

## THE USE OF SOYBEANS AS HUMAN FOOD

BY

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### ABSTRACT

Although the soybean has been referred to as the meat and milk of the Orient, the average American knows little if anything regarding the value of products of this plant in the human diet. The possibilities in the use of the soybean as a food for humans as well as for livestock should be of great interest to the thousands of farmers who have become interested in producing this crop, but who now are directly confronted with the problem of widening the market outlet for the soybean.

History tells us that soybeans have constituted the principal source of protein in the Chinese diet for more than 100 generations. Scientists in different countries, particularly Italy, Germany, England, and France as well as our own country, have been interested in investigating the soybean for human nutrition and the facts regarding the value of the soybean as a source of food supply are gradually gaining recognition.

The medical profession has recognized the soybean as a valuable food for diabetics on account of its freedom from starch. It also carries an unusual amount of those peculiar nitrogenous compounds, designated collectively as "protein", which play such an essential role in the nutritive processes.

In the Orient where the soybean to a large degree takes the place of milk in the diet, a cheese-like material is prepared by a well known process and extensively used.

The chemical composition of the soybean as compared with that of our ordinary grain products is extremely peculiar. Not only does it analyze as high as 35 to 40 per cent of protein but it also carries 17 or more per cent of oil, besides 5 or 6 per cent of minerals. Moreover, it is found to be very rich in vitamins, so that altogether the soybean represents the most concentrated, natural, common foodstuff available.

A soybean flour is now coming into use. It is prepared by dehulling the beans, extracting the surplus oil, and bolting the pressed cake into a fine flour. This product has a pleasing nut-like flavor. The flour is used in making breads, cakes, pastries, ice cream and other food materials.

A substance of special value extracted from soybeans is lecithin, formerly prepared largely from yolks of eggs. Lecithin is a phosphorus compound useful in building up nerve tissues.

Soy sauce is another oriental preparation that is now being made in this country under sanitary regulations.

Soybean sprouts are prepared by soaking the beans for a period in water in a warm place and permitting them to sprout through a period of four to six days. The sprouts are then kept in a cool place until served as salad, in stews, and in other ways.

The Chinese prepare soybean milk by grinding with water between millstones, filtering through cheesecloth, and boiling. This material will coagulate, forming a curd which resembles cheese.

When used as a binder for meats in the making of sausages and meat loaves, Soya Flour improves the flavor and appearance of products in which it is blended without increasing cost.

Soybean oil, properly refined, makes an excellent table oil.

Thus with all these various products for human consumption it would seem that the extension of the utilization of the soybean can well be encouraged, thus creating a wider market outlet for this valuable farm crop.