



A POSSIBLE QUALITY INDEX FOR FISH MEAL

Both producers and users of fish meal need a quick laboratory method to indicate the relative nutritive value of fish meals. At present variations in the nutritive value of meal as affected by raw material, processing, and storage variables are best determined by animal-feeding tests requiring from 10 days to several weeks to complete. The possibility of developing a chemical method for this purpose is being studied at the Service's Seattle Technological Laboratory.

One phase of the project is a study of the dye-adsorption properties of the protein in fish meal in relation to the nutritive quality. Although investigations of this type have been reported for vegetable protein, no definite method has been reported that might be used as a quality index for fish meal. Thus, the first step was to develop a technique.

After testing dyes representative of the major types, four dyes have been shown to be promising. These were orange G and orange II in acid solutions and congo red and tetrabromophenol blue in alkaline solutions. With this phase completed, exploratory work is being done on the adsorption by meals prepared from a number of species of fish. The results of the dye-adsorption tests will be compared with results of chick-feeding tests run by collaborative workers. These comparisons will determine whether any correlation exists between the nutritive value of the fish meal and the dye adsorption by the protein in the meal.



PROGRESS REPORT ON PROCESSING AND HANDLING SOUTHERN OYSTERS

The development of new processing methods to improve the quality of Louisiana oysters is being conducted at the Louisiana State University with funds provided by the Saltonstall-Kennedy Act of 1954. In recent tests they found that oysters packaged in cartons and overwrapped, frozen at 0° F. and stored at 0° F., are a very acceptable product after 6 months of frozen storage. Storage beyond 6 months resulted in the development of rancidlike odor and flavor and surface oxidation and discoloration.

Oysters that were packaged in cartons, frozen, and then glazed were an acceptable product after 8 months of storage at 0° F. From these results it appears that the ice glaze protects the surface from oxidation and discoloration.

Of all the methods of packaging which were tried, oysters which were vacuum-packed, frozen, and stored at 0° F., resulted in the best product. After 4 months of storage, taste-panel scores for this product were higher than for other methods of packaging. They were also less fragile after thawing.

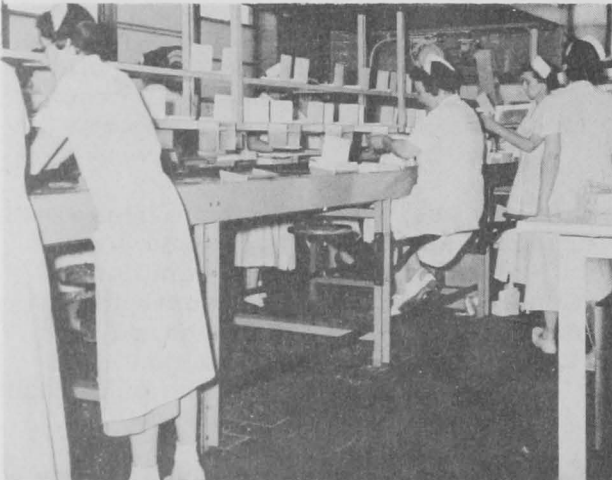
The effects of washing on the quality of oysters were also studied. Investigation revealed that oysters washed in a 0.65-percent salt solution and glazed or frozen in this solution produced slightly less drip upon thawing during the first 6 months of storage than oysters washed in the salt solution and glazed with water. Washing with or glazing with a salt solution instead of water resulted in slightly higher salt content in the oyster meats, but they had a better flavor, perhaps because of the higher salt content.



PUBLIC MEETINGS ON FISH STICK STANDARD

Fishery officials of the Fish and Wildlife Service held a series of public conferences in eight key cities from March 2 to April 5 to consider proposed standards for grading frozen fried fish sticks.

As an important part of its technological research program, the Service has been engaged for some time in the development of voluntary Federal standards for fishery products. Service technologists, with the active cooperation of the fish-stick producers, have prepared the provisional draft of a voluntary standard. This is now ready for consideration by those who will be concerned with the application of the standard when it goes into effect.



Packing fried fish sticks in 8-oz. paper cartons in a leading fish-stick plant in Boston, Mass.

are being developed for fishery products, and who can use them to advantage. Comments from those in attendance were summarized by the Service representative presiding. Subsequent comments from the floor were likewise summarized. These discussions indicate what changes, if any, are needed in the standard.

Scheduled meetings were held in New York, N. Y.; Atlanta, Ga.; Dallas, Tex.; Los Angeles, Calif.; Seattle, Wash.; Chicago, Ill.; and Boston, Mass.; and Washington, D. C.

This project for the development of voluntary standards for fishery products is being financed by funds available through the Saltonstall-Kennedy Act which was passed in 1954 to help the free flow of domestic fishery products into the channels of trade.

