

# RESEARCH

## IN SERVICE LABORATORIES

July and August 1950

**REFRIGERATION:** Palatability tests were made on commercially packed Pacific Coast rockfish fillets which had been frozen and stored under controlled conditions. The scores given the fillets indicate that Sebastes alutus (long-jawed rockfish) and Pinniger (orange rockfish) were about equal as to quality with the possibility of a slight advantage being given the latter. Fillets of S. diploproa (lobe-jawed rockfish) were the least desirable of the three species. The storage of fillet samples will be continued and further tests made since no conclusive results have been obtained.

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Various treatments are being investigated as a possible preventive against the growth of pink yeast in frozen packaged oysters. The growth of this yeast in oysters has been a source of serious loss to the industry in the past, particularly during some periods.

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**BYPRODUCTS:** Analytical data on a large number of hatchery food materials were checked and compiled for use in the preparation of a report on evaluation of hatchery diets.

Riboflavin, niacin, biotin, and vitamin B<sub>12</sub> assays have been completed on 11 frozen samples of the raw components of the hatchery diets. Beef and hog liver are comparable with regards to the amounts of these vitamins, while hog spleen has lower amounts of each. Although tuna livers and salmon livers are lower in these vitamin contents than beef liver, they appear to be fairly good sources of these vitamins. Tuna livers appear to be slightly better than salmon livers.

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Several of the fish meal factories have been visited for information as to the method of preparation of meal and oil in different plants. The information obtained will be used to make selections of samples for tests of the Animal Protein Factor (APF) contained in meals prepared by different procedures.

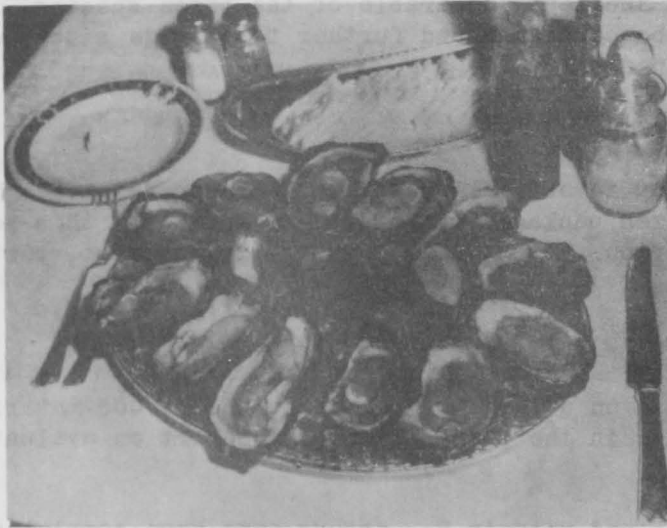
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**CANNING:** In the tuna-canning project, weights and measurements have been taken on all tuna before canning. A brief summary of the data indicates that the length of the fish varies between 23 and 26 inches with an average of about 24 inches. The weight varies between 8½ and 15 pounds with an average of about 10 pounds.

## OYSTERS ARE GOOD THE YEAR-AROUND

The wide-spread notion that oysters are harmful to consumers when eaten during the "non-R" months is debunked by the Assistant Surgeon General of the U. S. Public Health Service in a statement issued on September 1, the opening date of the traditional oyster season. "Oysters are edible the year-around," the Assistant Surgeon General declares, "but they are fatter, more palatable and more plentiful on the market during those months that contain the letter 'R'. It is only coincidental that those months in which the oyster is most palatable happen to be the 'R' months."

Mark D. Hollis, Assistant Surgeon General, said the tradition that oysters must be eaten only in the "R" months may have originated somewhat as follows: In that species of oyster eaten in the Old World for centuries,



fertilization of the seed from which the baby oysters grow takes place within the shell of the parent oyster. Shortly before the baby oysters are ejected by the parent to fend for themselves, they begin to develop a shell. If the Old World oyster is eaten at this stage of incubation, the large number of almost microscopic baby oysters, each developing a shell, impart a gritty quality to the meat. Because the reproductive period of

all oysters is in the summer, early settlers of this country, cognizant of this but mindful of their Old World variety, avoided placing New World oysters on the menu until later in the year.

Even after our forefathers discovered that the North American east coast oyster fertilizes its eggs in the sea water outside the parent shell, oyster consumption in this country continued, for the most part, to be a winter activity. Partly responsible for this was the fact that only until recent years have refrigeration facilities been developed whereby oysters can be preserved in warm weather while being transported from the coastal growing areas.

Today, when perishable food products are transported thousands of miles by railroad and airplane, yet preserved by refrigeration, the greater portion of the country's shellfish consumers still cling to the old tradition.

The advent of quality frozen oysters available throughout the year, however, may change this custom.