DEPARTMENT OF THE INTERIOR

INFORMATION SERVICE

FISH AND WILDLIFE SERVICE

For Release FRIDAY, JANUARY 2, 1942.

An almost 8-fold extension of keeping time for fresh crab meat has been obtained through newly applied pasteurization steps developed in the College Park (Md.) laboratories of the Fish and Wildlife Service, United States Department of the Interior.

In their experiments, which involved semi-commercial packing under conditions which can be carried out in any crab meat packing plant, Service technologists J. Y. Anzulovic and R. J. Reedy used crab meat purchased in the open market. The product represented output from nine plants in three Atlantic and Gulf coast states.

Applying principles of pasteurization already known for over a century and a half, the once-steamed flesh is resubjected, now in hermetically sealed #2 flat enameled cans, to temperatures below the boiling point of water (212° F.) for varying periods. Tests then applied include those for bacterial count, for color, smell, and taste.

Results obtained warrant the following conclusions, according to the co-workers:

1. The pasteurizing temperatures do not in any way impair the color, aroma, or taste of crab meat.

2. Pasteurization destroys organisms indicative of pathogenic contamination.

3. Applications of the pasteurizing process promises wider markets for crab meat: since it can be held longer, it can be shipped over longer distances.

As crab meat is usually sold according to its color, aroma, and taste, the first point is all important. Pasteurized crab meat could not be told from fresh by members of the technological staff who were "quite critical in their judgment."

"It is also seen from our experimental results," say the scientists concerning the second point, "that the pasteurization process eliminates pathogenic organisms present. In fact, the total number of organisms of any kind was small in the pasteurized samples when compared with the originals--even after 6 weeks' storage at ordinary refrigerator temperatures (41° - 43° F.)"

Finally, warn the authors, "it should be distinctly understood that this process does not sterilize the crab meat. It is still a perishable product. However, it does prolong its keeping quality when held under refrigeration for a considerable time." This time, it is explained, is about two months, as compared with the week or 10 days now possible before decomposition sets in.

"From our experiments it was shown that when good fresh crab meat was used the final product was also good. It must be realized, of course, that pasteurization cannot replace absolute cleanliness in the care and handling of the crab meat in the plants."

The pasteurization can be accomplished with the existing equipment found in the average crab meat plant. The only additional equipment needed is a can sealer. After the cans are sealed they should be placed in the racks which were previously used to steam the live crabs, and then put in the retort containing water five degrees higher in temperature than the desired pasteurizing heat.

When the crab meat reaches the desired temperature it is held for the proper time. At the end of that time the cans should be taken out and immediately cooled, either by immersion in cold water, or by a stream of cold water played on them until most of the heat is removed. These cans of crab meat of course should be placed in the refrigerator or thoroughly iced for shipment.

#