### **CANNING OF CLAMS IN BRINE / OIL**

**Aim:** To study canning of clam meat in brine or oil.

**Introduction:** Clam is a very popular item of shellfishes and a variety of product are made from this material. In addition to clam-meat as such, 'minced clam', 'clam powder', 'clam nectar', 'Clam Brota' etc. and a few of such delicacies. The several varieties of clams occur in almost all the countries of the world in shallow inland waters.

Several species of edible clams are available in India and many of them are harvested in backwaters, estuaries and inshore regions. They are abundant along the West coast of India. The important species are *Meritrix meritrix*, *M. Casta* and *Catalasiya opima*.

Clams are usually sold at a cheaper price in markets and mostly consumed by the low-income group peoples. Freezing and canning preserve a portion of clam meat. However the share of the latter is very less.

Product Code: CLL – Clams in brine

CL3 – Clams in oil

Can Used : a) 8-Oz. can, S-R lacquered

b) 4 ½-Oz. Shrimp can, S-R lacquered

Net Weight : a) 210 grams for 8-Oz. Can

b) 190 grams for 4 ½-Oz. Shrimp can

## **Materials and Equipments:**

Clams in live condition, table salt, refined oil, knives, trays, tubs, other canning equipments etc.

### **Procedure:**

Raw Material: Whole live clam

Washing : To remove dirt on surface

Depuration The live clams are kept in running water for 24 hours and later in 5 ppm chlorine water for 2 hours to remove sand particles from the gut and also to avoid muddy odour. Sort out dead clams (shell in open condition) Sorting The clam shell is opened by keeping them in boiling water (100°C) for Opening Shell: about 5-10 minutes. Shucking Removal of meat from the opened shells manually Cleaning The shucked meat is cleaned to remove the sand particles. Grading Grade the calm meat based on size. Blanching Depending on the size, the clam meat is blanched in 5% salt solution for 5-7 minutes. Add 3% table salt solution or refined vegetable oil to net weight (hot). Filling **Exhausting** Seaming Vacuum seaming after proper heat exhausting Can Washing At  $115^{0}$ C (10 psi) for 50 minutes. Retorting Can Cooling Drying Labeling

Storage

**Note**: For oil pack, fry the blanched meat for 2 minutes in hot oil and use the fried oil for filling.

### **Observations:**

Weight of whole clam shells

Weight of shucked meat

Weight of blanched meat

Weight of brine / oil filled

Number of cans produced

Number of persons involved and hours worked

Size of can used

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### **Calculations:**

Calculate the shucking yield, blanching loss, canning yield, yield rate and efficiency.

# **Precautions to be taken in canning of Clams:**

- 1) Sand may be present in the juice of the canned clams. Therefore the clams must be induced to expel the sand in the digestive organ while they are alive in seawater or in dilute brine solution. In which the pH value is adjusted to about 4.8.
- 2) Blackening of the canned clams often may occur. The cause and the prevention methods are the same as in the case of canned crab. C-enamel lined cans are used for prevention of blackening of meat.
- 3) In canned clams, the cans sometimes swell because the presence of heat resistant bacteria. Such bacteria live in the sand of the sea bottom. Therefore care must be taken in respective high standard sanitation.