white paper, starts with this quote: "Praise, if you will, large farms, but till a small one."–Virgil.

The letter comes with a MFM / FFH newsletter titled "Planting the seeds of change... and hope."

"Over 800 million people suffer from perpetual hunger and malnutrition-hunger that has robbed them of their strength and initiative, crippled their children's physical and mental growth, and condemned more than 15 million a year to an early death... empty bowls and empty futures lead to political turmoil-to the social chaos we are witnessing today... 'One dollar of aid,' says former Secretary of Defense, Robert McNamara, 'buys more security than a dollar spent on military hardware.'"

The letter discusses self-help programs in Thailand, Kenya, Ecuador, Antigua, and the Southwest U.S. Soy is not mentioned. Address: Chairperson, National Committee of Sponsors, Meals for Millions / Freedom from Hunger Foundation, P.O. Box 2000, Davis, California 95617. Phone: (916) 758-6200.

314. Vaidehi, M.P. 1984. Re: Request for tempeh culture and studies on tempeh in Bangalore. Letter to William Shurtleff at Soyfoods Center, Oct. 5. 1 p. Typed, with signature on letterhead.

• *Summary:* He requests a packet of tempeh starter culture for some consumer acceptability studies. "I was one of your students at M.F.M." [Meals for Millions, in Santa Monica, California] and hope you will help me in encouraging tempeh use in Indian villages.

"In one of my studies I found that when tempeh curry and chips were served to 100 villagers and 100 urban consumers in India, the results were very promising. The consumers liked tempeh, tofu, and nutri nuggets (TVP); they liked soya curds the least." Address: Assoc. Prof. & Head, Dep. of Rural Home Science, The Univ. of Agricultural Sciences, Hebbal, Bangalore–560 024, India.

315. Cheigh, H.S. 1984. Production system of low-cost nutritious food. Basan, Korea: Department of Food and Nutrition, Basan National Univ., No. 77-72. *

• *Summary:* The LEC project in Korea uses a lower capacity extruder (less than 100 kg/hour) designed by the Meals for Millions Foundation (MFM) and constructed by the Korean Institute of Science and Technology (KIST) using readily available parts. Address: Onchon-Dong, Dongrae-Ku, Basan, Korea.

316. Steinbeck, John (Mrs.). 1984. Re: Dear Friend. Letter to MFM Supporters. 2 p. Back to back. Typed, with signature on letterhead. Undated.

• *Summary:* This fundraising letter, printed with black and red ink on white paper, focuses on Kenya, Ecuador, Nepal,

and Thailand. Address: Meals for Millions / Freedom from Hunger Foundation, P.O. Box 2000, Davis, California 95617. Phone: (916) 758-6200.

317. Viavant, Suzy Jenkins. 1985. Trip with Plenty to Sri Lanka (Interview). Conducted by William Shurtleff of Soyfoods Center, Feb. 7. 2 p. transcript.

• *Summary:* She has a photo of a UNICEF soy demo van. Ellen Jayawardene wants to leave. All the sources of funding are drying up; this is an interim period. Government of Sri Lanka (GOSL) money is invested in RajaSoya; Forbes and Walker also apparently own shares. Two bad soybean harvests in a row; the soybeans are very old. This makes soyfood products taste rancid.

Suzy knows Hewage Jayasena of The Buddhist Socio-Economics Institute; she has his resume. He worked for Meals for Millions. General Mills wanted him to help set up a plant for them to make MPF in Sri Lanka, but he never could get the government to do it. He was one of the first people in Sri Lanka to get involved with soy, back in the 1950s. He was formerly a record keeper, Dep. of National Archives, now retired. Suzy has copies of several articles he wrote in the 1950s, and MFM pamphlets also from the 1950s–which she will send.

Why did Suzy go to Sri Lanka? The Canadian International Development Agency (CIDA) has invested over \$100 million and many years' work in the Mahavela project which is ducting water inland to the dry zone, where all the soybeans are being grown. They inaugurated it shortly after she arrived. That is why the Rajasoya plant was established there-to open up new territory. It is located in Maha Illuppallama, Anuradhapura, in the North Central Province. They want to develop soyfoods. One recommendation was that Plenty, because of their work with soyfoods in Guatemala, go to Sri Lanka, Suzy interviewed all the people working in the area with soy, and all were interested-Buddhist Congress, women's groups, etc. She identified 20 communities or groups. They are supposed to design a program and write up a report. Plenty wants a plant that will be near Kandy near the Kundasale plant; they want to have a mill where people can come in and mill their soybeans. They hope to pick up Soyanews; CARE is pulling out. Address: Utah.

318. Jayasena, Hewage. 1985. Re: History of his involvement with soybeans, and the development of soybeans in Sri Lanka. Letter to William Shurtleff at Soyfoods Center, March 20. 3 p. Typed, with signature. *Summary:* "My interest in soya grew because I was drawn to the advertisement of the so-called 'Multi-purpose Food' [MPF] introduced into parts of Asia as the 'Wonder food' by the Meals for Millions Foundation of California, U.S.A. The chief reason for my interest in nutrition was a result of my being appointed to the office of Joint Secretary of the

National Development Enquiry Committee of the All Ceylon Buddhist Congress by the late Dr. G.P. Malalasekara. Under this program I came to serve as the Secretary of the Health Enquiry Committee under the National Development Enquiry programme and hence my interest in nutrition and in the 'wonder food' of soybean called MPF, consisting of toasted soybean meal enriched with vitamins and minerals... I was a layman and it was a committee of volunteers who carried out this programme as a public service.

"The date I originally got involved with Meals for Millions..." was about 1959. Miss Florence Rose came to Sri Lanka in July 1955 to introduce MPF. She succeeded in organising the Ceylon Meals for Millions Affiliate under the aegis of the Ceylon Red Cross Society. However it was after about 1960 that the pursuit of soyabean popularisation was vigorously pursued.

Attempts to grow the soybean here started as early as 1937 and preliminary work had been done by the Department of Agriculture to develop inoculation procedures for the population of soyabean cultivation in Sri Lanka. "I can recall reading in the Hansard [the traditional name for the printed transcripts of parliamentary debates] about soyabean cultivation having been referred to in the Parliament as requiring encouragement.

"The real thrust for soybean development in Sri Lanka came after the visits of Miss Florence Rose, former Executive Secretary of the Meals for Millions Foundation in the U.S.A. This was after her second visit in 1964 when the Ceylon Meals for Millions Council was set up. This particular meeting was arranged when she was here on a brief visit and the meeting itself was sponsored by the Junior Chamber of Colombo and at that meeting I was appointed to function as the Secretary of the Meals for Millions Council. It was this Meals for Millions Council that was later reorganised as the Ceylon Meals for Millions Foundation. Professor C.D. de Silva was elected President of the Ceylon MFM Council and later of the... Foundation. This organization... now exists only in name.

"As regards soybean cultivation itself, the greatest impetus to it came after the work of Dr. Walter Fernando who successfully developed soybean varieties suitable for cultivation in the dry zone of Sri Lanka. Much of this breeding of cultivars was developed by the Dry Farming Research Station at Maha Illuppallama. Even earlier work had been carried out in cultivating the black varieties of soybean in Rahangala, the hill country of Sri Lanka.

"Even before this, or rather as the initial steps were being taken to promote the development of soybean as a crop, I had been in touch with Mr. Fred Hafner of General Mills through introduction from the MFM Foundation U.S.A. to explore the possibility of introducing soybean meal into the market. This was attempted when Mr. Fred Hafner was Director of Protein Operations at General Mills. Unfortunately this effort was not successful because there was little encouragement at that time for foreign investment." After he left General Mills, Fred was a consultant to some food manufacturer in Japan. "He is from Minneapolis and I have not heard from him for quite some time now."

When Col. Saunders (who lives in California) succeeded Florence Rose, he visited Sri Lanka and I was offered an opportunity to undergo training at the MFM Training School in Santa Monica, California in 1971.

"Upon my return to Sri Lanka from training at MFM in California I did submit proposals for the setting up of a mixing plant using imported soy grits for a start to produce a kind of MFM here, but this proposal did not find support.

"An important development after 1971 in regard to Soyabean was the *Poshana* Exhibition held in Sri Lanka which too gave considerable impetus to soybean development in Sri Lanka. The Exhibition was held under the Ceylon MFM Foundation auspices.

"Much of the development thereafter, from about 1973, came through Government initiative and developments which you probably have been able to document from various sources.

"In 1971 when I was at MFM Training Institute at Santa Monica I had the privilege of meeting Mr. Ernest R. Chamberlain [age 80] who was for a long time the secretary of the Meals for Millions Foundation and who, with Mr. Clifford Clinton, Dr. Henry Borsook and Miss Florence Rose pioneered the development of the Meals for Millions in the U.S.A. and developed it into a worldwide activity." But today it stands much muted due to a host of developments which have since taken place.

Mr. Chamberlain told me that he wanted to attempt to write the history of the Meals for Millions Foundation and he sent me some of the first notes prepared by him in this respect. Presumably he could not complete his work because of his advanced age and for other reasons. I can send photocopies of this material if it will interest you.

"For various reasons I have not been able to preserve all the records of Meals for Millions which I had accumulated over time. But I still have some records which I can share with you if you are interested.

"Part of the reason why there is this gap in information was because when I went to the U.S.A. for training on soybean work in 1971, I gave away my files and did not get them back because I was not re-elected as the secretary of the MFM Foundation, which at that time I had served as Secretary / Treasurer ad later as Secretary for more than a decade, all the work having been done in an honorary [volunteer] capacity... Hence my difficulty in tracing events chronologically.

"If there is any way in which you think I can be helpful, please do not hesitate to avail yourself of my services."

Note: A search of the Web for Hewage Jayasena shows that he was interviewed in March 1994 in Colombo, Sri Lanka by a person from the International Development Research Center (IDRC-CRDI) of Canada. Address: 185 Baseline Rd., Borella, Colombo 9, Sri Lanka.

319. Meals for Millions / Freedom from Hunger Foundation. 1985. Annual report 1984: Self-help for a hungry world. Davis, California: MFM / FFH Foundation. 16 p. 21.5 x 9.5 cm.

• *Summary:* Peter J. Davies is no longer president after "eight years of inspirational direction." Thomas C. Veblen is chairperson, board of trustees. The introductory message is given by Tom C. Veblen. On the green, black and white cover is a photo of a older man holding a young child. MFM has a new logo, a stylized upright plant in the middle of a stylized globe, on the front cover.

Gifts for program support totalled \$2.474 million in 1984, up 31% over 1983. "In addition, \$492,783 of Capital Campaign gifts helped Meals for Millions complete the funding of its International Center."

"A few days before the April 15 deadline, MFM raised the \$975,000 required to qualify for a \$225,000 Challenge Grant from the Kresge Foundation, completing a \$1.2 million campaign to fund our new International Center in Davis, California." A photo apparently shows the new building. Address: 1644 DaVinci Court, P.O. Box 2000, Davis, California 95617. Phone: (916) 758-6200.

320. Shurtleff, William; Aoyagi, Akiko. 1985. History of soya and the soybean development program in Sri Lanka. Soyfoods Center, P.O. Box 234, Lafayette, CA 94549. 31 p. April 16. Unpublished typescript.

• *Summary:* www.soyinfocenter.com/HSS/ AsSoSriL1. A comprehensive history of the subject. Contents: Introduction. Demographic background. Early history of soya in Sri Lanka. Meals for Millions in Ceylon (1955-1972). Establishment of Sri Lanka soybean development program. A brief chronology of key events: 1973-. Activities of the soybean development program: summary. Soybean production project. Soyanews. The Soyabean Foods Research Center. Role of Sri Lankan government and Thriposha. Commercial production of soyfoods. Institutional use of soyfoods: hospitals, prisons. Ongoing training abroad. Future prospects for soybeans and soyfoods. Conclusion.

Note: By the year 2000 it was clear that the soybean programs that had been so active during the period from 1955 to 1990 had not succeeded in helping the soybean to take root permanently in Sri Lankan food culture and agriculture. We would suggest several reasons. (1) The Meals for Millions program ended up as basically a food giveaway program, which was unsustainable. (2) The program that involved the University of Illinois and

Executive Staff

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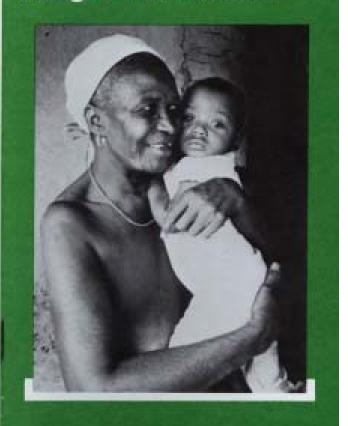
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Meals for Millions Freedom from Hunger Foundation 1644 DeVinci Coart P.O. Box 2000, Davis, CA 95617 (916) 758-6200 Self-Help for a Hungry World

Meals for Millions Freedom from Hunger Foundation



Annual Report for 1984

INTSOY was conceived by the government with relatively little focus on starting new business in Sri Lanka. When the government lost interest or money, the program stalled and eventually fizzled out. (3) The Soyabean Foods Research Center used state of the art technology from the USA and Europe. But this technology was inappropriate in Sri Lanka except for potential large soyfood processing businesses. The Center would probably have been much more effective if it had been conceived as a center where people who wanted to start new businesses came to learn how to make soyfoods, such as tofu, soymilk, soy yogurt, roasted soy flour, etc., then returned home with a small loan and with the necessary equipment, plus plenty of follow-up from the program. (4) The idea of making soyfoods at home has never worked anywhere in the world; it takes too much time. Making them on a village level will work if the village is large enough to support one person who makes the soyfoods or, equally good, if a group of people in the village forms a cooperative, individuals or small teams can make one or more soyfoods on a rotating basis. That way each member would get fresh soyfoods each day free of charge. (5) The program gave little emphasis to edamame / green vegetable soybeans as a new garden vegetable. (6) From about 1983 until 2009 there was a terrible civil war in Sri Lanka between the militant Tamil Tigers in the north and the government of Sri Lanka in the south. The Tigers fought to create an independent Tamil state named Tamil Eelam in the north and the east of the island. After a 30 year long military campaign, the Sri Lankan military defeated the Tamil Tigers in May 2009. But this war took the government's attention and resources away from many other worthwhile projects-including soybeans and soyfoods. Address: Lafayette, California. Phone: 415-283-2991.

321. Jayasena, Hewage. 1985. Re: Current developments. Letter to William Shurtleff at Soyfoods Center, July 23. 1 p. Typed, with signature.

• *Summary:* There was a little peace though violence by the [Tamil] terrorists has again broken out in the North. He has just returned from attending the 18th World Conference of the Society for International Development, which was held in Rome from July 1-4. He will answer Shurtleff's several enquiries about soybeans and Meals for Millions in Sri Lanka within the next few weeks. Address: 185 Baseline Rd., Colombo 9, Sri Lanka.

322. Harper, Judson M.; Jansen, G. Richard. 1985. Production of nutritious precooked foods in developing countries by low-cost extrusion technology. *Food Reviews International* 1(1):27-97. [53 ref]

• *Summary:* Contents: Introduction: Importance of weaning foods, centrally processed weaning foods, transition from imported to locally processed weaning foods. Manufacturing alternatives: Extrusion processing, roller

drum drying process, spray drying process, baked products line, milling process, selection of alternative processes, production capacity range, capital costs, operating costs, type of weaning food product, type of packaging, local equipment, energy, skill requirements, sanitation requirements, summary. Capabilities and limitations of LECs: Characteristics of low-cost extrusion cookers, Brady extruder (M&N Distributors, Torrance, California; or CIATECH, Chihuahua, Mexico), Insta-Pro extruder (Div. of Triple "F" Feeds, Des Moines, Iowa), Anderson extruder (Cleveland, Ohio), summary of LEC characteristics. Cost associated with LEC plants: Elements of a LEC plant, plant costs, manufacturing costs, project planning and implementation, preliminary study, project implementation. Cereal/legume blends: Specifications, energy, protein, dietary fiber, vitamins and minerals, ingredients, storage stability, calorie density, protein quality evaluation (corn/ soy blends, corn/sorghum blends with cottonseed), metabolic studies in human infants and preschool children (extruded corn/soy blends, extruded sorghum). Full-fat soy flour: Storage studies, protein nutritional value, rat growth evaluation, baking study, potential utility of extrusion processed full-fat soy flour. Applications in developing countries: Sri Lanka (1976, Thriposha). Costa Rica (1976, 1979, Frescorchata). Tanzania (May 1978, Lisha). Guyana (1979, Cerex). Mexico (CIATECH 1978, many products), other commercial applications (Pro-Nutre in San Jose, Costa Rica; Maisoy in Santa Cruz, Bolivia), miscellaneous developments (INCAP in Guatemala, Meals for Millions in Korea, PINFST in the Philippines, Thailand, Leche Arroz in Ecuador {an extruded mixture of ground broken rice and whole soy}). Technology transfer (Colorado State University). Discussion. Summary. Sources of funding for this publication.

Figures: (1) Graph of infant mortality rate vs. duration of breast feeding for 19 countries (mostly developing countries). In general, the longer the breast feeding, the greater the infant mortality. (2) Extruder, showing rotating screw which forces product through a discharge die. (3) Typical extrusion process for food production (from storage bin to packaging). (4) Schematic of roller drum drying process for food production. (5) Typical spray drying process for weaning food production. (6) Systematic of baking line to make biscuits. (7) Systematic of simple missing process. (8) Cross sectional schematic of Brady extruder. (9) Photo of Insta-Pro 500 extruder. (10) Anderson extruder showing braker bolts, water / steam injectors, and face cutter. (11) Diagram of sequential processing operations of a LEC processing plant. (12) PERT chart showing key steps in feasibility study to establish essential process parameters. (13) PERT chart showing steps necessary to complete a central processing facility for weaning foods. (14) Viscosity of uncooked or cooked gruels made from raw dehulled corn or dehulled corn extruded

from a Brady extruder at 149°C. (15) Inside Thriposha LEC plant (in Sri Lanka; LEC started in 1976). (16) Four labels of packaged Thriposha products. (17) Outside front of Costa Rica LEC plant. (18) Four packages of Lisha baby food (Tanzania). (19) Four plastic laminated bags used to package Cerex in Guyana.

Also contains 18 tables-many related to soy.

Note 1. The LEC project in Korea (p. 91) uses a lower capacity extruder (less than 100 kg/hour) designed by the Meals for Millions Foundation (MFM) and constructed by the Korean Institute of Science and Technology (KIST). This extruder is made from parts that are easily available and consists of a screw 6.35 cm in diameter and 63.5 cm long driven by 22.3 kW (30 HP) electrical motor. A nutritious snack has been made for the Wonseong County Comprehensive Nutrition Program using the MFM LEC (see Cheigh 1984).

Note 2. This is the earliest and only document seen (Jan. 2011) that mentions "Leche Arroz." It appears to be a beverage resembling a mixture of rice milk and soymilk, made from rice that might otherwise go to waste. Good idea! Address: Colorado State Univ., Fort Collins, Colorado.

323. Patterson, Glenn; Bray, Walter J.; Larson, Patricia Butzer. 1985. The puffing machine for quick cooking of cereals & legumes. Davis, California: Meals for Millions / Freedom from Hunger Foundation. 28 p. Illust. 22 cm. *Summary:* Contents: Introduction. Nutritional considerations. The puffing machine. Operating the puffing machine. Safety. Heating sources. Maintenance. Producing a good product. A puffed-food business. Conclusion.

Describes a small, hand-operated metal chamber that holds grain or legumes over an open fire, until the contents reach the right temperature to pop–or puff. Many photos and several drawings show the puffing machine.

Note: Single copies are available free of charge by writing the Foundation. Address: 1-2. PhD; 3. Editor. All: P.O. Box 2000, Davis, California 95617. Phone: (916) 758-6200.

324. Meals for Millions / Freedom from Hunger Foundation. 1986. Annual report 1985: Self-help for a hungry world. Davis, California: MFM / FFH Foundation. 16 p. 21.5 x 9.5 cm.

• *Summary:* Harlan H. Hobgood is the new president (elected in Aug. 1985). "He has a long development career as a Senior Officer in the U.S. Foreign Service, mostly in overseas development assignments." Tom C. Veblen is chairperson, board of trustees.

On the tan, black and white cover is a photo of a boy sowing seeds in a field of corn / maize.

Public support and revenue totalled \$3.095 million in 1985, up 25% over 1984. Three pie charts show where the money came from and where it went. A portrait photo shows

Harlan Hobgood. Address: 1644 DaVinci Court, P.O. Box 2000, Davis, California 95617. Phone: (916) 758-6200.

325. News Briefs (Meals for Millions, Davis,

California).1986. MFM (Meals for Millions) celebrates 40 years of dedicated service to millions of the world's hungry and malnourished. Sept. p. 3-4.

• *Summary:* "A glance through Meals for Millions' archive. Phase I: Relief.

"1956: Albert Schweitzer has word for Multi-Purpose Food: 'Wonderful.'" Dr. Schweitzer "would like much more 'if it is possible for you to be so generous.' 'It is wonderful food,' Schweitzer said. 'The patients like it and it does them great good. The leper village especially finds it a real help.

"The way it is packed, in small tins and not too large cartons, makes it easy to store and handle. The tins are the right size and are packed just right for the rigorous tropical climate." A photo shows Dr. Schweitzer with patients at his hospital at Lambarene, Gabon.

"1961: Dooley's 'Third Hand' still serves mankind. Six months before his death from cancer in his 34th year [on 18 Jan. 1961], Dr. Tom Dooley vividly characterized Multi-Purpose Food as his 'third hand' in surgical and medical practice in his Muong Sing jungle hospital in Laos. 'I use Meals for Millions,' he said, 'as an instrument of good, an instrument of compassion... every single day... you could say that MPF is Dooley's third hand... You have helped MEDICO programs in Vietnam, Laos, Kenya, Cambodia and Peru.'"

"As a living memorial to Dr. Dooley, MFM has pledged an additional 25,000 pounds of MPF to MEDICO." A photo shows Dr. Tom Dooley distributing Multi-Purpose Food at his hospital; he is holding one of the larger cans.

"Phase II: Technology and training.

"1970: 'Meals for Millions, a non-governmental foundation, is successfully utilizing free enterprise methods to help starving people throughout the world. Their educational program of self-help is one of the finest agencies in the humanitarian task of alleviating hunger.'– Governor [of California] Ronald Reagan.

"1976: MFM launches Korean Program. A comprehensive nutrition program in a very poor, rural part of Korea, Wonseong County, was launched by MFM in 1976."

"1979: Foods for Small Children. Fourteen village development workers from eleven Third World nations attended MFM June 1978 Training School focusing on 'Foods for Small Children." MFM has trained food technicians since 1967 at its Santa Monica laboratory and plant.

"Phase III: Education and expansion. 1981: Nutrition project planned for Thailand. 1982. African training program gets off to good start" in Kenya. Note: Harlan H. Hobgood is president of Meals for Millions / Freedom from Hunger Foundation; his portrait photo is shown. The subtitle of these News Briefs is "Self-Help for a Hungry World." Address: P.O. Box 2000, Davis, California 95617.

326. Steinbeck, John (Mrs.). 1986. Re: Dear MFM
Supporter. Letter to MFM Supporters. 2 p. Back to back.
Typed, with signature on letterhead. Undated. *Summary:* This fundraising letter mentions Ecuador,
Nepal, Sierra Leone (West Africa), etc. Address:
Chairperson, National Committee of Sponsors, P.O. Box
2000, Davis, California 95617. Phone: (916) 758-6200.

327. Jayasena, Hewage. 1987. Re: Additional remarks on work with soybeans and Multi-Purpose Foods in Ceylon. Letter to William Shurtleff at Soyfoods Center, March 25. 4 p. Typed, with signature. [5 ref]

• *Summary:* "Dr. Mrs. Beatrice V. de Mel refers to the introduction of the soyabean to Sri Lanka [sic, to USA] in 1804. The English version of her article on the 'Wonder Bean' is not available to me. But I have a translation of this particular article into Sinhalese which I can supply you if needed."

Note: Mr. Jayasena corrected the error of the 1804 date (with sincere apologies) in a letter of 19 Dec. 1989.

Mr. Jayasena then offers many specific comments on Soyfoods Center's draft manuscript "Sri Lanka: Soya Pioneer in the Third World (1726, 1979-1980s). "Page 7 paragraph 'Meals for Millions in Sri Lanka.' I am enclosing for you a 'Distribution Summary of Multipurpose Food' called 'Friendship Food' from Sept. 1946 to May 15, 1963. Apparently, according to this table, shipments to Sri Lanka have been coming from as early as Sept. 1946, the first shipments having gone to the Ceylon Red Cross. I came into the scene long after.

"In last paragraph page 7 you pose the question (how?). We tried to interest the Government in relaxing their import policies to enable this food to be imported into the country through trade channels. Last line 'A National Health Plan for Ceylon' was published in 1962. I will be sending you a copy of this book by air mail later under separate cover. This report did not mention MPF. Lever Bros. interest was shown by the participation of their representatives in the Ceylon Freedom from Hunger Campaign and their representation in the Ceylon Meals for Millions Foundation.

"The work of the Meals for Millions Council was mainly confined in the early stages to stimulating Governmental interest in the cultivation of soyabean as an agricultural crop. My paper on 'Meals for Millions and Multipurpose Food' was prepared in 1963. I am sending you a copy of it. I cannot recall of the 2 page note you refer to (on page 8) written by me. "Page 9 'Poshanaya Exhibition.' The work about the food exhibition was done by Mr. Nelson Wijenayaka, the then secretary of the Meals for Millions Foundation, who succeeded me in my absence... I cannot give a figure of the number of people who attended the exhibition, but it as well publicised by the Press... I am enclosing a copy of a circular letter he had written to stimulate interest by inviting participants for the Exhibition, which was held in Feb. 1974. The then Minister of Agriculture, Mr. Henctor Kobbekaduwa declared open this food and nutrition Exhibition, which was held at Colombo for several days and was well attended. Enclosed is a photocopy of a full report of my Food and Food Substitutes...

"I do not have a copy of the publication on soyabean issued on that occasion; I have only a Sinhalese copy now. I do not know who has an English one. It is not available in the Agricultural Department Library.

"I believe the Clementa Bocobo report referred to in my paper also mentioned the potential of soya for meeting the problem of malnutrition in Sri Lanka.

"As for the reports of Dr. Hill, none of them appear to have been published. I enclose for your information a reply I have received from Mr. Cecil D. Dharmasena, the Project Coordinator of the Sri Lanka Soyabean Project about Dr. Hill's reports.

"As regards the questions raised in your letter dated 16th April, 1985:

"Dr. Walter Fernando is now retired from his position as Director of the Department of Agriculture, and is engaged as an agricultural consultant."

Mr. Fred Hafner even produced an appeal addressed to U.S. Senators and Congressmen. General Mills archives in Minnesota should have a copy of this. I too received sample copies, which I cannot trace immediately.

"My date of birth is 24 June 1925." Your paper "tends to give too much credit to my work. True enough I played a crucial role, but at best my own contribution was marginal. It was the work of the Department of Agriculture and the work of dedicated officers like Dr. Walter Fernando and his other colleagues in the Department who helped to make the success that soya has attained in this country agriculturally, though its consumption isn't so widespread as it should be."

Among the many who have worked for the Meals for Millions Foundation are: "Professor C.C. De Silva helped to promote the work of the soyabean as a potential crop, pushing it as a pediatrician. He was for a long time the head of the Chief Children's hospital in Sri Lanka besides being the Professor of Pediatrics at the University Medical Faculty." Many other names are mentioned.

"With the death of Mr. Nelson Wijenayaka, the work of the Meals for Millions Foundation suffered a setback." There is now an attempt to revive its activities. "I am however no longer active in the programme at present. "With the work of the Soya Project of the Dept. of Agriculture making headway, the contribution of the Meals for Millions Foundation in the programme became less and less important. So the emphasis in your paper may well be on the bearing it had in the early stages of the development of soyabean in Sri Lanka."

He sends several black and white photos. Address: 185 Baseline Rd., Colombo 9, Sri Lanka.

328. Meals for Millions / Freedom from Hunger Foundation. 1987. Annual report 1986: Turning heartache into joy. Davis, California: MFM / FFH Foundation. 40 p. Each 21.5 x 9.5 cm.

• *Summary:* Harlan H. Hobgood is president. Thomas C. Veblen is chairman, board of trustees. On the tan, brownish-orange and black cover is a photo of the face of a girl smiling.

Public support and revenue totalled \$3.543 million in 1986, up 13% over the previous year. Three pie charts show where the money came from and where it went. Photos show: (1) The regional directors. (2) Tom Veblen. (3) Harlan Hobgood. Address: 1644 DaVinci Court, P.O. Box 2000, Davis, California 95617. Phone: (916) 758-6200.

329. *News Briefs (Freedom from Hunger Foundation, Davis, California)*.1988. Freedom from Hunger: A name that says it all. We've shortened our name to get right to the point. 41(1):1-2. Jan.

• *Summary:* "Meals for Millions / Freedom from Hunger Foundation has shortened its name. Now we are known as Freedom from Hunger Foundation."

In 1979, Meals for Millions merged with the American Freedom from Hunger Foundation which was founded in 1962 by John F. Kennedy. The merger allowed Meals for Millions to greatly expand our impact on the hungry of our world.

"For nine years we've maintained a dual identity. But now in recognition of our commitment to finding permanent solutions to hunger and malnutrition, we're making this name change.

"It's really not a new name-just shorter and simpler."

A photo shows Harlan H. Hobgood, President, replacing the old name with the new shortened version in the FFH headquarters (Davos, California).

Note: This is the earliest document seen (Dec. 2010) that mentions the name change, which took place in January. Address: P.O. Box 2000, Davis, California 95617.

330. *News Briefs (Freedom from Hunger Foundation, Davis, California)*.1988. Meet our Board of Trustees: Meet Thomas R. McBurney, Vice Chairman, Board of Trustees. 41(1):4. Jan.

• *Summary:* "Tom McBurney is Chairman of the U.S. Foods Group of the Pillsbury Company. That gives Tom

responsibility for all the Pillsbury products you see on the grocery store shelves. He and his wife, Barbara, live in the Minneapolis [Minnesota] area." Tom joined the board of trustees in 1983.

"Next to preventing nuclear war, I think hunger and malnutrition are probably the most important problems we face today."

"'I'm also pleased that my company, Pillsbury, is supporting the FFH program in Bolivia with both funds and technical assistance... I strongly believe in what FFH is doing. We're making real progress in long-term development projects based on self-help principles. There is also a real focus on children and creating a better world for the next generation. Besides all that, the programs are staffed by some terrific people. Their skills and commitment are outstanding. That's why I'm so enthusiastic about being involved.'"

A photo shows Thomas R. McBurney. Address: P.O. Box 2000, Davis, California 95617.

331. Freedom from Hunger Foundation. 1988. Annual report 1987: From hunger to hope–We are making a world of difference. Davis, California: FFH Foundation. 40 p. Each 21.5 x 9.5 cm.

• *Summary:* Harlan H. Hobgood is president and CEO. Tom C. Veblen is chairman, board of trustees. On the purple, black and white cover is a photo of the face of a girl in pigtails smiling.

Public support and revenue totalled \$3.533 million in calendar year 1987, down 0.2% from the previous year. Three pie charts show where the money came from and where it went. Photos show: The regional directors. Tom Veblen. Harlan Hobgood.

During the past year the organization changed (and shortened) its name.

Clifford Clinton, founder of Meals for Millions in 1946, liked to say: "Bridge the ideal with the possible." Address: 1644 DaVinci Court, P.O. Box 2000, Davis, California 95617. Phone: (916) 758-6200.

332. Harper, J.M. 1988. Interview with Mr. Mark H. Sterner on his work with LECs. *LEC Newsletter* 12(2):1-3. July. *Summary:* "Feature personality... Beginning with this issue, the LEC Newsletter will feature one of these groups or individuals. We contacted Mark Sterner for our first profile, because he has been associated with the LEC project almost from the start of the concept. He has made a number of contributions to the literature and the world through the expertise he possesses."

"LEC: What are you currently involved with in your work?

"MHS: I am with Island Empire Foods, a company I started about three years ago."

"LEC: When did you first become interested in extrusion processing as a method for manufacturing soybased foods?

"MHS: Back in 1970, by watching an extruder at Wenger Manufacturing operate in Sabetha, Kansas. Just seeing one operate and being somewhat amazed at the possibilities that exist started me thinking.

"LEC: After your initial exposure, you began work at Meals for Millions Foundation. What were you doing there?

"MHS: I was interested in becoming more familiar with extrusion, and the opportunity arose at Meals for Millions to set up a training program and a pilot lab for different companies to come in and do test work at Meals for Millions.

"LEC: What kind of extruders did you first have at Meals for Millions?

"MHS: When I first started, they only had a Wenger X-5 on which we did some screw design work and parts changing to allow us to texturize protein. We sent a film to Wenger showing their X-5 texturizing protein, which was a first on this equipment.

"LEC: Didn't Meals for Millions mostly use Sprout-Waldron extruders?

"MHS: Sprout-Waldron had manufactured an extruder for the pet food industry and they wanted to get into human food products. They had enough interest and faith in it that they were willing to go ahead and donate a machine to Meals for Millions which we modernized to make it capable of texturizing protein."

LEC: Why did you move away from testing existing machines and start to design your own MFM extruder made from local parts [found in developing countries].

MHS: People from developing countries who came to our training program where they learned to use extruders (made in the USA) couldn't afford such an imported extruder, so the need for a locally built extruder kept arising.

"LEC: Next, you designed a small-scale extrusion machine [the village texturizer] and provided plans to interested people. How many of these machines were manufactured?

"MHS: We don't know exactly because we produced units at Meals for Millions and also through a joint venture with the Korea Institute of Science & Technology [KIST, Seoul, Korea] for their use in Korea and Asia.

"LEC: Is it still possible for people to get plans to build their own machine?

MHS: Yes, definitely from KIST and probably from Meals for Millions (P.O. Box 2000, Davis, California 95615 USA). Address: Inland Empire Foods, 1710 Palmyrita Ave., Suite 8, Riverside, California 92507.

333. *News Briefs (Freedom from Hunger Foundation, Davis, California)*. 1988. Arizona's Growing Connections.

Nov. p. 1.

• *Summary:* "Freedom from Hunger Foundation began 'Sow and Grow,' a gardening-based nutrition program for elementary school children in Tucson, Arizona in 1984. It started with one school in an impoverished area. But today, 22,000 local children have been reached by this program in 38 schools in Tucson, three of them on the Tohono O'Odham (Papago) Indian Reservation. A total of 390 teachers have attended a two-day training workshop and received a comprehensive teaching guide and lesson plans."

"An exciting new nonprofit organization, 'Growing Connections' has now evolved out of our original 'Sow and Grow' program in Tucson."

A photo shows an elementary school girl on her knees, working intently in the garden. Address: P.O. Box 2000, Davis, California 95617.

334. *LEC Newsletter*.1989. Whole raw soybeans texturized. 13(1):7-8. Jan.

• Summary: Until now, the manufacture of textured plant proteins has required the use of defatted oilseed flours which have received little or no heat treatment. Some years ago Hank and Mark Sterner, while employed by Meals for Millions, developed an innovative LEC, the design of which was subsequently taken over by the Korean Inst. of Science and Technology [KIST] in Seoul. Paul Allred, of Riverside, California, is a retired Seventh-day Adventist who has worked extensively on extrusion processing with Wenger equipment in Mexico. He directed a project in Navojoa, Mexico, which now uses several X-25 extruders to make standard textured soy protein products. Recently Mr. Allred observed that the Sterner screw design permits texturization of oilseeds without removal of the oil. The resulting product has a typical textured soy protein structure and a pleasant roasted soy flavor. The extra oil in the product makes it much more palatable directly from the extruder. Allred recently made parts for a Wenger extruder located at Africa Basic Foods in Uganda. He believes these will enable that machine to texturize whole (undefatted) soybeans. Address: Colorado State Univ., Ft. Collins, Colorado.

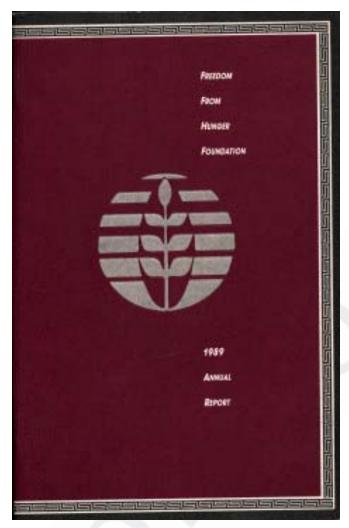
335. Freedom from Hunger Foundation. 1989. Annual report 1988: Self-help in a hungry world. Davis, California: FFH Foundation. 40 p. Each 23 x 10.6 cm.

• *Summary:* David C. Crowley is the new President and CEO. Tom C. Veblen is chairman, board of trustees. On the light green, darker green, black and white cover is a photo of the face of a girl smiling.

Public support and revenue totalled \$3.178 million in calendar year 1988, down slightly from the previous year. Three pie charts show where the money came from and where it went. Freedom from Hunger loaned funds to a women's group in Togo.

Photos show: David C. Crowley. A map of the world shows the countries in which FFH is operating. Address: 1644 DaVinci Court, P.O. Box 2000, Davis, California 95617. Phone: (916) 758-6200.

336. Freedom from Hunger Foundation. 1990. Annual report 1989. Davis, California: FFH Foundation. 28 p. Each 22 x 14 cm.



• *Summary:* David C. Crowley is President and CEO. Susan Cleary Garratt is the new chair, board of trustees. She says: "There is no greater cause than helping others to realize their full potential."

David Crowley says: "This has been a year of exciting progress for us as we helped people throughout the world free themselves from chronic hunger.

"We successfully transferred our programs in Kenya and Sierra Leone to our in-country collaborators during the year, fulfilling our mission of leadership and development.

"In 1989 we launched credit-led nutrition education projects in Mali and Thailand... Because of the early success of the credit / nutrition education projects, similar projects are being implemented in 1990 in Bolivia, Ghana, and Honduras."

On the purple, light green, darker green, and white cover is the FFH logo (large, embossed, and at the center). This is the first FFH annual report that is not comprised of one large sheet of paper, printed on both sides, folded like a road-map.

Public support and revenue totalled \$2.850 million in calendar year 1989, down 11.3% from the previous year. Three pie charts show where the money came from and where it went.

Photos show: (1) David C. Crowley. (2) Susan Cleary Garratt. A map of the world shows the countries in which FFH is operating. Address: 1644 DaVinci Court, P.O. Box 2000, Davis, California 95617. Phone: (916) 758-6200.

337. Shurtleff, William; Aoyagi, Akiko. comps. 1990.
Bibliography of soy flour and cereal-soy blends: 3,085
references from the 3rd century B.C. to 1990, extensively annotated. Lafayette, California: Soyfoods Center. 427 p.
Subject/geographical index. Author/company index.
Language index. Printed June 6. 28 cm. [3085 ref] *Summary:* This is the most comprehensive bibliography ever published on soy flour and cereal-soy blends. It is also the single most current and useful source of information on

the single most current and useful source of information on this subject available today, since 56% of all references (and most of the current ones) contain a summary/abstract averaging 84 words in length.

One of more than 40 bibliographies on soybeans and soyfoods being published by the Soyfoods Center, it is based on historical principles, listing all known documents and commercial products in chronological order. Containing 32 different document types (both published and unpublished, including many original interviews and partial translations of Japanese and European works), it is a powerful tool for understanding the development of this subject and related products from its earliest beginnings to the present, worldwide.

Compiled one record at a time over a period of 15 years, each reference in this bibliography features (in addition to the typical author, date, title, volume and pages information) the author's address, number of references cited, original title of all non-English publications together with an English translation, month and issue of publication, and the first author's first name (if given).

It also includes details on 653 commercial soy flour products, including the product name, date of introduction, manufacturer's name, address and phone number, and (in many cases) ingredients, weight, packaging and price, storage requirements, nutritional composition, and a description of the label. Sources of additional information on each product (such as references to and summaries of advertisements, articles, patents, etc.) are also given. Details on how to use the bibliography, a complete subject and geographical index, an author/company index, a language index, and a bibliometric analysis of the composition of the book (by decade, document type, language, leading periodicals or patents, leading countries, states, and related subjects, plus a histogram by year) are also included. Address: Soyfoods Center, P.O. Box 234, Lafayette, California 94549. Phone: 510-283-2991.

338. Shurtleff, William; Aoyagi, Akiko. comps. 1990. Bibliography of soybean crushing, soy oil, and soybean meal: 4,183 references A.D. 980 to 1990, extensively annotated. Lafayette, California: Soyfoods Center. 647 p. Subject/geographical index. Author/company index. Language index. Printed Nov. 9. 28 cm. [4183 ref] • Summary: This is the most comprehensive bibliography ever published on soybean crushing, soy oil, and soybean meal. Its scope also includes: Statistics on the soybean oil and meal industries, use of soybean meal in feeds, use of soybean cake or meal as a fertilizer, and the efficiency of animals in converting feeds into human foods. It is one of the most useful sources of information on this subject available today, since 53% of all references (and most of the early and current ones) contain a summary/abstract averaging 121 words in length.

One of more than 40 bibliographies on soybeans and soyfoods being published by the Soyfoods Center, it is based on historical principles, listing all known documents and commercial products in chronological order. Containing 36 different document types (both published and unpublished, including many original interviews and partial translations of Japanese and European works), it is a powerful tool for understanding the development of this subject and related products from its earliest beginnings to the present, worldwide.

Compiled one record at a time over a period of 17 years, each reference in this bibliography features (in addition to the typical author, date, title, volume and pages information) the author's address, number of references cited, original title of all non-English publications together with an English translation, month and issue of publication, and the first author's first name (if given).

It also includes details on 54 commercial soy products, including the product name, date of introduction, manufacturer's name, address and phone number, and (in many cases) ingredients, weight, packaging and price, storage requirements, nutritional composition, and a description of the label. Sources of additional information on each product (such as references to and summaries of advertisements, articles, patents, etc.) are also given.

Details on how to use the bibliography, a complete subject and geographical index, an author/company index, a language index, and a bibliometric analysis of the composition of the book (by decade, document type, language, leading periodicals or patents, leading countries, states, and related subjects, plus a histogram by year) are also included. Address: Soyfoods Center, P.O. Box 234, Lafayette, California 94549. Phone: 510-283-2991.

339. Freedom from Hunger Foundation. 1991. Annual report 1990: Self-help for a hungry world. Davis, California: FFH Foundation. 6 p. 28 cm.

• *Summary:* Christopher Dunford, PhD is the new president. Thomas R. McBurney is the new chair, board of trustees; he had been the vice-chair since Jan. 1988. During the long term of these two men, FFH will undergo a major, very positive transformation.

On the beige, gray and black cover is the green FFH logo and a photo of a girl (see next page). This is the first FFH annual report to have a full-page (8½ by 11 inch) cover.

Public support and revenue totalled \$2.579 million in calendar year 1990, down 10.6% from the previous year. Three pie charts show where the money came from and where it went. A map of the world shows the countries in which FFH is operating. Address: 1644 DaVinci Court, P.O. Box 2000, Davis, California 95617. Phone: (916) 758-6200.

340. Freedom from Hunger Foundation. 1992. Annual report 1991: Strategies for the nineties. Building on 45 years of experience. Davis, California: FFH Foundation. 14 p. 28 cm.

• *Summary:* Christopher Dunford, PhD is president. Thomas R. McBurney is chair, board of trustees. On the cover is a photo of a woman writing. Public support and revenue totalled \$2.707 million in calendar year 1991, up 4.9% from the previous year. One pie chart show where the money went. A map of the world shows the six countries in which FFH is operating. For the first time, the pages of the report are numbered.

Page 5 is titled "Credit with education." A table (p. 5) is titled "Status of credit association loans by country, December 1991." The five countries are Bolivia, Ghana, Honduras, Mali, Thailand, and worldwide. For each is given: Date of first loan (the earliest was Dec. 1988 in Mali, followed by July 1989 in Thailand). Number of credit associations (range from 8 in Honduras to 35 in Mali; total 96 worldwide). Number of borrowers (range from 129 in Honduras to 589 in Mali; total 1,988 worldwide). Average size of loan (range from \$38 in Mali to \$108 in Ghana; \$64 worldwide). Outstanding loans (total \$93,369 worldwide). Repayment rate (range from 74% in Ghana to 100% in Honduras; worldwide 93%).

For the first time there is a list of the major contributors, arranged by dollar amount contributed.

Note: 1992 is a "stub year," with no annual report. In 1993 the fiscal year will end June 30 instead of Dec. 31.



MEMBER OF INTERNATIONAL SERVICE AGENCY CFC #0314

SELF-HELP FOR A

HUNGRY WORLD

"Freedom from Hunger develops innovative programs for allevisting chronic hunger by providing resources and information that empower families and communities to help themselves."



Address: 1644 DaVinci Court, P.O. Box 2000, Davis, California 95617. Phone: (916) 758-6200.

341. Freedom from Hunger. 1993. Annual report 1993.
Davis, California: FFH Foundation. 10 p. 28 cm. *Summary:* Christopher Dunford PhD is president. Thomas R. McBurney is chair, board of trustees. On the blue-green and beige cover is a wood block print of two African women sitting on the ground. Public support and revenue totalled \$2.743 million in fiscal year 1993, up slightly from the previous year. One pie chart shows where the money went; general & administration 9%, fundraising 14%. Credit with education is increasingly the focus of FFH. Address: 1644 DaVinci Court, P.O. Box 2000, Davis, California 95617. Phone: (916) 758-6200.

342. Wescott, Mary. 1994. Re: Historical documents about Meals for Millions or Freedom from Hunger. Letter to William Shurtleff at Soyfoods Center, Feb. 2. 2 p. (front and back). Handwritten on letterhead.

• *Summary:* "Just a follow-up to our recent conversation about 'Friendship Food for a Hungry World I & II.'

"After a long and very interesting search I regret to inform you that I have been unable to find either publication. I was told that a number of boxes of historical documents were lost in the move from Santa Monica. Other than Annual Reports, etc., I was only able to find two boxes of materials prior to around 1980–which seems a pitty [sic, pity] to me.

"I have enclosed copies of information found in the one remaining file we have on Soy-maybe something will be of interest to you historically speaking.

"Thanks again for your inquiry, I regret we could not help you out. Sincerely,..."

Note: William Shurtleff replies in a letter dated May 10 that unfortunately all but two of the documents that Mary sent which Soyfoods Center "did not have were undated, so we were unable to use them or cite them in our database... Our library owns 116 documents by or about Meals for Millions / Freedom from Hunger Foundation. A histogram showing the distribution by year is enclosed." Address: Librarian, Freedom from Hunger, 1644 DaVinci Court, P.O. Box 2000, Davis, California 95617. Phone: 916-758-6200.

343. Freedom from Hunger. 1994. Annual report 1994. Davis, California: FFH Foundation. 21 p. 28 cm. *Summary:* Christopher Dunford, PhD is president. Thomas R. McBurney is chair, board of trustees; page 1 of this annual report, titled "View from the chair," is by him. On the brown on white cover is a photo of an African women standing with her baby on her back.

For the first time this year FFH used and independent auditor, Deloitte & Touche, LLP. The financial statement is much more complete and detailed. Total revenues totalled \$3.280 million in fiscal year 1994, up 19.5% from the previous year. Pie charts show revenues and expenses; general & administration 8%, fundraising 13%.

General public donations accounted for 38% of total revenues. FFH describes itself as "pioneers in the international self-help movement." Credit with Education, which began in 1989, is now in six countries. "Altogether, Credit with Education serves about 10,000 women." In the United States, FFH uses a different strategy–"Community Health Advisors."

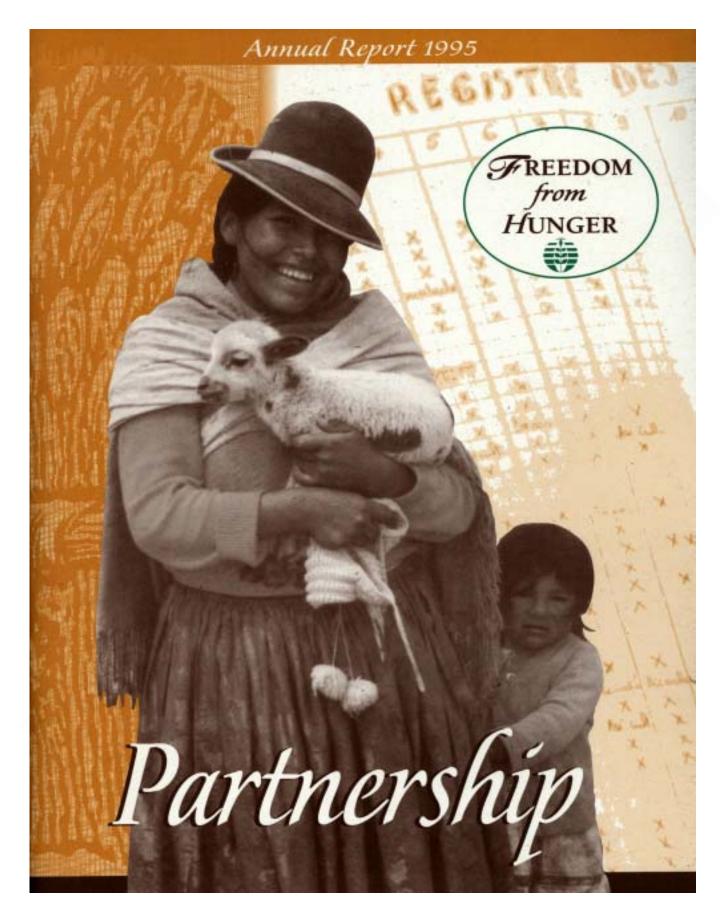
A glossy 8-panel (smaller format) insert seems to be a brief summary of the longer report and contains financial information that is clearer and easier to understand. This is the first annual report seen to contain this insert.

Chris Dodson (Jan. 2011) explains: This insert, called the "mini annual report," was not actually inserted into the annual report and it was never mailed to the same donor as the annual report. Rather it was designed specifically for direct mail. After the fiscal year had been moved to June 30, the complete annual report would appear in November (to be sent to large and corporate donors, foundations, etc.) and the "mini" would come out in February. The "mini" would be mailed to all of FFH's individual direct-mail donors (the general public). In 2008 (the year of a major financial downturn) the last complete annual report was produced (3,000 copies) and the "mini annual report would go to the complete mailing list that had not gotten the complete annual report (about 15,000). So the total mailing list of donors is 18,000 names and this list is carefully kept up to date and manicured for active donors-those who have given FFH a gift within the last three years. Surprisingly, FFH will often receive a handsome bequest from the will of a former who has not donated for many years.

Starting in 2009 only the "mini annual report" was produced, but it emphasized that the all information formerly in the complete annual report was now on the FFH website–www.freedomfromhunger.org. In short, it is designed to drive donors to the website for more information. Chris doubts that FFH will ever return to sending out a complete annual report; using the Web is so much more effective and sustainable. Address: 1644 DaVinci Court, P.O. Box 2000, Davis, California 95617. Phone: (916) 758-6200.

344. Freedom from Hunger. 1995. Annual report 1995: Partnership. Davis, California: FFH Foundation. 21 p. 28 cm.

• *Summary:* Christopher Dunford, PhD is president. Thomas R. McBurney is chair, board of trustees; page 1 of this annual report, titled "Letter from Thomas R. McBurney" is by him. On the cover, printed in brown, orange, and green on white is a photo of an Bolivian woman holding a lamb; the woman's daughter is standing beside her.



The president's report (p. 3) begins: "Partnership. Leverage. Linkage. These are more than buzz words. At Freedom from Hunger, these concepts represent our strategy for ending chronic hunger... In 1995, all of our efforts are centered on two highly effective self-help strategies that engender sustainability and self-sufficiency: *Credit with Education* in developing countries and *Community Health Advisors* in the United States.

A diagram (p. 6), titled "Breaking out of the cycle of despair," shows graphically what must be done.

Leverage (p. 7): "Freedom from hunger gives individuals an exceptional opportunity to increase the impact of their gifts. For example in Fiscal Year 1995, Freedom from Hunger multiplied three and a half times the value of each dollar donated by an individual. In FY95, individuals donated \$948,207. These funds attracted \$2,113,597 in grants from institutions and supported \$915,319 in lifesaving loan capital to women." In short: "Each dollar donated to Freedom from Hunger provided \$3.19 in lifesaving help."

A table shows worldwide totals for Credit with Education (as of June 30, 1995): Credit Associations: 601, up from 331 the previous year. Members [women receiving loans] 16,515, up from 9,872 the previous year. Amount lent to date: \$3.683 million, up from \$1.785 million the previous year. Average loan size: \$69, up from \$52 the previous year. Outstanding loans: \$915,319, up from \$425,709 the previous year. Delinquency [late in repayment]: 1.5%, down from 3% the previous year. Repayment rate: 99%, same as the previous year. General public donations accounted for 32% of total revenues.

Total revenues totalled \$3.226 million in fiscal 1995, down slightly from \$3.280 million from the previous year. Pie charts show revenues and expenses; general & administration 8%, fundraising 12%.

An 8-panel (smaller format) insert seems to be a brief summary of the longer report and contains financial information that is clearer and easier to understand.

On the rear cover, FFH's e-mail address is given (for the first time) as: freedom@mother.com. Address: 1644 DaVinci Court, Davis, California 95617. Phone: (916) 758-6200.

345. Freedom from Hunger. 1996. Annual report 1996: Fifty years. Davis, California: FFH Foundation. 28 p. 28 cm. • *Summary:* Christopher Dunford, PhD is president. Thomas R. McBurney is chair, board of trustees. On the cover printed in brown, white and orange on black, are four square photos of women with children. This fiftieth anniversary report contains a good 2-page history and 2-page chronology (p. 13-16). Photos show: (1) Clifford Clinton. (2) The front of a can of MPF.

Total revenues totalled \$4.046 million. Pie charts show revenues and expenses; general & administration 14%,

fundraising 8%.

In March 1996 FFH's "Board of Trustees held its meeting in Bolivia, South America's poorest nation. Each of us committed the time and expense required to make the trip. It was an unforgettable experience. Gathering ourselves into several small groups, Trustees and a few of our generous donors visited our *Credit with Education* education programs in the field. The surrounding poverty is brutally obvious, but the women who participated in *Credit with Education* do not despair of their condition. Instead they are determined, committed, and hopeful." This program, the result of 50 years of learning, is a "long-term sustainable approach to human development." (Thomas R. McBurney, Chair, Board of Trustees, p. 5).

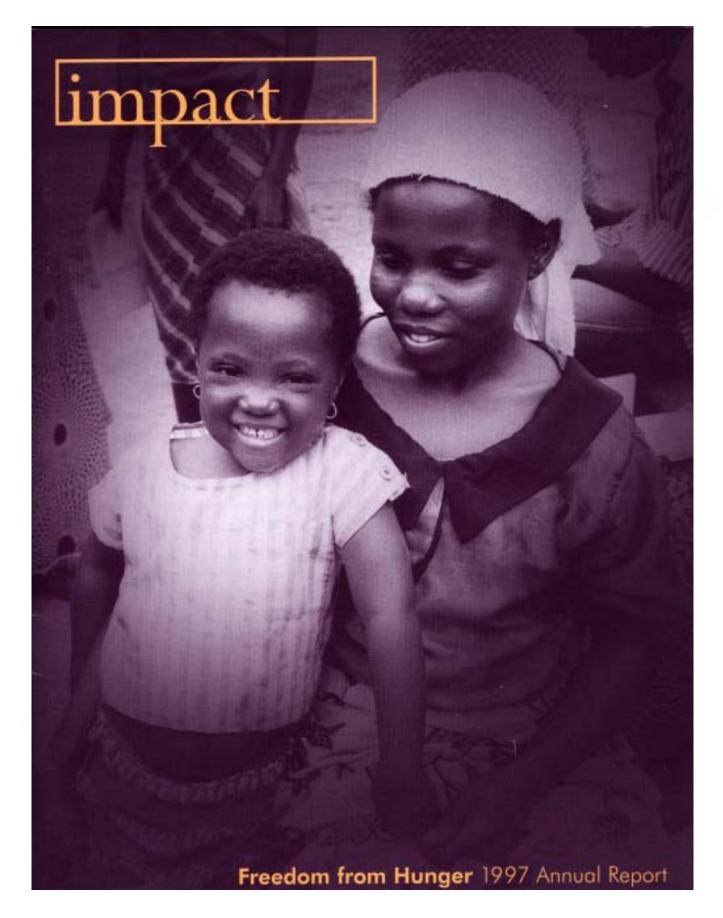
President's report: "Over the past year Freedom from Hunger increased the number of women we reach in our *Credit with Education* program by 120% to 36,433. Each one of the women we serve has an average of five people in her family who also benefit from the improved economic status and health and nutrition education the women gain through the program. This means we are helping approximately 182,000 people break the cycle of chronic hunger and poverty that grips their impoverished rural communities" (Christopher Dunford).

A full-page table (p. 11) shows the worldwide progress of *Credit with Education* from 1994 to 1996, as well as the progress in seven individual countries: Bolivia, Burkina Faso, Ghana, Honduras, Mali, Thailand, and Togo. Two graphs (p. 12) show the "Increasing participants and beneficiaries" and the "Growth of credit and operational funds."

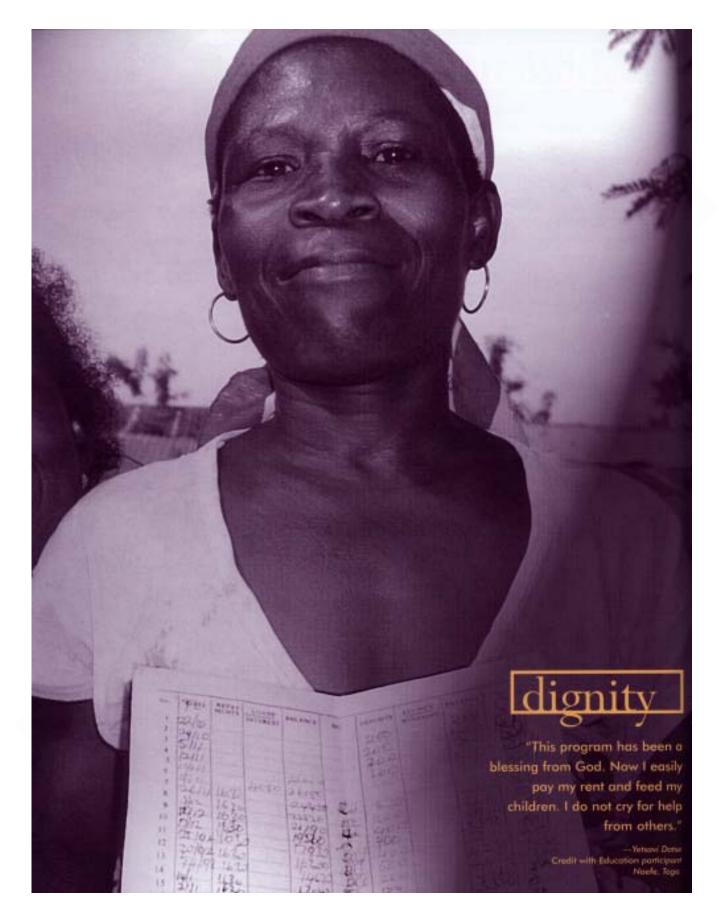
e-mail: info@freefromhunger.org. Visit our website at www.freefromhunger.org.

This is the first year on which FFH's former logo (a stylized upright plant in the middle of a stylized globe) does not appear; no other logo has taken (or will take) its place. FFH is now mainly in the business of providing credit (money) rather than agriculture, or even food. A woman may use her credit to start a business selling shoes; the profit from that business, of course, is used in part to buy food. Address: 1644 DaVinci Court, Davis, California 95617. Phone: (916) 758-6200. Fax: (916) 758-6241.

346. Freedom from Hunger. 1997. Annual report 1997: Impact. Davis, California: FFH Foundation. 28 p. 28 cm. *Summary:* Christopher Dunford, PhD is president. Thomas R. McBurney is chair, board of trustees. On the cover, printed in purple, orange and white, is a photo of an African woman with her daughter. A new set of metrics are now firmly in place to evaluate the progress of FFH. A table [unnumbered page] shows "Worldwide *Credit with Education* credit portfolio," as of June 30, 1994 to 1997. In 1997: Credit associations: 2,274, up from 1,277 in 1996. Members [women receiving credit]: 64,958, up from 36,433



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in 1996. Amount of savings: \$799,242, up from \$478,433 in 1996. Amount loaned to date: \$17.044 million, up from \$7.381 million in 1996. Average loan size: \$73, up from \$62 in 1996. Outstanding loans: \$3.833 million, up from \$2.025 million in 1996. Repayment rate: 99%.

This report is very moving and impressive, as are its "comparative statistics," which enable the reader to see progress clearly. Address: 1644 DaVinci Court, Davis, California 95617. Phone: (530) 758-6200. Fax: (530) 758-6241.

347. Freedom from Hunger. 1998. Annual report 1998: It's a transformation from a life of chance to a life of choices. Davis, California: FFH Foundation. 26 p. 21.5 x 28 cm. • Summary: Christopher Dunford, PhD is the president. Thomas R. McBurney is chair, board of trustees. On the cover, printed in red, green and black on light green, are five color photos (the first color photos in an FFH annual report) of women in Third World countries and their children. A table (p. 12) is titled "Progress of five-year plan," as of June 30, 1993 to 1998. In 1998: Members [women receiving credit]: 93,732, up from 64,958 the previous year. Freedom from Hunger expenditures: \$4.030 million, up from \$3.735 million the previous year. This table (and a graph on the same page) shows: The number of members increased from 5,100 in 1993 to 93,732 in 1998, an increase of 1,738%. Freedom from Hunger expenditures increased from \$2.875 million in 1993 to \$4.030 million in 1998, an increase of 40%. FFH achieved its 5-year plan!

The independent auditor's report shows that revenue and support was \$4.673 million in fiscal 1998. Of this: General public donations and bequests: 47%. USAID 36%. Institutions 7%. Expenses: Administration 16%. Fund raising 9%. As in all annual reports, a list of major individual and institutional donors is given, by amount given if \$500 or greater.

A small, 8-panel insert, the "mini annual report," gives a brief summary of the longer report. Address: 1644 DaVinci Court, Davis, California 95617. Phone: (530) 758-6200. Fax: (530) 758-6241.

348. Freedom from Hunger. 1999. Annual report 1999: My life was very difficult before this program... Davis, California: FFH Foundation. 24 p. 28 cm.

• *Summary:* Christopher Dunford, PhD is president. Thomas R. McBurney is chair, board of trustees. On the cover, printed purple and black on white, is a photo of an Asian mother with her daughter.

A table (p. 12) is titled "Credit with Education worldwide progress," as of June 30, 1998 and 1999. In 1999: Countries: 10, up from 8 the previous year. Credit associations: 4,934, up from 3,606 the previous year. Members [women receiving credit]: 121,316, up from 93,732 the previous year... Average loan size: \$74, same as the previous year. Repayment rate: 99%, same.

A small, 8-panel insert, the "mini annual report," gives a brief summary of the longer report. Address: 1644 DaVinci Court, Davis, California 95617. Phone: (530) 758-6200. Fax: (530) 758-6241.

349. Wolf, Walter. 2000. Soy-related documents–Business records (Archival collection). Peoria, Illinois. *Summary:* In July 2000 Dr. Walter Wolf, as he was preparing to retire from the Northern Center for Agricultural Utilization Research in Peoria, Illinois, sent to Soyfoods Center many file folders of soy-related documents that he had collected between about 1968 and the present. Most are in the field of soy protein, and none are confidential / proprietary. Each one is neatly dated, and the documents are in reverse chronological order in each manila file folder.

Dr. Wolf earned his PhD degree at the University of Minnesota, where he studied soy proteins. He began work at NCAUR in 1956; at that time it was named the Northern Regional Research Center. He worked as a chemist in the Meal Products Research Group. He did mostly pure research, rather than applied. At the time there was little interest in food uses of soy protein. One of his main contributions was collecting and publishing statistics on the annual production and price of soy flour, soy protein isolates, soy protein concentrates, and textured soy protein products.

The following files (listed alphabetically) were received by Soyfoods Center. Unless otherwise stated, only one file on each company or subject was received. A thin file contains less than about 20 sheets of paper; a thick one contains more than 20 sheets: ADM (Archer Daniels Midland Co.; 2 thick files 1970-2000). Anderson Clayton (thin, 1971-81). Cargill (thin, 1970-2000). Central Soya (4 thick files, 1959-1999). Dawson Mills (thick, 1974-1983). Edible Soy Products, Inc. (Hudson, Iowa; Maker of Pronuts; thin, 1971-78). EMI Corp. (Des Plaines, Illinois, thin, 1971-74). Erie Casein Co. (thin, 1966-73). Fuji Oil Co. Ltd. and Fuji Purina Protein Ltd. (of Japan, thick, 1972-1993). Farmland Industries and Far-Mar-Co (thin, 1970-1993). Food Ingredients-Dale Johnson (thick, 1964-1998). Garrison Products (extrusion, thin, 1977-78). General Foods (thin, 1974-1981). General Mills (thick, 1965-1976). Gerber Products (thin, 1969). Grain Processing Corp. (1968-1976). Griffith Laboratories (thick, 1968-1986). Gunther Products (purchased by A.E. Staley, thick, 1963-1975). Honeymead Products (Mankato, Minnesota, thin, 1978-1986). Industrial Grain Products (Montreal, Canada, thin, 1973-1975). Kikkoman (thick, 1972-1997). Kraft, Inc. (1965-1984). Lauhoff Grain (1 thin, 1973-86). Loma Linda Foods (thin, 1969-1986). Miles Laboratories (thick, 1970-83). Nabisco (1974-81). Meals for Millions Foundation (1 thin file, 1976). Protein Advisory Group of the United Nations, PAG

Guidelines (thin, 1969-1978). Quaker Oats (thin, 1970-97). Joe Rakosky, consultant (1979-83). Ralston Purina Co. (4 files, very thick, 1962-1999). Soy protein products (2 files, thick, 1970-1986). Soy protein production statistics and estimates (two thick files, 1970-1996). Staley (A.E., 1 thick, 1969-1986). Swift & Co. (thin, 1961-1971). Takeda Chemical Industries (thin, 1970-1984). Textured soy proteins (1 thin, 1969-71). Tofu equipment (thin, 1970s). Tokuji Watanabe tofu studies at Peoria, Illinois (thick, 1960-61). United Nations Industrial Development Organization (UNIDO, thick, proceedings of Nov. 1969 meeting at Peoria, Illinois), Unilever (thin, 1974-79). Wenger Manufacturing Co. (thin, 1975-76). Worthington Foods (thick, 1965-1998). Address: NCAUR, Peoria, Illinois.

350. Freedom from Hunger. 2000. Annual report 2000: Outreach, innovation, progress. Davis, California: FFH Foundation. 20 p. 28 cm.

• *Summary:* Christopher Dunford, PhD is president. Weldon H. Wasson is the new chair, board of trustees. On the cover, printed in pink, red, orange and black on white, are two brown photos of children and a light pink photo of an African mother with her daughter.

A table (p. 2) is titled "Credit with Education," as of June 30, 2000. In 2000: Countries: 11, up from 10 the previous year. Credit associations: 6,435, up from 4,934 the previous year. Members [women receiving credit]: 145,207, up from 121,316 the previous year... Average loan size: \$70, down a little from \$74 the previous year. Repayment rate: 99%, same.

A table (p. 5), more detailed than any seen before, shows "Credit with Education's activities worldwide as of June 30, 2000, organized by continent, and within each continent by country, and within each country by partner (including partner type, such as credit union federation, rural bank, non-bank finance company, NGO (nongovernmental organization)). In addition, for each program (row) is given: Year of first loan, number of members, outstanding loans (\$), savings (\$), and average loan size.

"Agents of change: The role of Credit with Education's field agents" (p. 11). "When women gather each week for their Credit Association meeting, it is the field agent who guides them through their participation in Credit with Education. For these village women, the field agent is the 'face' of Credit with Education. And it is a familiar face."

A small, 8-panel insert, the "mini annual report," gives a brief summary of the longer report. Address: 1644 DaVinci Court, Davis, California 95617. Phone: (530) 758-6200. Fax: (530) 758-6241.

351. A chronicle of progress: The history of Freedom from Hunger. 2000. Davis, California: Freedom from Hunger. 4 p. Undated. 28 cm. • *Summary:* The front and back pages give an overview of the organization. Pages 2 and 3 contain a "Freedom from Hunger Chronology."

"The forties & fifties: The era of the 3-cent meal. "1944–Clifford Clinton, owner of Clifton's Cafeterias, finances biochemist Dr. Henry Borsook to develop Multi-Purpose Food (MPF). The high-protein powdered food supplement provides a nutritious meal for \$.03.

"1946–Responding to the threat of post-war famine, Clinton, Borsook and others found Meals for Millions to distribute MPF, the "Friendship Food for a Hungry World.

"1951–MPF is saving countless lives. More than 100 agencies have been enlisted to distribute the food supplement in over 100 countries, including the United States.

"1956–Clifford Clinton leads his organization away from famine relief and toward the prevention of chronic hunger–a condition that affects many more millions of people. New self-help program approaches are explored to provide long-term solutions.

"The sixties and seventies: Americans give a hand up, not just a hand out. 1961–The American Freedom from Hunger Foundation is founded at the behest of President John F. Kennedy to support the FAO's global Freedom from Hunger Campaign. The organization's mission is to educate the American public about hunger issues and to encourage volunteerism.

"1967–Meals for Millions introduces "Appropriate Food Technology" to developing nations. Working in Colombia, Kenya and Uganda, local people are trained in food science, nutrition, agriculture and food processing.

"1968–The American Freedom from Hunger Foundation sponsors its first 'Walk for Development.' It is an enormous success. Within a year more than 100 'Walks' raise over \$800,000 and involve over a million people in sixteen states.

"1979–Meals for Millions merges with the American Freedom from Hunger Foundation. The final shipment of MPF is sent. Other organizations providing disaster relief take up the manufacture and distribution of high-protein, vitamin–enriched food supplements patterned after MPF.

"The eighties, nineties & the new millennium: Creating sustainable programs.

"1980–The newly blended organization dedicates itself to self-help through local partnerships and culturally appropriate programs. It gives its highest priority to helping children by providing services to their mothers.

"1987–"The name Meals for Millions is dropped in favor of Freedom from Hunger to reflect the organization's focus on the long-term challenge of creating a world without hunger.

"1989–Freedom from Hunger implements its first *Credit with Education* programs in Mali and Thailand. The program is designed to be sustainable and provides women with financial services and basic education in health, nutrition and business management.

"1993–Based on the clear success of Credit with Education, Freedom from Hunger is devoted to demonstrating the program's impact and achieving largescale outreach to the poorest families. A five-year plan is adopted to bring Credit with Education to 80,000 women in eight countries by the year 1998.

"2000–Inspired by the achievements of its five-year plan, Freedom from Hunger is now determined to bring Credit with Education to millions of families. Working strategically through partnerships–large and small–the organization is seeing remarkable growth."

On the last page we read: "In the 1960s another organization began to cross the path of Meals for Millions. The American Freedom from Hunger Foundation, founded at the behest of President John F. Kennedy, mobilized Americans to become involved in the Food and Agricultural Organization's (FAO's) global Freedom from Hunger Campaign. 'Development,' which provided a hand up and not just a hand out, was hailed as the path to a world without hunger.

"The American Freedom from Hunger Foundation informed Americans about hunger issues and encouraged volunteerism. Searching for new ways to raise funds the organization planned the first Walk for Development in 1968. A new approach at that time, volunteers asked their families and friends to 'sponsor' them on marathon length walks to raise awareness and money.

"The walks quickly caught on and within a year, more than 100 were scheduled in sixteen states. In twelve months they raised \$800,000 from 1,130,000 contributors sponsoring 120,000 walkers. Funds were donated to organizations working on the front lines in the fight against hunger.

"One of the early beneficiaries of the walks was Meals for Millions. It was the beginning of a relationship that would bring the two organizations together in 1979."





Photos show: (1) Clifford E. Clinton. (2) A group of children in Mali, Africa, in about 1996-97. (3) A woman weaving at a loom in Thailand (sometime between 1989 and 1995).



A Chronicle of Progress, (c) 2000 Freedom from Hunger. Used by permission. Address: 1644 DaVinci Court, Davis, California 95616. Phone: 800-708-2555.

352. Freedom from Hunger. 2001. Annual report 2001: Future of health, hope and dignity. Davis, California: FFH Foundation. 16 p. 28 cm. • *Summary:* Christopher Dunford, PhD is president. Weldon H. Wasson is chair, board of trustees. On the cover, printed in red, brown and black on white, is a brown and white photo of two children.

A table (p. 4) is titled "Credit with Education total program outreach," as of June 30, 2001. In 2001: Countries: 15, up from 11 the previous year. Credit associations: 7,863, up from 6,435 the previous year. Members [women receiving credit]: 189,540, up from 145,207 the previous year... Average loan size: \$73, up a little from \$70 the previous year. Repayment rate: 99%, same.

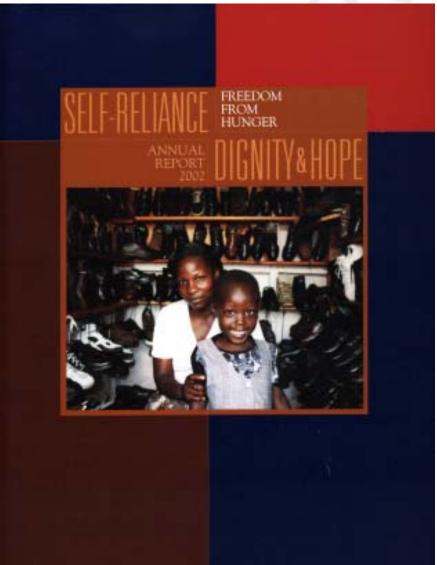
A small, 8-panel insert, the "mini annual report," gives a brief summary of the longer report. Address: 1644 DaVinci Court, Davis, California 95617. Phone: (530) 758-6200. Fax: (530) 758-6241.

353. Freedom from Hunger. 2002. Annual report 2002: Selfreliance, dignity & hope. Davis, California: FFH Foundation. 12 p. 28 cm. • *Summary:* Christopher Dunford, PhD is president. Weldon H. Wasson is chair, board of trustees. On the cover, printed in red, brown and black and orange, is a full color photo of a mother and her daughter in their shoe shop.

A table (p. 4) is titled "Credit with Education progress report," as of June 30, 2002. In 2002: Countries: 16, up from 15 the previous year. Members [women receiving credit]: 236,906, up from 189,540 the previous year... Average loan size: \$79, up a little from \$73 the previous year. Repayment rate: 99%, same.

All the photos in this report (for the first time) are in full color.

A small, 8-panel insert, the "mini annual report," gives a brief summary of the longer report. Address: 1644 DaVinci Court, Davis, California 95617. Phone: (530) 758-6200. Fax: (530) 758-6241.



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354. Freedom from Hunger. 2003. Annual report 2003: The resolve to end hunger. Davis, California: FFH Foundation. 16 p. 28 cm.

• *Summary:* Christopher Dunford, PhD is president. Weldon H. Wasson is chair, board of trustees. On the cover, printed in pastel colors, black and white on beige, is a full color photo of a mother holding her daughter.

A table (p. 4) is titled "Credit with Education progress report," as of June 30, 2003. In 2002: Countries: 14, down from 16 the previous year (Two achieved independence and self sufficiency). Members [women receiving credit]: 288,499, up from 236,906 the previous year... Average loan size: \$100, up from \$79 the previous year. Repayment rate: 99%, same.

A small, 8-panel insert, "the mini annual report," gives a brief summary of the longer report. Address: 1644 DaVinci Court, Davis, California 95617. Phone: (530) 758-6200. Fax: (530) 758-6241.

355. Freedom from Hunger. 2004. Annual report 2004: The path to self-reliance. Davis, California: FFH Foundation. 12 p. 30.5 cm.

• *Summary:* Christopher Dunford, PhD is president. Lawrence P. Youngblood is chair, board of trustees. On the cover, printed in blue, pea green and black on white, is a long quotation by a woman from Togo and five full-color photos of people in Third World countries.

The body of this report does not contain comparable statistics to previous reports so we are unable to compare performance–unfortunately. On the inside rear cover of this oversized, portfolio-style report is a "pocket" which holds four inserted pieces of regular-size white paper printed on both sides. Members [women receiving credit]: 327,484, up from 288,499 the previous year... Average loan size: \$96, down from \$100 the previous year.

In fiscal year 2004 total unrestricted operating revenue and support was \$3.956 million, down 5.2% from \$4.170 million in 2003.

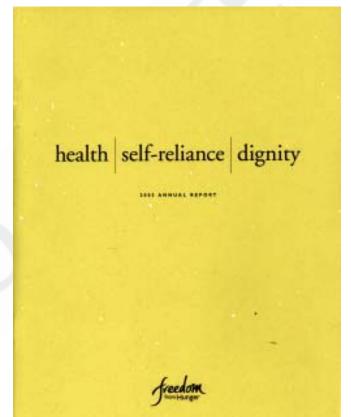
Of revenues, 68% came from general public donations and bequests, 20% from the U.S. Agency for International Development (USAID), and 12% from program and other income.

A small, 8-panel insert, the "mini annual report," gives a brief summary of the longer report. Address: 1644 DaVinci Court, Davis, California 95617. Phone: (530) 758-6200. Fax: (530) 758-6241.

356. Freedom from Hunger. 2005. Annual report 2005: Health, self-reliance, dignity. Davis, California: FFH Foundation. 12 p. 30.5 cm.

• *Summary:* Christopher Dunford, PhD is president. Lawrence P. Youngblood is chair, board of trustees. On the plain cover, printed in black on pea green, are no photos. For the 2nd year in a row, any comparative statistics (except for income and expenses) contained in this report are not readily apparent–disappointing. Revenue is also unclear (see p. 6-7). We are told that, of expenses: Administration 11%. Fund raising 12%. "In FY05, it supported the self-help efforts of more than 370,000 women and their families in 15 countries" (p. 3).

In the section titled "Fulfilling the promise" (p. 8-10), donors are listed and ranked into categories by amount donated. The top category is \$100,000+ in which 3 donors are listed. These include: GlaxoSmithKline (African Malaria Partnership). U.S. Agency for International Development (USAID).



On the inside rear cover of this oversized, portfoliostyle report is a "pocket" which holds three glossy full-color thick inserted pieces of regular size paper printed on both sides. But no statistics.

A small, 8-panel insert, the "mini annual report," gives a brief summary of the longer report. Address: 1644 DaVinci Court, Davis, California 95617. Phone: (530) 758-6200. Fax: (530) 758-6241.

357. Freedom from Hunger. 2006. Annual report 2006: In her own words. Davis, California: FFH Foundation. 12 p. 28 cm.

• *Summary:* Christopher Dunford, PhD is president. Lawrence P. Youngblood is chair, board of trustees. On the cover is a brown and white photo of an Indian woman and three smaller color photos. Any comparative statistics (except for income and expenses) contained in this report are not readily apparent.

In 2006 total unrestricted operating revenue and support was \$5.012 million, up 26.1% from \$3.705 million in 2005. Of the expenses, 9% were for administration and 9% were for fundraising, leaving 82% for program services and information (the "information" includes giving a presentation or lecture about FFH, answering a question from a donor on the phone, talking to potential partners about a project).

In the section titled "Sharing the vision, changing the world" (p. 10-13), donors are listed and ranked into categories by amount donated. The top category is \$100,000+ in which 10 donors are listed. These include: Bill & Melinda Gates Foundation. GlaxoSmithKline (African Malaria Partnership). Microfinance Opportunities. Nike Foundation. U.S. Agency for International Development (USAID).

On page 9 (Revenues and Expenses) we read: "In fiscal year 2006, each dollar donated to Freedom from Hunger mobilized \$29.78 in loan funds to entrepreneurial women." Below that is a dollar bill, followed by an "equal sign," followed by \$29.78 in bills and coins. Chris Dodson of FFH (Jan. 2011) explains: "It is just not about matching grants. Rather, it is a statement of the leverage that donations from the general public funding could provide to Freedom from Hunger as it approached larger donors. Without a steady base of public support, many larger donors will not fund a smaller organization. The larger donors want to be sure that the smaller organization has stability and will survive if the larger organization (for any reason) decides to stop its funding." Address: 1644 DaVinci Court, Davis, California 95617. Phone: (530) 758-6200. Fax: (530) 758-6241.

358. Freedom from Hunger. 2007. Annual report 2007: Can microfinance change the world? Davis, California: FFH Foundation. 12 p. 28 cm.

• *Summary:* Christopher Dunford, PhD is president. Lawrence P. Youngblood is chair, board of trustees. The cover is largely white with three small color photos. Any comparative statistics contained in this report are not readily apparent. But page 1 seems to suggest some new approaches and deep changes: "Credit with Education is now delivered by local microfinance institutions in 14 countries to well over 530,000 women... This is a 13% increase over last year... Saving for Change is reaching 55,000 women who were previously considered 'too poor' for a loan and too expensive to serve with education..."

Under "Program achievements" is a section titled "Microfinance and health protection" which states (p. 5): "Families living in poverty are often devastated by costly health crises. Microfinance organizations that depend on women's ability to repay loans, want to help their clients safeguard their own health as well as that of their families'. With the support of a major grant from the Bill & Melinda Gates Foundation, Freedom from Hunger's Microfinance and Health Protection (MAHP) initiative is working with five microfinance institutions in Benin, Bolivia, Burkina Faso, India and the Philippines to develop new combinations of microfinance and health-protection services. These packages include offering health savings accounts and emergency loans, supporting local sellers of health care products, enrolling microfinance borrowers in health insurance programs and making service contracts with local health care providers.

"Fiscal Year 2007 marked the launch of MAHP. Partners were selected, packages researched and developed, pilot-testing begun, and research to measure impact designed. Over the next two years, each package will be evaluated for effectiveness and scalability. The most successful packages will be offered to all of Freedom from Hunger's partners as well as other organizations..."

Reach (p. 6): "People living in poverty are ready and willing to help themselves and thousands of local organizations are trying to help them succeed. However, the time and cost to train local organizations to provide highimpact self-help support is slowing real growth. Reach is Freedom from Hunger's solution. Through Reach we are setting up regional training centers to offer high-quality training and materials at low cost to local service organizations."

Saving for Change–"Freedom from Hunger and Oxfam America have jointly developed Saving for Change."

Because of the large grant from the Gates foundation and new partnerships, the former metrics of progress used by FFH no longer work so simply. Moreover, the financial statements have become more complex. Total unrestricted operating revenue and support is \$7.356 million in fiscal 2007, up 46.8% from \$5.012 million the previous year. Of this, 40% is corporate and foundation giving, and 37% is philanthropic and planned giving.

In a plastic pouch on the inside rear cover is a 10minute DVD titled "Ending hunger for good," narrated by Jane Pauley and Mohammad Yunus, PhD, each a co-chair of FFH's Ambassador's Council. Note: In future years, any DVDs or videos were on the website. This DVD was donated by one of FFH's trustees who is in marketing and advertising; producing such a DVD costs a great deal of money and takes huge amounts of staff time.

On page 8 is a new and important feature: "Freedom from Hunger is honored by Charity Navigator's highest rating: four stars." The meaning of this rating is explained. Below that is the Charity Navigator logo and the BBB Wise Giving Alliance Standards logo (give.org).

A small insert, which is partly a summary of the larger report, states: "Microfinance and more... Credit with

2007 ANNUAL REPORT Can Microfinance change the world?

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Education. It's been nearly three decades since Professor Muhammad Yunus (now Co-chair of Freedom from Hunger's Ambassadors Council) recognized the power of microfinance to change the world. His work in developing the vision earned him the Nobel Peace Prize [in Nov. 2006].

Inspired by his model, in 1989 Freedom from Hunger adapted his concept to meet the needs of hungry families living in rural areas. Focusing on groups of women who came together regularly to repay their loans and deposit their savings, we added education to their meetings– teaching them how to grow their businesses, prevent malaria and other diseases, improve their families' nutrition, and become community leaders for change.

"Our Credit with Education has proved a winning combination. Not only has it increased incomes, assets and women's sense of empowerment, but it also improves child nutrition and family health. Now we have reached a significant milestone: more than half a million women in some of the poorest countries in the world participate in Credit with Education programs delivered by more than 50 local partners of Freedom from Hunger." Address: 1644 DaVinci Court, Davis, California 95617. Phone: (530) 758-6200. Fax: (530) 758-6241.

359. Freedom from Hunger. 2008. Annual report 2008: One in a million. Davis, California: FFH Foundation. 17 p. 28 cm.

• *Summary:* Christopher Dunford, PhD is president. J. Grover Thomas, Jr. is chair, board of trustees. The cover is largely filled with a brown and white photo of an African woman holding a string of beads and looking deeply content. This year we get some comparative statistics.

Page 2, titled "Reach for Three Million progress report," notes that FFH has a plan by this name. On this page, a large graph titled "Number of women reached" shows: 1999–121,316. 2002–236,906. 2005–503,616. 2007–1,162,358. Notice that only one number is given every 3 years, thus skipping the last two years and that no number is given for fiscal 2008.

Page 3 begins: "Freedom from Hunger's mission might be described this way: develop, demonstrate, disseminate. Through innovation we continually develop new and better ways to support the self-help efforts of very poor families around the globe. We then work with local partners to demonstrate the value of these innovations and train those partners to implement the programs sustainably. We research, evaluate, and monitor impacts to ensure that we're creating beneficial and sustainable programs. And when we find the methods that are most successful, we distribute these programs as widely as possible for others to adopt and adapt in their own anti-hunger, anti-poverty efforts."

Financial highlights (p. 10) shows that FFH's Total unrestricted operating revenue and support was \$7.769 million in 2008, up slightly from \$7.356 million. in 2007.

Total assets were \$5.279 million in 2008, up slightly from \$5,217 in 2007.

Two pie charts show (p. 11) that of revenues: Individuals and planned gifts: 53%. Corporate and foundation grants and gifts: 37%. Of expenses: Administration: 13%. Fundraising: 7%.

Again (p. 10): "Freedom from Hunger has been honored by Charity Navigator for the second consecutive year with its highest, four-star rating... In addition, the Wise Giving Alliance of the Better Business Bureau, gave us another year of approval, ad the American Institute of Philanthropy again named us one of its 'Top Rated Charities.' Williams & Olds, Certified Public Accountants audited our financial performance..."

A third logo appears with the other two below the explanation: "American Institute of Philanthropy (www.charitywatch.org)." Address: 1644 DaVinci Court, Davis, California 95617. Phone: (530) 758-6200. Fax: (530) 758-6241.

360. Freedom from Hunger. 2009. Annual report fiscal 2009. Davis, California: FFH Foundation. 16 panels. Each 9 x 22.5 cm.



• *Summary:* This annual report represents a major downsizing from the last decade. This may well be due to the effects of the "Great Recession" in the USA which started in Oct. 2008. The report is printed on a single large piece of paper (26 x 44 cm, or 14.5 x 17.5 inches), which is then folded into eighths, so it is opened sort of like a road map.

We are no longer told who is president or who is chair of the board. On the small cover (3.75 by 8.75 inches) is a color photo of a Latin American woman carrying a child up a dirt path with a field of corn in the background.

This year we are given a new set of basic metrics titled "Freedom from Hunger leverage: Staff 46. Countries 16. Partners 72. Women 1.5 million." The latter figure "translates into 8,552,641 people when all the members of their families are included." This means that each woman benefits 5.77 people. Does that mean that the average woman lives in a household with 5.77 people, including herself? A graph titled "Number of women reached shows: 1.483 million, up from 1.162 million in 2007. Since the x (horizontal) axis of the graph is broken (not continuous), the graph may conceal as much as it shows. For example, on the horizontal axis, only one number is given every two years from 2005 to 2009 (OK) but at the place where 2003 should be, the year 1999 appears instead! What happened from 2000 to 2004 and in 2006 and 2008?

Two pie charts show "Financial highlights:" Operating revenues: \$7,039,874, of which 48% came from private foundations and corporations, and 46% from individuals. Expenses: \$6,939,405 of which 14% was for administration and 8% for fundraising.

For more details, the reader is encouraged to visit FFH's website www.freedomfromhunger.org.

On the large inside of the report (when all the panels are unfolded): "Pioneered in 1989 by Freedom from Hunger, Credit with Education was the first microfinance service to prove that participatory education about nutrition, health and business management could be sustainably incorporated into women's repayment meetings to achieve greater impact for large numbers of chronically hungry families. Credit with Education is now delivered by 25 local organizations (credit unions and federations of credit unions, rural banks and microfinance institutions) in 14 countries worldwide. The names of these 14 countries are listed.

"Microfinance and Health Protection (MAHP): MAHP is in the fourth year for a five-year grant [of millions of dollars] from the Bill & Melinda Gates Foundation, which supports Freedom from Hunger's initiative to develop and test the ability of microfinance institutions to do more for their clients by improving access to health care and health products..."

The HealthKeepers program in Ghana is also explained. Address: 1644 DaVinci Court, Davis, California 95617.

Phone: (530) 758-6200. Fax: (530) 758-6241.

361. Dodson, Chris. 2010. Re: Change of name to "Freedom from Hunger." Start of Credit with Education program. Letter (e-mail) to William Shurtleff at Soyinfo Center, Oct. 18. 1 p.

• *Summary:* "The word 'Foundation' was officially dropped (filed with the Secretary of State of California) on September 20, 1991, because we were being confused with a foundation that makes grants rather than as a non-profit doing our own projects and seeking funding for those projects.

"We officially started Credit with Education with 50 women in Mali and 50 women in Thailand early 1989."

Chris has worked at Freedom from Hunger since 1982. Address: Manager, Donor Communications, Freedom from Hunger, 1644 DaVinci Court, Davis, California 95616. Phone: 1-800-708-2555.

362. Dodson, Chris. 2010. Re: On-site archival and electronic documents. Letter (e-mail) to William Shurtleff at Soyinfo Center, Oct. 22. 1 p.

• *Summary:* Freedom from Hunger has an on-site archive in Davis that has most of their annual reports since the mid-1970s. They have relatively little of their own archival material prior to that–Chris would estimate that (without all the *duplicates* of the annual reports and newsletters, etc.) we might have about 10 file drawers of archival documents and about two cubic feet of objects. However these archival documents are disorganized, stored in bankers boxes, and hard to access. More specifically (Chris writes): "Bankers boxes: 25–containing duplicate copies (as many as 20 copies) of each annual report, newsletter, direct mail piece, etc.

"One three-ring binder with plastic sleeves holding one copy of each of the following annual reports: the first is a ten-year annual report that covers 1954 through 1964; 1969 (this appears to be a single-year report, rather than a multiple-year report); 1971, 1972, 1977, and then 1979 through the present. The binder is stored in one drawer of a fireproof filing cabinet in our storeroom.

1644 Da Vinci Court Davis, CA 95618 | USA (800) 708-2555 (530) 758-6200 x1042 (direct) cdodson@freedomfromhunger.org www.freedomfromhunger.org

Christine M. Dodson

Monager, Donor Communications





"That same drawer in that same fireproof filing cabinet has about 20 rolls/beta and VHS videotapes of video footage of our programs shot in the mid-1980s. The other drawer has a few other videotapes.

"Stairwells: Two small areas: $3-\frac{1}{2} \ge 3-\frac{1}{2} = 3-\frac{1}{2}$

"There is one complete ledger for India. The earliest entry is from 1957; the latest entry is 1965. I've attached a scanned sheet–notice that one of the last entries on the page is for a shipment to Mother Theresa, Missionaries of Charity, Calcutta!" This India ledger has 10 columns; here is an example: Sponsor agency: Catholic. Consignee: Mother Theresa [sic, Mother Teresa], Missionaries of Charity, 51-A Lower Circular Rd., Calcutta 14. Date: 9-6-65 [Sept. 6, 1965]. India #: 904. Purchase lbs.: -. Donation lbs.: 423.28 AID. Total lbs.: 423.28. Date shipped: -. Date received: -. Remarks: \$100–Diocesan Council of Catholic Women, c/o Mrs. John Ganger, 603 W. 5th St., Ontario, California.

"The second ledger has about 40 or more countries in alphabetical order for 1963 and for 1964. I've attached a sample sheet for Iran."

For more recent historical pieces (from about the mid-1990s on; annual reports, newsletters, direct mail pieces) they have electronic records. These are part of their electronic storage system; they are backed up once each week and stored off-site. Address: Manager, Donor Communications, Freedom from Hunger, 1644 DaVinci Court, Davis, California 95616. Phone: 1-800-708-2555.

363. Freedom from Hunger. 2010. Annual report fiscal 2010: Stronger together. Davis, California. 16 panels. *Summary:* This report is in the same format as last year's–16 small folded panels. On the cover panel is a color photo of a boy with his left arm around his younger sister; both look healthy and happy. "Freedom from Hunger leverage:" Staff 42, down from 46 the previous year. Countries 17, up 1 from 16 the previous year. Partners 112, up dramatically

from 72 the previous year. Women 2.4 million, up dramatically from 1.5 million the previous year. "At the close of fiscal 2010 we were reaching more than 2.4 million women plus their families–a total of 14 million people."

The operating revenues during Fiscal Year 2010 (from June 2009 to June 2010) were \$7.467 million dollars. Of these, 48% came from private foundations and corporations, 46% from individuals, 5% from government and NGOs, and 1% from in-kind gifts. Expenses were \$6.245 million. Of these, 78% were used for program services & information, 14% for administration, and 8% for fundraising.

"At the close of Fiscal Year 2010, with only 42 staff worldwide, working with 112 partners in 17 countries, we are reaching 2.4 million women plus their families–a total of 14 million people."

A graph shows that the number of women reached has increased from 503,616 in Fiscal Year 2005, to 1,163,358 in 2007, to 1,483,427 in 2009, to 2,465,357 in 2010–a huge increase in women served over 2009!

Contents of main page: Credit with Education: Combining microfinance with life-saving education. Saving for Change: Connecting women in remote villages with savings circles. Advancing Integrated Microfinance for Youth (AIM): Equipping young people with a combination of financial education and financial services. Launching a movement toward integration: Connecting practitioners with combined solutions. Stronger together: Microfinance and health protection.

The World Bank estimates that about one billion people worldwide live on less than \$1.25 a day. Address: 1644 DaVinci Court, Davis, California 95616. Phone: 1-800-708-2555.

364. Dodson, Chris. 2010. Re: The work of Nelda Clinton with Clifton's Cafeterias and Meals for Millions. Letter (email) to William Shurtleff at Soyinfo Center, Nov. 23. 1 p. • *Summary:* "Here is what Don Clinton told me: Nelda was in charge of the cafeterias when Clifford went into the army in early 1942. She played a supportive role to his Meals for Millions involvement and often spoke to groups in that connection, i.e., churches, women's groups, etc. Florence Rose was the dominant female figure in those days–and Ernie Chamberlain right beside her.

"Nelda quit working at the cafeterias in 1946 when Don returned from the service and entered the business with his older brother (Edward) and sister (Jean). Robert (Don's son) was born in 1954 and went to work full time in the cafeterias at age 18.

"I hope this is helpful.–Chris." Address: Manager, Donor Communications, Freedom from Hunger, 1644 DaVinci Court, Davis, California 95616.

365. Wikipedia, the free encyclopedia. 2010. Clifton's Cafeteria (Web article printout). http://en.wikipedia.org/

wiki/Clifton's_Cafeteria. 5 p. Printed Dec. 9. [25 ref] • *Summary:* "Clifton's Cafeteria, once part of a chain of Clifton's restaurants, is the oldest surviving cafeteria style eatery in Los Angeles, California, and the largest public cafeteria in the world. Founded in 1931 by Clifford Clinton, the name was created by combining the first half of 'Clifford' and the last half of 'Clinton' to produce the name 'Clifton's.' The design of the restaurants included exotic decor and facades that were 'kitschy and theatrical.'"

"History: The Clinton family's five generations as California restaurateurs began when David Harrison Clinton came to Los Angeles from Missouri in 1888 and purchased the Southern Hotel and its dining room in downtown Los Angeles. David's son Edmond settled in San Francisco, where he and his wife Gertrude became co-owners of a group of cafeteria-style restaurants named Dennets.

"Clifford, one of Edmond's five children, learned the restaurant trade while working in his father's restaurants. Along with 2 partners, he bought his father's interest in Dennets. [Note: This investment was profitable enough for them to leave the operation to managers while they answered "the call" to be Christian missionaries in China, self-supported by their restaurants]. Due to differences in opinion over business practices, Clifford relinquished ownership to his partners and moved to Los Angeles in 1931.

"Establishing his restaurants during the height of the Great Depression, and using knowledge gained from working in his family's cafeteria chain in San Francisco, Clinton made a point to never turn anyone away, even if they had no money, seeking to average only a half-cent profit per customer. During one 90-day period, 10,000 people ate free before he was able to open an emergency "Penny Caveteria" in a basement (hence the modified name) a few blocks away to feed two million patrons during the next two years.

Contents: 1 History. 2 Fare. 3 Branches. 3.1 Founding branch: Clifton's Pacific Seas (1931-1960). 3.2 Surviving branch: Clifton's Brookdale (1935). 3.3 Lakewood (1956-2001). 3.4 West Covina (1958-1978). 3.4.1 The Greenery (1978-2003). 3.5 Century City (1966-1986). 3.6 Silver Spoon (1975-1997). 3.7 Woodland Hills. 3.8 Laguna Hills (1987-1999). 3.9 San Bernardino (1974-1984). 4 Reception. 5 In popular culture. 6 References. 7 External links.

Note: As of Jan. 2011 Clifton's Cafeteria now has one location at 648 South Broadway, Los Angeles, California 90014–near W. 7th St. Subway: Pershing Square.

The Introduction states: Clifton's Brookdale was sold to nightclub operator Andrew Meieran on September 21, 2010. Meieran intends to preserve the food and unique atmosphere of the establishment. Note: This means Brookdale is the last surviving cafeteria of what once was an 8-store chain. 366. Clinton, Donald. 2010. From the life of Clifford E. Clinton (Interview). *SoyaScan Notes*. Dec. 19. Compiled by William Shurtleff of Soyfoods Center.

• *Summary:* Donald is the youngest son of Clifford and Nelda Clinton. Clifford's father, Edmond Jackson ("E.J.") Clinton was born on 15 June 1872 and died on 19 Nov. 1944. E.J. Clinton came to California in 1888 at age 16. He met Gertrude Hall as a fellow student at Los Angeles High School, which was located at the time on Bunker Hill, downtown. E.J. and Gertrude were both Salvation Army officers; Gertrude was active in the Salvation Army Church Corps (they call their membership or congregation a "corps"). They are a Christian denomination and people go to public worship at Salvation Army churches.

They were married in 1895 at a Salvation Army Revival Meeting in Los Angeles, by the Maude Ballington Booth, daughter-in-law of Salvation Army founder William Booth (1829-1912). For the next 5-6 years E.J. and Gertrude were leaders in Salvation Army work in San Bernardino, San Louis Obispo, etc. They left the Salvation Army in about 1900-01 as their family was growing and moved to Berkeley. E.J. took the ferry boat across San Francisco Bay and back each day as he worked for Dennets–a small chain (several locations) of restaurants and coffee shops that existed in San Francisco since about 1900. Not long after E.J. went to work for Dennets, then took some ownership in them, and eventually was able to acquire the name.

In 1905, when Dennets was profitable, the family left on its first trip to China as self-supporting missionaries; Clifford (age 5) and two or three of his sisters went too. Clifford was the third child born; he eventually had two brothers and six sisters. They went to Taimingfu (Chihli Prov.) in northern China, to work with the Houlding Group, a missionary group organized by Rev. Horace W. Houldingwhich was not related to the Salvation Army. They stayed in China for only about one year, until E.J., Clifford's father, received a brief notice in April 1906 that his business had been destroyed; the father quickly returned to San Francisco alone, only to find that much of San Francisco, as well as his business, had been destroyed by the earthquake and fire. E.J. contacted his wife and family in China, and asked them to return to California because it would take him a few years to rebuild the family business.

Clifford, only 5-6 years old, returned to the Bay Area with his mother and sisters. Clifford returned to grammar school (probably at Washington Elementary School) in Berkeley where his family lived; where he continued at this school for the next two years, until about 3rd or 4th grade.

In 1910, with the business again profitable, the entire family returned to China, but this time to south China and the area around Canton (Guangzhou), to a city named Shiuhing (shown on a map in the Dec. 1937 issue of *National Geographic Magazine*). Today this city is named Zhaoqing (pronounced jou-ching; Variant name: Shiuhing; 1994 total estimated population was 415,000); located 50 miles / 80 km west of Guangzhou on the north bank of the West River / Xi River (*Xi Jiang.*)

This time the Clinton family worked at a Christian orphanage for the blind; Don does not know if it belonged to some denomination. Clifford was now age 10; a younger sister was born in China on this second trip. Because he was now old enough to understand much more about daily life in China, Clifford was deeply moved by what he did and saw.

The orphanage was a walled property within a walled city. Clifford's job was to go around each morning to collect the blind baby girls that had been left outdoors to die (girls were considered more expendable than boys) and to bring them to the orphanage. He also saw the hunger and starvation around him. After the Boxer Rebellion (1898-1900), it was a time of chaos and disorder in China, with banditry and vandalism and all sorts of danger. And there was still a lot of suspicion of (and therefore danger to) foreigners. Sun Yat Sen and his revolutionary forces started in Canton. The impressions that were left with him lasted the rest of his life and influenced many of his later policies and practices of feeding people who were hungry. The family stayed in China this second time for two years (1910-1912) and then (Donald thinks) they had to return to California after receiving word from managers with whom they had left the business that a fierce competitor (a Boos Bros. cafeteria) had moved into the street-level space above Clinton's basement location, threatening the survival of E.J. Clinton's restaurants. They urged E.J. to return because they were in trouble. The whole family returned.

In 1912 E.J. (with one or two investors) renamed Dennets the Quaker Company and first introduced an adaptation of cafeteria-style food service (which had been pioneered by others). The Quaker Co. was later renamed Clinton Cafeteria Company.

When he was in California, Clifford grew up in Berkeley, always living in the same house at 1907 Haste Street. This house was owned by his grandma Hall, and Don was born there and visited it through the years. The house has been torn down but for many years it was a fraternity house.

Clifford never went to high school or college; a year or two after returning from his second trip to China, Clifford left school in the 8th grade at about age 12-15 and went to work as a storekeeper for his dad; he ordered and stored the groceries and foods that were to be used in the restaurant. Clifford worked in the back while his father was out front, dressed beautifully and with the guests / customers. His daddy's business was across the bay in San Francisco. His father commuted to and from business every day on the ferry boat.

While in China, Clifford learned to speak a little Chinese–a few words and phrases, which he later taught his own children. He could also count to 10 or 20. He loved Chinese food and later he often took his own family to Chinese restaurants.

Q: Why did he leave school so early? Ans: He was a slow learner, he wasn't doing too well at school, and he had a desire to get busy (he had worked some summer vacations with his father in the business). But he had a good mind, and from an early age he had a mentor-his uncle-his mother's brother, Burton Hall, who was a professor of history at the nearby University of California at Berkeley. Clifford's wife, Nelda, was the youngest child in her family. Burton encouraged Clifford in his school, in his continuing learning and reading and philosophizing and all of the other arts that went with these things. He continued to mentor Clifford until the 1920s, when he died. He was a significant influence in Clifford's relational ability and continued learning. Clifford then went on to be quite a reader. He read a lot of Edgar Guest, the legendary five foot shelf of knowledge (also known as the Harvard Classics, a 51volume anthology of classic works from world literature, compiled and edited by Harvard University president Charles W. Eliot and first published in 1910). He did a tremendous amount of reading. As a boy, Donald remembers him reading all of the Fortune magazines, many business magazines, and many restaurant trade journals. Continued.

367. Clinton, Donald. 2010. From the life of Clifford E. Clinton (Interview) (Continued–Part II, 1928-1934). *SoyaScan Notes*. Dec. 19. Compiled by William Shurtleff of Soyfoods Center.

• *Summary:* After World War I, Clifford returned to Berkeley and continued to work at his father's cafeteria company in San Francisco. Clifford met Nelda Patterson in Berkeley at the Church of the Nazarene which she attended regularly.

Note: This church is an evangelical Christian denomination that emerged from the 19th century Holiness movement (Methodist) in North America with its members colloquially referred to as Nazarenes. It is the largest Wesleyan holiness denomination in the United States.

He was attending the Church of the Nazarene because his parents took him there and he was aware that the Patterson family was active in that church. The parents on both sides may have helped bring the two young people together. Nelda had only one sibling, Stephen, a younger brother.

Clifford and Nelda were married in Berkeley on 7 Sept. 1920. They decided to get married in the Friend's Church [Quaker Meeting House] in Berkeley as it was neutral ground for several members of the family.

They rented their first home on Milvia Street (Don doesn't have a number). After a few months they decided to make payments to purchase the Milvia St. house rather than to rent. They had their first child there, Edmond J., in 1921. They lived on their own for a few years and then moved into a house at 1907 Haste St. from which they moved to Los Angeles in 1931.

Clifford and Nelda had three children; they were all born in Berkeley at Alta Bates hospital. The first child, Edmond J., was born 15 June 1921 on his grandfather's birthday so they named him after his grandfather, Edmond J. He was later a vice-president of the Meals for Millions Foundation. He graduated from USC–after 17 years of night school. The 2nd child, Jean M., was born on 12 June 1923. Donald was the 3rd child, born 17 Dec. 1926.

In about 1921 Clifford became a manager at his father's restaurant company. Then in about 1928, when Clifford was age 28, his father, E.J., wanted to sell his stock (ownership) in his restaurant company to three of his close relatives: Clifford (his son), Paul Mills (his son-in-law), and Robb Crist (the son of his second wife); each of the three ended up with equal shares. However Clifford became the president of corporation that owned the chain of seven restaurants in San Francisco.

E.J. (the former missionary) was now free to invest in a mining venture in Bodie, California, now a ghost town near Bridgeport (south of Lake Tahoe), where he stayed for about two years and lost his venture capital.

In San Francisco, Clifford began to express his more generous and selfless ideas for running the restaurants. While he was attempting some new approaches it became apparent that it was an incompatible threesome. The basic problem was that he wanted a more cooperative working arrangement with his employees, who he wanted to call "associates" rather than "employees." He wanted to introduce profit sharing, medical benefits, etc. They would participate in the restaurant business rather than just work for it. John Cash Penney (J.C. Penney, the founder of the very successful chain of American department stores) and his ideas, his organization and life story had a big influence as well. By this time he may also have been thinking about how he could run a restaurant as a business but also never turn away a hungry person who could not afford a meal.

In about 1930 (after he had looked around a bit in southern California and was thinking of expanding in that area) Clifford's restaurant partners voted to retire his stock (it was a partnership, not a corporation); they forced him out, telling him that his ideas were a little too radical for them-they're too far out. But they agreed to pay him something over a period of several years.

Fortunately Clifford and his wife, Nelda, had saved up several thousand dollars, which became their nest-egg to start over.

In 1931 he and his wife moved from Berkeley to Los Angeles, where he took over the lease of a cafeteria operated by Boos Brothers. Dad had flirted with the location earlier and had liked it but Boos Bros. still operated it. When the landlord got notice that Boos Bros. wanted out, the landlord asked dad if he'd be interested. The answer was yes! and it was in fully operational mode. He, mother, and a handful of others from the San Francisco cafeterias drove down a few days ahead of the transfer. They kept on a few of the previous Boos Bros.' employees and opened under a new lease July 1, 1931. The Boos people operated it until the end and it was virtually seamless transition, with no 'down time.' They did no remodeling until 1939.

"When mom and dad arrived in Los Angeles they rented an apartment on Winston near the cafeteria, across from the public library, as they were working 14-16 hour days. Mother was working right alongside dad, while the Patterson's (Nelda's parents) took care of us kids in Berkeley for six months. Later in 1931 they rented a house on Westchester in Los Angeles which accommodated the family of five plus the two Pattersons to make seven. Mom and dad were still fully occupied getting the place going."

The cafeteria opened in 1931 and was named "Clifton's Cafeteria: The Cafeteria of the Golden Rule." The cafeteria kept this name until 1939. His first cafeteria opened as the Great Depression was getting really bad. It was at this original Clifton's Cafeteria (in about 1932-33), that 10,000 people who could not pay were fed for free. People predicted that he would fail if he kept on feeding people like this. This urgency ("Necessity is the mother of invention") led him to figure out a way to keep faith with his inner core promise that "no one would be turned away hungry."

So in about 1932-33 Clifford started the Penny Cafeteria (also called Penny Caveteria). About 2 million meals were fed there during the two years that it was open.

In about 1932-33 Clifford became a Presbyterian; perhaps the main reason was that the family purchased and moved to a house 245 South Wilton Place that was not far from a Presbyterian church–4-5 blocks away at 3rd Street and Western. But one of the missions were he worked in China may have had Presbyterian affiliation. The whole family regularly attended public worship at this church. The children remained Presbyterians for most of their lives. Clifford's life and his religion were one; his life was not divided into compartments, with business in one and his spiritual life in another. In particular, his commitment to the Golden Rule was especially strong and deep. Continued.

368. Clinton, Donald. 2010. From the life of Clifford E. Clinton (Interview) (Continued–Part III, 1935-1969). *SoyaScan Notes*. Dec. 19. Compiled by William Shurtleff of Soyfoods Center.

• *Summary:* Continued: In July 1935, Clifford's second cafeteria in Los Angeles, named Clifton's Brookdale, opened to the public. Clifford took the entire five-story building (over 40,000 square feet at 648 South Broadway) under lease; it had previously been a Boos Bros. Cafeteria. Remodeling and redecorating commenced soon thereafter, mostly at night but they never closed during that phase.

There was scaffolding throughout the main floor dining room and the singing busboys would do a number on the pipe bars: "The Daring Young Man on The Flying Trapeze."

In 1936 Clifford and Nelda, with their three children and Nelda's two parents, moved into house at 5470 Los Feliz Blvd., near Griffith Park; they lived there until 1949.

In 1939 Clifton's Cafeteria was remodeled and renamed Clifton's Pacific Seas.

In 1946 when Clifford Clinton established the Meals for Millions Foundation (MFM), he located its offices (free of charge) on the top (4th) floor of the Clifton's Brookdale building at 648 So. Broadway. That five-story building had a full basement which extended under the public sidewalk. On the main floor at street level was the main dining room plus serving counters and the main kitchen. On the 2nd floor (see photo) were the front and rear mezzanine dining rooms. On the 3rd floor was another dining room (the building seated about 750 people maximum), small group rooms and storage area. On the 4th floor were employee locker rooms, corporate offices, a small test kitchen as part of the purchasing department, and rest rooms. On the 5th (top) floor was a Clifton's bakery (rear half), mechanic shop, carpenter shop and storage. On the roof was air handling equipment and water heaters.

However from 1946 to about 1956 the Meals for Millions offices occupied the front half of the 5th floor– overlooking Broadway. In about 1956 the MFM offices were moved to Seventh St. in Los Angeles for a few years, and then to Santa Monica.

After MFM was started, Clifford and his eldest son, Edmond, went to the East Coast to look for support for their new venture. They went there twice within one year, but they did not stay for one year. On their second trip, they went by airplane, just the two of them.

Autobiography: Clifford Clinton wrote his memoirs in about 1956-57; Donald has a typewritten copy of it. In about 1949-50, Clifford and Nelda had taken a journey of about 100,000 miles that lasted an entire year. Then they took a shorter trip in about 1956-57. He wrote his memoirs in longhand during this latter trip and Nelda typed them on a portable typewriter. The work has no title and is not dated, but events in the text help to put it into the period mentioned above. It is typewritten, double spaced, on 8½ by 11 inch white paper. The 427 pages are numbered. The original was photocopied in multiple copies for family and friends. The text is divided into 49 "letters," each addressed "Dear Friends." They deal with his childhood, youth, feelings and adventures through life. There is no table of contents or index, and no photographs or other graphics.

A man has written a screen play of 200 to 300 pages that is a biography of Clifford Clinton. Donald and his son have worked with this man over the past 6-7 years, and they did a lot of research together at UCLA at the special collections were Clifford left all of his papers. The screen play has not yet been aired and no footage has been shot.

One of Clifford's grandsons (Edmond, an MD, the son of Don's brother who is also named Edmond) is doing a biographical sketch at the moment; he is focusing more on the Clifford's political activities, but that doesn't even enter for the first 100 pages.

Ernest Chamberlain's friends called him "Ernie Chamberlain." Florence was a dynamo; she was assertive.

When Clifford died on 20 Nov. 1969 he and Nelda had 13 grandchildren and no great-grandchildren; they now have about 40-60 descendants.

Nelda's parents (the Pattersons) lived in Clifford and Nelda's household for many years-in fact up to the time that Donald entered the U.S. Navy in World War II and on until about 1950 or 1952.

Q: When Clifford Clinton designed and built his two very unusual cafeterias, was he doing this to attract tourists and get on the bus tour route (which guarantees hundreds of regular customers) or primarily to provide a unique dining environment for the people of Los Angeles? Ans: Donald thinks it was definitely the latter. He wanted to create a venue that was "out of the ordinary. His philosophy was to do the common thing in an uncommon way. He wanted to have an environment that was pleasant, attractive, picturesque, and entertaining while dining. Anyone can dine anywhere. But he wanted it to be unique." He wasn't thinking so much of a larger market as he was of the local people of Los Angeles. His first two restaurants (on Olive Street and on Broadway) did end up being on the bus tour schedule, but that was a result, not his intention. In addition to the two he started, his three children opened five more; the name of each started with the word "Clifton's." Each of those five was also unique, with its own theme and special character. The Food for Thot newsletter was mailed out to a list of about 1,000 people. The rest were put on tables or in small boxes in each restaurant. After a while it was discontinued as postage rates increased.

During World War II, Clifford's first two restaurants had their peak performance (in terms of number of people fed per day) feeding 10,000 people a day in about 1944 and 1945. The entire chain of eight restaurants had its peak performance (by the same measure) in about 1983 and 1984.

The policy of never turning away a hungry person lasted through the years until 1 Oct. 2010, which is when they leased the one surviving location (the Clifton's Brookdale at 648 South Broadway, Los Angeles) to another operator; he has the option to buy it later.

Note: Donald just turned age 84; he sounds like a man in his fifties or early sixties. Donald is a conservative.

369. Dodson, Chris. 2011. Recent history of Freedom from Hunger: The story behind the annual reports (Interview).

SoyaScan Notes. Jan. 9. Conducted by William Shurtleff of Soyinfo Center.

• *Summary:* Chris started work with Meals for Millions / Freedom from Hunger (FFH) Foundation on 7 Jan. 1982–29 years and 2 days ago. The organization now has 42 employees. Christopher Dunford, PhD became president of FFH on 1 Feb. 1991 and he is still president to this day, but as of 1 July 2011 he will be stepping away from that position. The plan is for him to remain on staff so he will be available as a mentor and senior research fellow for the following two years, working on Research and Evaluation, writing "lessons learned" over the 20+ years of integrated microfinance services, and creating a learning environment in the cross-section between microfinance and health. Of course, this is dependent on the new CEO and whether that plan is suitable to him/her. He has had, by far, the longest term as president in the history of the organization.

In recent years he has "stuck to his guns" in making sure the microfinance community does not move away from reaching the poorest of the poor. In about the year 2000 there was a big movement in the lending community called "commercialization" or "going upscale." Every banker knows that it is easier to loan money to people who already have a fair amount of it than it is to people who are in need of it. At this time even microfinance was starting to move in this direction, leaving the poor behind-one more time. So Freedom from Hunger (along with Sam Daley-Harris of Microcredit Summit Campaign {Washington, DC}) became a voice of opposition to movement in this direction. The Grameen Bank, founded by Muhammad Yunus in Bangladesh, was not as vocal as FFH, but they were definitely staying with their original ideals and cheering FFH. Eventually (in about 2002) the U.S. Congress passed a law stating that 50% of all funding from USAID for microfinance has to go the poorest of the poor. At that point the question arose: How do we measure poverty? So FFH's evaluation team (headed by Christopher Dunford) started to get involved in actual poverty measurement tools.

In the early 1990s, when FFH started its program of Credit with Education, which made small loans to poor women and provided valuable information with the loans, Christopher Dunford realized that it would be essential to measure the results of the new program to see if it was working, and if it was working better than money alone– without the innovation of education. He said, "We need to prove that its working" and to measure the impact. Its all about food security, plus the health and nutrition of the mothers and the children. FFH has always worked only in rural villages with very poor people.

Question: During the almost three decades that Chris has worked for FFH, what have been the most important developments in this organization?

CD: By far the most important change was the move from the Applied Nutrition Program over to microfinance.

The Applied Nutrition Program was effective for the people that FFH was reaching, but the evaluations were showing that the impact was very limited, and it was very labor intensive and very expensive-with things such as weighing babies several times a year. David Crowley, who as president of FFH just before Dunford, made the decision to make this major change. But the decision was forced by a set of layoffs in 1988 due to a funding downturn. Of the 29 people on staff, nine were laid off-a third of the staff. He made the decision to lay off the Applied Nutrition Program staff. Shortly before this, one of the staff had gone to see the Grameen Bank in Dhaka, Bangladesh. Kathleen Stack (who is now vice-president) spent about a week in Bangladeshwhich was really the right way to do it. When she came back she said, "This is really great. But how can we make the change from a hunger and nutrition organization to a new type of bank?" It so happened that she and Dunford and Ellen Vor der Bruegge (who was a public health specialist, newly hired at FFH) went together on a trip to Nepal. The FFH program village in Nepal was an 8-hour hike from where the car dropped them off. They had a guide, had to ford streams, etc. The whole time they were trekking, they were talking about the Grameen Bank and how FFH could suddenly transform itself into being a new type of organization. On the trek they came up with a completely new idea: "Why don't we use the money as the locomotive and the education topics will be the cars in the train." This was the origin (worldwide) of the innovation of linking microfinance with health and nutrition education. Later business education was added to the program. So this trip to Nepal turned out to be the turning point. FFH began to make the transformation slowly, starting microfinance in only two countries-Mali (in Dec. 1988) and Thailand (July 1989)-with only 50 women in two countries. Why didn't other microfinance organizations think of this excellent idea before? First, microfinance / microcredit / microlending was still a relatively new idea. And also, adding the education component made the process much more complicated and expensive-but it turned out to pay for itself many times over. The typical person going to the village to make or collect loans had a financial background. It became necessary to teach that person health and nutrition topics and train them to communicate those basic ideas (such as "mosquitoes carry malaria") to usually illiterate village women in a way that they would "get it." This adds many new layers to the process. For the first ten years, FFH grew the Credit with Education program very slowly as they worked to understand the root causes of chronic hunger, malnutrition and poverty, and the learned the best ways to address these-including adult learning techniques, using pictures, games, discussions, demonstrations, etc. Many different things go into the education topics. By 1999 (ten years later) FFH was still reaching only 121,316 women. But over the next ten years, by Dec. 2008, the number of

women in the program had skyrocketed to 1.5 million–a 12.3 fold increase! Nevertheless, the rest of the microfinance community has been very slow to add integrated services to their basic lending programs. However recently, 20 years later, an entire conference was devoted to integrated microfinance. Even though the rest of the microfinance community has been slow to take it up, they are now starting to see the beauty of it because health is so deeply related to whether or not a woman can pay back her loan. The organizations are starting to see the benefits of having a healthier clientele–not to mention the benefits to the people themselves. One health emergency in a family can completely wipe them out! Continued. Address: Manager, Donor Communications, Freedom from Hunger, 1644 DaVinci Court, Davis, California 95616.

370. Dodson, Chris. 2011. Recent history of Freedom from Hunger: The story behind the annual reports (Continued– Part II). *SoyaScan Notes*. Jan. 9. Conducted by William Shurtleff of Soyinfo Center.

• *Summary:* Continued: As FFH worked to develop its Credit with Education program it started with what are now called the "first five" ideas; they were introduced together during the first ten years. They are: (1) Improving breast feeding. (2) Infant and child weaning foods. (3) Diarrhea– management and prevention. (4) Illnesses that attack our children (take advantage of immunizations / vaccinations). (5) Family planning (promoting pre-conception methods, and not discussing abortions).

Other important ideas had to do with understanding malaria and sleeping under mosquitoe nets. FFH has a policy against their representatives taking free gifts with them to villages. Rather they might take mosquito nets which cost them \$5 each and sell them for \$2 each so that the villagers have made an investment, whose value they appreciate, and will use carefully.

The other big change at FFH has been "integrated health services"-not just microfinance + education. This is the MAHP (Microfinance and Health Protection services) program. FFH has had an increasingly wholistic approach to helping people in developing countries. This program includes: (1) Health saving accounts (like health insurance in developed countries). (2) Training people (such as nurses or nurse practitioners) to go to villages to offer preventive and other health services. (3) More access to clinics, and health products, etc.

Question: As I look through FFH's annual reports (which Chris so kindly sent), I notice that two men have had unusually long terms during the period from 1990 on. Please tell me more about these two men–Christopher Dunford, president, and Thomas R. McBurney, chairman of the board of trustees.

CD: Dunford was not the person who made the original decision to move from applied nutrition to microfinance

plus health and business education, but he was one of the three who went on the "great trek" to Nepal (in Sept. 1988). At the time, Christopher was vice president for all of FFH's programs-so he was their boss. Christopher has an incredible commitment to integrity, to intellectual honesty. He is incapable of presenting a false face, or of selfdeception about the effectiveness of FFH programs. He wants to know the truth. He comes from a statistical background. He was a biology and ecology major; his PhD dissertation was in ground squirrel populations in Arizona. He was first hired in Arizona as the program director for the Arizona program. He loves the details and the data, and he wants the proof. He's very intellectual, and truly a visionary. He wanted to make a difference in the world. FFH became his best vehicle for doing that-other than raising a wonderful child. He is good with people. He has a great ability to listen to a variety of different ideas and perspectives, and then to step back and make the best decision. He used to have a sign on his desk, "Chris' pretty good decisions." It was welcoming people to come there for Chris' pretty good decisions. But he wouldn't consider himself a people person. When he has to get up and speak in front of a crowd, it's not easy. He's an introvert. He would tell you himself that his biggest weakness in this job is that he doesn't like to be out there in the limelight. He's very self-effacing, very humble. But he's grown into the job. He would probably say that Freedom from Hunger would be bigger and better known today if he were less of an introvert and more of promoter of the organization.

And so, today, Freedom from Hunger is small but powerful: 42 staff, working through 112 partners, reaching more than 2.4 million women and families—a total of over 14 million people. Christopher has always cared more about impact.

Thomas R. McBurney, chair of the board of trustees. What a wonderful man! He was Christopher's mentor. He was on the board of trustees at about the time that Christopher was hired. By 1988 he was vice chairman of the board. In 1986 when Christopher was transferred to Davis from Arizona, Tom had been on the board for quite a while. Alas, he is no longer living. His obituary in the *StarTribune* (Minneapolis, St. Paul; April 3) was headlined: "Tom McBurney, modern renaissance man." It began: "From his unwavering support for local arts organizations to his efforts to help eliminate hunger on the other side of the globe, Tom McBurney dedicated his life to make the world a better place for all."

Tom became chair of the board of trustees in 1991, the same year that Christopher became president. (Christopher was offered the presidency in Jan. 1991 and became president on 1 Feb. 1991). At the time FFH's fiscal year ended on Dec. 31, whereas now it ends on June 30.

Tom is from the Minneapolis area. From 1968 to 1989, he held various positions with The Pillsbury Company, finishing his career as a high-ranking executive. He was an activist on and chair of many boards (including the Minnesota Opera, the Minnesota Orchestra, Minnesota Public Radio, FFH, etc.). Tom was an outstanding chair of the FFH board. He always allowed for plenty of discussion and then would cut it off at just the right moment, stay on time for topic. The meetings always started and ended right on time, yet everyone felt included in the discussion by the time the votes were taken. He was a visionary, and, like Christopher, was deeply committed to the intellectual dimension and to proving impact. He visited many of FFH's programs worldwide, always paid his own way, and was often deeply moved by the what he saw as a result of FFH's programs. He had a huge heart (everyone could feel that) with unusual wisdom and business acumen-a rare combination. Tom and Christopher worked very well together; they made a superb team.

FFH moved to Davis, California, from Santa Monica in about 1982 and on 20 March 1983 their newly constructed international center was dedicated. Davis was chosen for its agricultural university and its leadership in agriculture. In those days FFH's main activity was still applied nutrition, which involved applied technology, using bamboo for irrigation pipes, and much more crop-related resources. In addition, FFH wanted to be near an international airport and to the general resources of the university from libraries to experts. Throughout its long history, MFM / FFH has discussed moving from the "wrong coast" to the east coast (which would aid in recruiting staff, communicating with major organizations in the field) but sunny, innovative California has always won out in the end-and its distance from the center of action ("the thick of it") does have definite advantages. Address: Manager, Donor Communications, Freedom from Hunger, 1644 DaVinci Court, Davis, California 95616.

371. Dodson, Chris. 2011. Recent history of Freedom from Hunger: The story behind the annual reports (Continued– Part III). *SoyaScan Notes*. Jan. 9. Conducted by William Shurtleff of Soyinfo Center.

• *Summary:* Continued: Question: What has been the effect on FFH and its programs of the large grant received from the Bill & Melinda Gates Foundation? CD: Gates was the foundation that funded the Microfinance and Health Protection (MAHP) program. FFH proposed the program to Gates and Gates said, "yes," that they were interested. It was a 5-year grant. Gates had never been in microfinance at that time, so on the recommendation of Sam Daley-Harris at the Microcredit Summit Campaign, who had worked with Christopher to keep microfinance focused on the poorest of the poor, to a meeting. In March 2005 they met in San Francisco; the Gates people didn't want to talk about Freedom from Hunger at all; they just wanted to talk about the microfinance community and the potential. In June the Gates foundation called to say they were putting out a request for proposals in the field of microfinance to six organizations and FFH was one of them. The proposal was due Sept. 2. FFH took a big breath, let out a loud "whoop," and then settled down to try to craft a proposal. It had to be filled with new ideas, because Gates likes to fund only innovative projects. In about the 2nd week in July Gates called to ask: "Is FFH planning to submit a proposal?" FFH said "Yes." And they said, "How come we haven't heard from you? We'll help you with the details of the proposal and its submission. Why don't you talk to us?" So that's how the world of Gates works! What a relief. But they didn't direct or shape the proposal in any way. FFH had always been focused on "integrated services of microfinance"-its long-time specialty and innovation-and more specifically "integrating health with microfinance." FFH got the proposal in on time and was one of four organizations that was awarded a major grant on the first round; they also got the largest grant.

Now, the five years have passed and FFH has just this summer reported everything that it has learned from MAHP. It was "blockbuster." They thought they would reach 30,000 people; they ended up reaching 300,000. As the 2010 annual report states: "The average annual cost of adding health protection services to microfinance programs is only 29¢ per person... and some services can be expected to more than break even generating modest profits at larger scale." Each of the program highlights is bulleted.

Counting the number of women who get loans plus integrated services is a big, complex job. Part of the complexity is that FFH is working with 112 partners around the world; it asks each of those partners to submit the number of women served twice a year. It's a very big project. While FFH has less connection with the lowincome women in the field than they did, say, ten years ago, that also means that FFH is reaching many, many more women. In the early 2000s FFH decided that, since they have this proven Credit with Education program that they've been working on for ten years (all the lessons, techniques for loan repayments, loan disbursements, etc.) they will offer their services, their programs, to partner organizations and to train them to do the program that FFH has designed, tested and evaluated. It's a dissemination strategy, working through these existing partner organizations to deliver the services that FFH has perfected. FFH's programs team (staff) goes regularly into the field (to Africa, etc.) to work with both the partners and the women to teach them how to do the program, then FFH staff returns to ensure that the partner organizations are still doing it. "Our programs team is out in the field a great deal of the time. They will be out there for 2-3 weeks at a time, visiting 2-3 programs, then they come back to Davis, have several weeks here, then back out to the field again. I'd guess they spent 40-50% of their time overseas, in the field, and 6050% back at Davis. Of their time overseas, our program staff spends about half their time training our partners and the other half working with local women in villages. Our core program remains Credit with Education."

Other recent large grants of \$100,000 or more are shown in the mini annual report in the section titled "Donor spotlight." The Gates grant was much more than \$1 million. Master Card Foundation is more than \$1 million; they are funding a new "Advancing Integrated Microfinance for Youth" (AIM Youth)–targeting young men and women ages 13-24 and teaching them a combination of financial education + financial services (access to saving accounts, how to budget money, what do you want vs. what do you need).

Chris' dream (after she retires) is to organize and preserve FFH's rich history.

Note: At the beginning of this interview, in the interest of full disclosure, Chris Dodson explained that she is married to Christopher Dunford, PhD–who is known professionally in the development community as "Chris Dunford."

In 1980 Christopher and Chris first met.

1982 Jan.–Chris was hired as Office Manager, Tucson, Arizona Program of Meals for Millions/Freedom from Hunger Foundation.

1984 Aug.–He was first hired in Arizona as the Program Director for the Arizona program.

1984 Oct.–Christopher and Chris were married. 1986 Jan.–Both transferred to Davis, California (FFH's International Center); he as Program Director, U.S. Programs; she as Assistant to the President and Board of Trustees.

1988 Sept.–Christopher trekked to Nepal with Kathleen Stack and Ellen Vor der Bruegge

1991 Feb. 1–Christopher became president of Freedom from Hunger (at Davis).

Thomas R. McBurney became chair, board of trustees, in 1991, the same year Christopher Dunford became president of Freedom from Hunger. Tom's term as chair expired in Nov. 1999, but he remained on as a trustee until Nov. 2005, when his term expired. He returned as a trustee in Nov. 2007 until his death in March 2009.

Photos show: (1) Portrait photo of Christopher Dunford (taken by Karl Grobl in Aug. 2008). (2) Portrait photo of Thomas McBurney. These two visionary men worked as a team for almost 20 years (1991-2009).

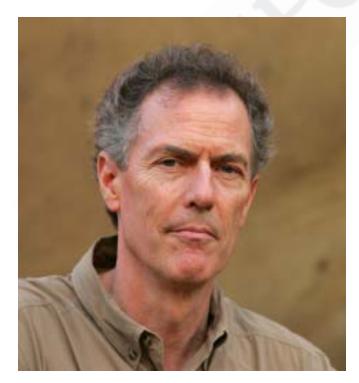
Address: Manager, Donor Communications, Freedom from Hunger, 1644 DaVinci Court, Davis, California 95616.

372. *SoyaScan Notes*.2011. Soyfoods historical research and writing wish list (Overview). Compiled by William Shurtleff of Soyinfo Center.

• *Summary:* 1. Early history of Chinese soyfoods companies and products in America and Europe. Especially Chinese tofu manufacturers in San Francisco and Los Angeles from 1850 to 1910.

2. Statistics on soyfoods in China during the 1980s.

3. The Swedish trading mission in Canton during the 1700s and 1800s and its work with soy sauce.





4. A lengthy, scholarly history (with an extensive bibliography) of soybeans and soyfoods in China written by a Chinese.

5. A lengthy, scholarly history (with an extensive bibliography) of soybeans and soyfoods in Japan written by a Japanese.

6. A lengthy, scholarly history (with an extensive bibliography) of soybeans and soyfoods in Korea written by a Korean.

7. A history of the health foods industry in America, 1930-1980.

8. A book on mochi or how mochi came to the West, with a clear chronology of commercial mochi manufacturers in the western world.

9. A scholarly history (with an extensive bibliography) of each of the following soyfoods in Japan, written by a Japanese with a long-term involvement in the field: natto, miso, shoyu, tofu.

10. Explain why Linnaeus stated in *Hortus Cliffortianus* (1737, p. 499) that the soy bean was grown in the colony of Virginia in North America.

11. A lengthy, scholarly history (with a good bibliography) of Chinese growing and processing soybeans in California. They must have grown them between 1849 and 1899! (13 Sept. 1991)

12. Visit the best libraries and centers in Germany for doing research on soybeans and soyfoods (See #37465) and try to get missing old documents.

13. Try to document the statement that the soybean was used as a coffee substitute during the Civil War in the USA (1861-1865).

14. Use the Coker family archives in South Carolina to write a history of the company's pioneering work with the soybean.

15. A history of early experimental gardens such as those that the Portuguese developed on the Cape Verde Islands, the British at Kew, Nairobi, Singapore, and the colony of Georgia (the Trustees' Garden of Georgia, a government experimental farm at Savannah, laid out in 1733), the Spanish (under Cortez / Cortés) in today's Mexico, etc. Did soybeans appear in any of them? When did they first appear in each?

16. Learn much more about Korean natto. Did it exist in Korea before Korea became a Japanese colony? Try to find some references, as in early studies of food in Korea. How widely was it made and used? Try to find some estimates of annual production. How was it served? What was its distribution in Korea in 1900? 1950? 2000?

17. A scholarly biography of Clifford E. Clinton of Los Angeles.

373. SoyaScan Notes.2011. When soy-related terms first appear in the Reader's Guide to Periodical Literature

(Overview). Compiled by William Shurtleff of Soyinfo Center.

• *Summary:* The Reader's Guide to Periodical Literature began publication in 1894. Soybeans first appear as a subject heading in the April 1949–March 1952 issue. Information on soybeans and soyfoods is found under the following subject headings: Central Soya Company. Coffee substitutes. Cookery–soybeans. Cookery–vegetables. Diesel fuels (from 1979-1980). Food substitutes. Lecithin. Soybeans (divided into: Cost, cultivation, diseases and pests, drying, export-import trade, harvesting, hybrids, marketing, prices, seed, seeding (planting), yield; with See also: cookery–vegetables). Multipurpose Food (from 1949). Plant proteins. Root tubercles. Soybean industry. Soybean products (with See also: okara, tempeh, tofu). Tempeh (from 1976-1977). Tofu (from 1977-1978). Tofutti/Tofutti Brands Inc. (from 1984-1985). Vegetarianism.

An asterisk (*) at the end of the record means that SOYFOODS CENTER does not own that document. A plus after eng (eng+) means that SOYFOODS CENTER has done a partial or complete translation into English of that document.

An asterisk in a listing of number of references [23* ref] means that most of these references are not about soybeans or soyfoods.

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