DEVELOPMENT OF STANDARDS FOR PACIFIC COAST FISHERY PRODUCTS

The development of voluntary standards for grades of fishery products was started about five years ago by the U. S. Department of the Interior's Fish and Wildlife Service. The first standard was published under an agreement with the U. S. Department of Agriculture in 1956. Standards for grades of fishery products were promulgated under this arrangement. Inspection and certification services for fishery products became the responsibility of the U. S. Department of the Interior on July 1, 1958. Since then the program has developed at an accelerating rate. Five standards have already been developed and put into effect by the Bureau of Commercial Fisheries: frozen fried fish sticks, frozen raw breaded shrimp, frozen fish blocks, frozen haddock fillets, and frozen halibut steaks. It is likely that by the end of 1959 this number may be doubled to include frozen raw breaded fish portions, frozen cod fillets, frozen ocean perch fillets, and frozen salmon steaks.

Some 28 firms are now under continuous inspection. On the Pacific coast one processor has accepted continuous inspection in the Los Angeles area and an inspector has been hired to service a Seattle processor as well as other processors in the Pacific Northwest that are interested in lot inspection.

The U. S. Department of the Interior's voluntary standards program consist of two major stages:

(a) Standards development and promulgation. (The development of the standard is carried on by the several technological laboratories, and when a given standard is judged to be reasonably satisfactory by industry and laboratory personnel, it is turned over to the Bureau's Washington office for review and re-working prior to official promulgation.)

(b) Product inspection and certification. (The inspection and certification is carried on by trained government inspectors.)

NEED AND OBJECTIVES: The need for, and the advantages of, voluntary U. S. standards for grades have been recognized by various segments of the fishery industry, and they have requested the Bureau of Commercial Fisheries to develop such standards.

The primary objective of this project is to develop and to assist in the promulgation of voluntary U. S. standards for grades which are to serve as a quality grading yardstick for buying and selling of fishery products; we thereby seek to create a quality-improving incentive, which has for its ultimate purpose a greater consumer acceptance and consumption of fishery products. A parallel objective is to train and work with the product inspection and certification groups (field inspectors) in developing practical means of evaluating, protecting, and improving the quality of fishery products. Active industry support and participation to these ends is essential.

The current work of the Bureau's Seattle Technological Laboratory on standards is concerned with:

(a) Completing the standard for frozen salmon steaks.

(b) Developing a standard for frozen dressed halibut.

(c) Training and orientation of the newly-employed Government inspector at Seattle in the grading of frozen halibut steaks and all other fishery products that he may be called upon to inspect. (Inspection of fishery products may be on the basis of the published voluntary standards, Federal specifications, or such other applicable material, such as industry specifications).

As an example of some of the details involved in the development of a standard, the following sequence is given for the halibut steak standard which became official on March 15, 1959:

(1) The responsibility for developing the Frozen Halibut Steak Standards was assigned to the Seattle Technological Laboratory.

(2) The Standards Unit made numerous plant visits and discussed with various halibut steak processors the quality-affecting characteristics that should be considered.

(3) Numerous samples from retail and wholesale origin were examined to see what other quality factors might be considered. In addition, some samples were allowed to spoil under accelerated storage conditions (simulating poor storage) to observe the development of the various deteriorative type of quality defects.

(4) Quality factors that affect the desirability and eating quality of halibut steaks from the standpoint of the household consumer and fish buyers were investigated and considered.

(5) When sufficient data were accumulated, a rough draft standard was drawn up and reviewed by our laboratory personnel from which was prepared a first proposed draft for industry consideration.

(6) A public meeting was held with the various local segments of the halibut industry to discuss this first proposed draft. Industry comments and suggestions were embodied in a revised draft.

(7) This revised draft was reviewed with the industry's appointed Halibut Steak Technical Committee in order to assure that the standards were practical and reflected quality levels that are reasonably attainable by industry. Based upon industry suggestions and further cross-consultation, the standards may be revised several times at this phase of the development, which was the case for the halibut steak standards. In addition, during this phase of development, the standards were reviewed by our other Bureau laboratories.

(8) To test the practicality of the standards, a grading survey was made of some 300 randomly-selected retail and institutional size packages of frozen halibut steaks.

(9) When the standards were considered close to what industry and the Technological Laboratory personnel considered reasonable, the latest revised draft was circulated, on a national basis, to the various segments of industry for comment. At this time industry was advised that a series of public hearings would be held in various major cities to further review the proposed standards.

(10) On the basis of the comments and views expressed at these meetings, a final draft was prepared and submitted to the Washington office for approval. After minor modification it was submitted as a notice of proposed rule making, published in the Federal Register on December 3, 1958. Notice was therein given of the intention of the Director of the Bureau of Commercial Fisheries to recommend to the Secretary of the Interior, the adoption of the United States Standards for Grades of Frozen Halibut Steaks as set forth. Interested persons were given until January 1, 1959, to submit views or comments concerning the standard. No comments were received.

(11) Accordingly, the standards as set forth were adopted, and published in the Federal Register of February 25, 1959. They became effective on March 15, 1959. (Federal agencies may now, if they wish, purchase frozen halibut steaks on the basis of the grades set forth in these standards.)

Although the standards are designed to reflect high product quality, they should, at the same time, be practical, keeping inspection costs to a minimum. For example, one of the quality factors considered in our preliminary drafts was free drip, the liquor that exudes from the fish meat on thawing. Based on laboratory tests, it was found that the time and cost-consuming procedure of making drip determinations was unessential and not too meaningful for halibut steaks. The deletion of drip simplified the halibut standards from the standpoint of equipment, time, and cost.

COD-LIVER OIL IS POTENT CHOLESTEROL LOWERER

In contrast to animal fats which increase the serum cholesterol level in the body, oil from marine animals--seals, sardines, whales--seems to lower the level.

Since cholesterol is believed to be associated with atherosclerosis, research reported on the potent cholesterol level reducing activity of cod-liver oil may be important in human medicine. It is more potent than some vegetable fats tested.

Rats fed a diet of starch to which cholesterol and coconut oil were added received both corn oil and cod-liver oil as dietary fats. The fish oil, report A. P. de Groot of the Central Institute for Nutrition and Food Research, Utrecht, and S. A. Reed of the Marfleet Refining Co., Ltd., Hull, had a higher cholesterol-lowering activity.

The fatty acid fraction accounts for most if not all of the activity, the scientists report in Nature (April 25, 1959).