

October 1950

ANALYTICAL METHODS: The effect of extraction of fish meal with mixtures of water and acetone was investigated with respect to the optimum ratio of acetone to water. It was found that the greatest amount of ethyl-ether-soluble material was extracted with a mixture of 75 percent acetone and 25 percent water. When the proportion of water was increased or decreased, lesser amounts of ethyl-ether-soluble material was obtained. When the amount of water was increased, a greater amount of total extract was obtained, but the ethyl-ether-purified extract was less than with the 75-25 acetone water solution.

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PRESERVATION: Samples of the salmon eggs preserved on a large scale during August and September at Ketchikan were examined. It has been found that those samples in which one of the preservative ingredients was sodium chloride are not keeping well. Furthermore, feeding tests carried out at Leavenworth during the past summer indicated that laboratory-preserved samples, in which salt was one of the preservative ingredients, have inferior nutritive value as compared to those samples preserved without salt.

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FRESH FISH: Another species of rockfish, *S. miniatus*, (also known as vermilion rockfish) was obtained by the Exploratory Fishing Section's vessel John N. Cobb for a palatability test. Although the skin of this fish has a rather inferior appearance since it is mottled with grayish streaks, the general appearance is quite similar to the red rockfish (*S. ruberimus*). Because of this mottled appearance, the fishermen have been accustomed to discarding it at sea. In the palatability test carried out on this species it appears that it is just about equivalent to the *S. ruberimus* in initial palatability.

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COMPOSITION: Preliminary plans were made for collecting a large number of samples of pilchard meal, stickwater, and other products in California for later analysis of Vitamin B₁₂ and other vitamins by microbiological methods. Several hundred sample bottles were procured and labeled and tentative schedules were drawn up for procuring fish meal at times when it is hoped that the fish-meal plants will be in operation in various California areas. It is planned to procure samples of the raw meal, the semi-finished product (cooked fish, press cake, etc.), the final meal and condensed fish solubles in order to determine the effect of processing on destruction of Vitamin B₁₂. It is also planned to obtain from commercial dealers a sufficiently large number of pilchard meals (probably more than 100) in order to determine the range of Vitamin B₁₂ content of this product ordinarily met in commerce.

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CANNING: Additional samples of gill-net albacore tuna were brought to Seattle by the exploratory vessel John N. Cobb. Some of the samples were iced immediately after catching and then frozen one week later; while others were frozen right after being caught. Final arrangements were made for having these fish, and the others previously obtained, canned at a custom cannery in Astoria.

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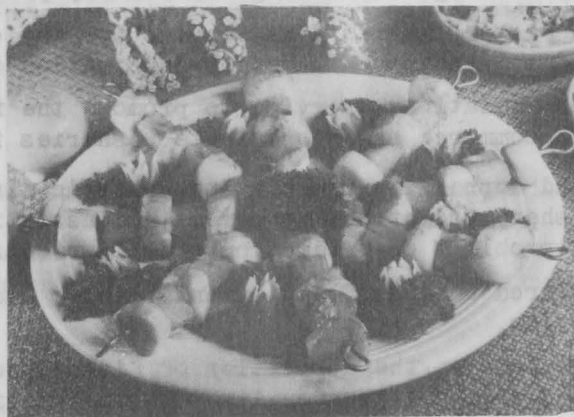
REFRIGERATION: After six months of storage at 0° F., oysters treated with dips and glazes of ascorbic acid and with water only were still considered satisfactory. Although considerable variation had occurred from month to month, due possibly to differences in individual oysters, no one lot receiving a particular treatment had consistently stood out as being superior or inferior. As is generally true with frozen oysters, appreciable quantities of free liquor had formed upon thawing the oysters.

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A series of frozen whole Dungeness crabs were prepared for a study of the effect of freezing the crabs (cooked and raw) in order to obtain information as to the feasibility of freezing whole crabs aboard a vessel or freezing raw crabs at the production peak in the plant.



SCALLOP AND PINEAPPLE KABOBS



1 POUND SCALLOPS	PINEAPPLE CHUNKS
4 TABLESPOONS BUTTER	1 TEASPOON SALT
6 TABLESPOONS BROWN SUGAR	DASH PEPPER
1/2 CUP PINEAPPLE JUICE - (FROM THE CHUNKS)	

Melt butter, add crown sugar, seasonings, and pineapple juice. Dip each scallop in the mixture and arrange alternately with pineapple chunks on the skewer. Place skewers across baking dish and bake in hot oven 350° for 30 minutes. Baste twice during cooking. Serve on skewers. 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.