



# ILLINOIS FARM AND FOOD OUTLOOK

COLLEGE OF AGRICULTURE  
DEPARTMENT OF AGRICULTURAL ECONOMICS

Urbana, Illinois 61801

June 9, 1976

## USE OF VEGETABLE PROTEIN TO INCREASE

THE USE OF VEGETABLE PROTEIN IN FOOD PRODUCTS WILL GO UP. The increase will not be as rapid as some people hope or as others fear.

Vegetable protein can be produced from various sources. Most attention has been centered on products from soybeans because of the wide availability of raw products and the relative cost. Some food products from soybeans have been produced for more than forty years. The growth in their use has been slow.

Vegetable protein is used in various foods, but the greatest expansion is now likely in connection with meats. During the 1950's, a process was devised for producing products with a texture compatible with meat. In the early 1970's, these products gained considerable use in institutional markets. The school lunch program was especially important in expanding their use. Then in 1973 with the relatively higher price of meat, textured vegetable protein was blended with ground beef for retail sales. Store experiences indicated that with a 15- to 25-cent differential below ground beef prices, these products would have a substantial volume (20 to 25 percent of ground beef sales). By the end of 1974 with the increased quantity of lower-quality beef and lower prices, these items largely disappeared.

Now, we are entering a new phase of the cattle cycle. Cow slaughter will be declining. The slaughter of nonfed cattle will drop. The number of dairy cattle has continued to decline. Domestic supplies of lower-quality beef to be used in ground beef will be smaller. Imports will continue to supply some boneless beef, but the quantity will continue to be restricted. This will mean considerably higher prices for ground beef, even though the supplies of higher-quality, fed beef is increasing and the prices for steaks and roasts will increase very little.

We have built a very large market for ground beef. Large quantities go to various fast-food outlets, to institutions, and for home use. To supply this large market, more use is likely to be made of textured vegetable protein extenders. Textured vegetable protein is currently selling for less than 20 cents per pound. For blending with meat, the mixture is 1 part extender to 2 parts of water. Thus, the cost



is less than 7 cents per pound. This extender can be successfully used to provide up to a fourth of the finished product when blended with meat. Such a product provides a substantial price advantage.

Although no exact figures are available on the supply of textured vegetable protein, current production seems to be less than one pound per capita. Therefore, even with a substantial expansion, it will not provide a large threat to the meat industry. Efforts are being made to produce substitutes for meat items. For some time, however, a much greater use probably will be made of extenders used with a meat base.

The net result of these developments will be to provide a larger quantity of protein at a lower price, thus offering the opportunity for diets with a greater nutritional value for low-income people. Vegetable protein will provide some competition for meat; yet, it will mean that meat-based items can be sold within a greater range of prices and continue to be used in the lower-priced markets.

*M.B. Kirtley, Extension Economist, Livestock Marketing*

Cooperative Extension Service  
United States Department of Agriculture  
University of Illinois  
At Urbana-Champaign  
Urbana, Illinois 61801

---

Official Business  
Penalty for private use, \$300

6/76-18,400

FIRST CLASS

POSTAGE AND FEES PAID  
U.S. DEPARTMENT OF  
AGRICULTURE  
AGR 101

