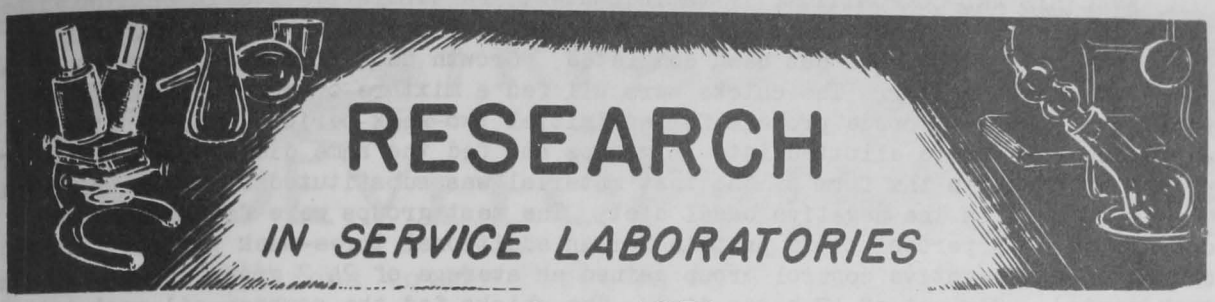

June 1951

REFRIGERATION: Freezing-Fish-At-Sea: In order to test on a commercial scale the freezing of round (whole) fish at sea for later defrosting, filleting, and refreezing ashore, a surplus trawler, the M/V Delaware was obtained from another governmental agency. The Delaware was received in Boston in December 1950. During the past several months the vessel was overhauled, reconditioned, and outfitted. Fish-handling and refrigeration test equipment was installed, the captain and crew were recruited, and on June 19 the vessel left for its first or "shakedown" cruise to the Georges Banks fishing grounds. The Delaware returned to Boston on June 23.

Vessel and gear were in good order, and fish-handling and refrigeration equipment seemed to operate satisfactorily as far as could be determined. The Diesel generator, which furnished power for the foregoing equipment, did not operate satisfactorily and will be replaced before the next voyage is made. A number of other alterations and adjustments will also be necessary.

Approximately 6,000 pounds of fish were landed of which 1,000 pounds were frozen at sea for experimental use. (Boston)

Freezing and Storing Alaska Shrimp and Dungeness Crab: Frozen Alaska shrimp were examined after storage at 0° F. for seven months. The highest-quality pack was that in which raw shrimp tails were frozen in either sealed cans or as a glazed block, and their storage life was greater than 7 months at 0° F.

Coon-stripe (Pandalus hysinotus) and side-stripe (Pandalopsis dispar) shrimp which were precooked for 4 minutes, peeled, packaged in sealed cans, and frozen were rated unmarketable or on the borderline. Their storage life was less than 7 months at 0° F.

Examination of two packs of side-stripe shrimp which were precooked for 4 minutes, peeled, packaged and frozen in vacuum-sealed cans and in plastic-top cans showed that the vacuum pack was definitely superior in color and flavor. However, the vacuum-packed shrimp had a flat flavor and lacked a desirable crisp texture. The storage life of these shrimp was a little over 6 months at 0° F. (Ketchikan)

Studies on Methods of Handling Frozen Salmon for Canning: The second examination of canned, frozen sockeye salmon, prepared from salmon taken in Southeastern Alaska during the 1950 season, was carried out.

This examination reaffirmed the results reported earlier. Sockeye salmon frozen at -20° F. and stored at that temperature for 22 weeks prior to canning were not noticeably higher in quality than the same fish frozen at -20° F. and stored at 0° F. for 22 weeks. In both cases the quality was markedly reduced as compared to the fresh-canned fish. Excessive curd and toughening as well as a reduced amount of free oil and liquid and slight off-odor, color, and flavor were noticeable in both experimental packs. (Ketchikan)

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ANALYSIS AND COMPOSITION: Vitamin Content, Particularly Vitamin B_{12}, of Fishe Byproducts: The chick-feeding test to determine the comparative nutritive value of the protein of fish meals has been completed. Growth data for only a few groups ha been calculated so far. The chicks were all fed a mixture of cereal products containing 9.5 percent crude protein for an initial two-week period. After this the surviving birds were allotted into 16 groups and fed the same diet, except that thr percent protein in the form of the test material was substituted for an equal weigh of starch used in the negative basal diet. The test groups were fed these diets containing 12.5 percent crude protein for an additional three-week period. The chicks of the negative control group gained an average of 24.2 grams during the thre week period. Six out of 17 birds died. The chicks fed the soybean-oil-meal test diet gained an average of 80.9 grams each, and one chick died. Two groups were fed the same fish meal. The chicks of one group averaged 94.1 and the other 101.6 gram each and none died. There was considerable difficulty with cannibalism, otherwise the experimental method seemed to be very good. (College Park)

MOLDED CRAB SALAD

1 POUND CRAB MEAT
1 CUP CELERY, DICED
¼ CUP FRENCH DRESSING
1 PACKAGE LEMON GELATIN
1½ CUPS HOT WATER
¼ CUP LEMON JUICE
½ TEASPOON SALT
½ CUP MAYONNAISE OR SALAD DRESSING

Remove any cartilage from the crab meat. Marinate crab meat and celery in French dressing while preparing gelatin. Dissolve gelatin in hot water. Add lemon juice and salt. Place about 1/2 of the gelatin mixture in a ring mold, which has been rinsed in cold water. Chill until partially set. Arrange crab meat and celery over gelatin base and cover with remaining gelatin mixture. Chill until firm. Unmold on round chop platter and garnish with parsley or salad greens. Fill center with mayonnaise. Serves 6.

A Fish and Wildlife Service tested recipe. This is one in the series of recipes using fishery products tested and developed in the Service's test kitchens.