

Prevent contamination.....

- Use only good quality ice made of potable water.
- Handle ice carefully, do not drag it along floor as it contaminate ice.
- Use only clean containers to store fish.
- Avoid the use of bamboo baskets for raw material receiving/ transporting.
- Ensure proper sanitation and proper hygiene.



Things to remember.....

- Ensure adequate quantity of ice while going for fishing.
- Ice the fish immediately after catching preferably within half an hour.
- Maintain fish in cool condition till it reaches consumer.



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ICE & FISH

Simplest way to keep fish fresh



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MPEDA

Keep the fish fresh

Fish is a very perishable food commodity that requires proper handling and preservation to increase its shelf life and retain its quality and nutritional value. Icing is the oldest method of preserving fish freshness. Currently, it is widely used.

Rise in temperature spoil fish

The spoilage rate at 5°C is twice as fast at 0°C. So it is very important to keep the temperature of fish low preferably below 0°C.

How fish get contaminated

The utensils, dirty ice and all other surfaces including human hand that come in contact with fish add bacterial load in seafood. Pathogenic seafood that contaminates fish can cause food poisoning and even several contagious diseases. During decomposition, a set of metabolic products are formed, giving rise to intolerable odours.

Types of ice

Ice can be produced in different shapes; the most commonly utilized in fish utilization are flake, plate, tube and block. Block ice is ground before being utilized to chill fish.

How icing prevents spoilage

➤ **Temperature reduction:** By reducing temperature to about 0°C the growth of

pathogenic micro-organisms and enzymatic actions would be reduced.

- **Keeps fish moist:** This action mainly prevents surface dehydration and reduces weight losses.
- **Advantageous physical properties:** Ice has a large cooling capacity that is comparatively small amount of ice is needed to cool 1 kg of fish.
- **Extended shelf life.** The overall reason for icing fish is to extend fresh fish shelf life in a relative simple way as compared to storage of un-iced fish at ambient temperatures above 0°C.

Proper icing.....

- Properly ice the fish using well crushed good quality ice before rigor mortis begin
- Keep fish in clean insulated fish boxes
- Do not overfill containers
- Use 1kg of Ice to preserve 1 kg of fish
- Avoid large and sharp edged pieces of ice
- Ensure drainage of ice melted water from boxes.

