

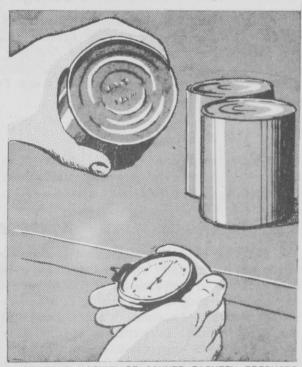
December 1948 Seattle, Wash.

Samples of commercial and experimental packs of frozen and canned king crab were examined and scored. Important factors in the preparation of a quality frozen

and canned pack appeared to be freshness of the crabs, prompt cooking and cooling, thorough cleaning and removal of discolored flesh and coagulated material, and care in packing to minimize air voids in the meat.

Bluish discoloration of coagulated material was the most important factor in lowering the score of various canned packs. Addition of citric acid or acetic acid to the can, or use of acid dips before packing, did not improve the color.

Canned crab meat prepared from whole crab legs held in frozen storage for 25 days before canning was rated equal in quality to control samples. Use of crabs which had recently molted did not lower the quality for canning. Use of crabs held 48 hours on deck before canning resulted in poor color and a definitely lower quality canned pack.



CHECKING VACUUM OF CANNED FISHERY PRODUCTS

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Red and silver salmon, which had been frozen by immersion in 75 percent saturated brine at 6° F. and subsequently stored in the brine for 3 weeks, were thawed in air and canned by the usual process. Examination of the samples after 2 weeks indicated that salt penetration had been superficial during the freezing and storage period. Effect of the pre-treatment was noticeable mainly in the poorer color of the surface flesh and a very slight after-taste. Odor, texture, and shrinkage during canning were satisfactory.

Boston, Mass.

Frozen haddock, cod, hake, pollock, and cusk fillet samples from fish frozen in the round at sea and from fish that had been gutted and iced were examined after two months storage. Organoleptic tests showed that the fillets from fish frozen at sea were as good, and, in some cases, superior in quality to fillets from fish iced at sea.

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It was noticed in the taste tests that fillets of fish frozen at sea had a "sea-salt" flavor of the type associated with fresh-caught fish. It is possible that icing fish causes a leaching out of some of the desirable constituents which contribute to the flavor of the fish. Tests are being conducted to throw some light on this phenomenon.

College Park, Md.

The Steering Committee of the Committee on Sanitation and Pollution Control of the Atlantic States Marine Fisheries Commission, at an all day conference at this Laboratory, outlined plans for the preparation of a sanitation manual for the fresh and frozen fish industry. Since one of the results of better sanitation would be improvement in quality, it was felt that the frozen fillet industry should receive assistance first.

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Analysis of basic school lunch fish preparations showed them to contain 12.5 percent to 15 percent protein, as served, and to furnish approximately 150 calories per 4-ounce (100-gram) portion.

Ketchikan, Alaska

Studies to develop improved processing methods for butter clams were continued. Preliminary results indicate that a marketable product can be prepared if the clams are steamed for 10 minutes at 250° F., the siphons are completely removed, the body meats are well washed and then minced, the meats are packed with approximately equal quantities of 3 percent brine, and then steam processed for 50-80 minutes (depending on the size of the can) at 250° F. (15 pounds pressure). Further experiments are being conducted to check these conclusions and to determine methods which are even more efficient in producing high quality products.

