

"American multipurpose 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.

"Soybeans appear to offer one of the most attractive possibilities for making a suitable food mixture of high-protein value at low cost. Mixtures of various other products, such as corn, peanut flour with fish flour, meat powder, fish flour, dry skim milk, and the use of a variety of legumes would appear to offer the most attractive possibilities.

"We have on hand the knowledge and the resources to improve the health of millions of people in the world today. I do not see any practical problem in the world's supply that cannot be solved by education, research, and by good planning."

Nutritional studies relating to the development and uses of soy-containing foods.—The U.S. Department of Agriculture conference report contains considerable information on this subject. Two summary statements will suffice.

H. P. Sarett of the Mead Johnson Research Center has reported studies showing that soybean meals provide protein of good nutritional value for use in infant formula products, in precooked cereal products for the infant, and as an important constituent of nutritional specialty foods.

Commercial soybean milks have been tested on infants by Dr. Paul Geörgy, chairman of pediatrics, Philadelphia General Hospital, under the sponsorship of the National Research Council, the International Nutrition Research Foundation, and Mead Johnson Co. His report concludes that commercially available soy products, and, in particular, soy milk, may be used as a satisfactory source of protein for feeding young infants, even prematures.

Processing of soy liquid and powdered soy milk in Asia.—Under this topic, Harry W. Miller, M.D., director emeritus, International Nutrition Research Foundation, and the first to establish a soy-milk plant in the United States, reported:

The first commercial development was a soy-milk dairy establishment in Shanghai in 1935. The process used was in bottle sterilized milk formulated to the standard of cow's milk; also a chocolate milk, and a soy-acidophilus milk, which was extensively marketed all over the city of Shanghai up until the plant was destroyed in 1937 by the bombing of Shanghai.

Using the formula of animal milk, from 1 pound of soybeans we can obtain sufficient protein extracted to formulate a gallon of milk. This pound of soybeans yields all needed protein, half of the required oil, and some of the edible carbohydrate. The B vitamins, together with some minerals are present, and other vitamins can be added at low cost. At the market value of the sum total of constituents needed to constitute a gallon of formulated vitamized soy milk less than 15 cents is required, and these figures answer quite well for most parts of the world. Low-cost small pilot plants operated by cheap labor in countries of low economic resources seem very practical. These figures and statements are verified through the operation of several small pilot plants in south Asia countries.

Soybeans incorporated in the national diets as a milk and cheese and its many other recipes, if supplied in adequate quantities, insures balanced nutrition. It is a bodybuilder from infancy to the age limit. It is unique compared with other agriculture products in that it is available as a liquid, curd, or solid, as whole beans and flour.

Dr. Miller advises that his soy-milk plants operating in the Orient and in Honduras represent an average investment of about \$2,000. An additional investment of \$1,000 would convert the plant into a tofu, or soy-cheese, as well as a milk plant.