

## Safety/Quality Tips for the Consumer

Seafoods, like many other foods, are perishable and must be handled properly to avoid spoilage and the possibility of food poisoning. Food poisonings are caused primarily by bacteria and toxins natural to the marine environment, although poor handling and storage practices may also be the cause of contamination.

The following tips are designed to help reduce or eliminate these risks.

### Use a Reliable Source

When you purchase seafood, always buy from a source that maintains high standards and has the required facilities and knowledge to handle fish.

Know the characteristics of quality seafood, and avoid low quality products.

**Look** The eyes of finfish should appear bright, clear - almost alive; the gills reddish; the skin moist with shiny, tightly adhered scales. Fresh fillets have a bright, shiny colour without browning.

**Touch** Fresh fish will give slightly, then spring back into shape when gently pressed.

**Smell** Fresh fish shouldn't smell fishy. A fresh fish aroma is never offence.

### Storing Fresh Seafoods

Wrap seafood in cling wrap or store in an air-tight container. As a general rule, fresh seafood should not be held more than a day or two before being cooked. From a safety point of view, the maximum temperature for perishable food is 4°C. Based on quality and shelf life, it is recommended that seafoods are held between -1 to 2°C.

*(Disease-producing bacteria thrive at warm temperatures and can live very well on seafood. In the danger zone - between 4°C and 60°C - bacteria can double in numbers every 15 to 30 minutes. At the faster*

*growth rate, one bacterium could replicate to one million within 5 hours.)*

Even though frozen storage for fish can vary from 3 - 10 months, depending on the oil content of the fish, all frozen seafoods should be used within a month or two to ensure the best flavour.

Smoked fish requires refrigeration, which should be no longer than seven to ten days. If longer storage is required, freeze the product immediately after purchase, re-wrapping if necessary. Signs of quality deterioration and

spoilage of smoked fish include discolouration, mold, and an unpleasant odour. Discard the product immediately if there are any signs of spoilage.

Crustaceans (i.e. crabs) and unshucked bivalve molluscs (i.e. clams, oysters) should be routinely culled to ensure they are alive when purchased or cooked. When alive, the bivalve shellfish will be tightly closed or will close when tapped lightly.

Refrigerate live bivalve molluscs in well-ventilated containers and cover with a damp paper towel.

### Thawing Frozen Seafoods

Poor thawing procedures can also cause rapid bacterial growth on a seafood product. Freezing will not kill bacteria, but only places them in a hibernation state. These micro-organisms will reactivate and grow once thawing begins.

Many frozen seafood products, such as fillets and steaks, may be cooked without thawing if additional cooking time is allowed. If you must thaw frozen seafood, use one of two recommended methods:

- thawing in the refrigerator - this takes about 18 hours per pound.
- thawing under cold running water - this takes only about ½ hour per pound.

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## **Cooking**

Proper cooking is important to destroy any parasites or harmful bacteria that may be present. For fin fish, allow 10 minutes cooking time for each inch of thickness. Turn the fish over halfway through the cooking time unless it is less than a half-inch thick. Add 5 minutes to the total cooking time if the fish is wrapped in foil or cooked in a sauce.

Properly cooked fish will flake easily with a fork and should be opaque and firm.

When boiling in-shell molluscan shellfish (i.e. clams, oysters), note when the shells open and continue the boiling for 3-5 more minutes. If steamed, cook the opened molluscs for 4-9 minutes. Discard molluscs that do not open during cooking. When cooking shucked oysters, boil for at least 3 minutes or fry in oil for at least 10 minutes at 190°C or bake for 10 minutes at 230°C.

## **Avoid Cross-Contamination**

Even though cooking will destroy most of the harmful micro-organisms that may be on fish, cooked products (and any other foods) can be re-contaminated through poor handling or storage practices.

Handle and store raw and cooked seafood products separately and thoroughly wash and sanitize knives, containers and cutting boards after handling raw seafoods.

## **Consuming Uncooked Seafoods**

If uncooked products such as sushi, cerviche, or cold smoked fish are eaten, it is critical to adequately freeze these products prior to consumption. See Fish Safety Note "*Parasites and Fish*".

In summary:

- Know your seafood seller
- Purchase seafood carefully
- Keep seafoods cold
- Keep "Live" shellfish "Alive"
- Cook seafood thoroughly
- Don't cross-contaminate
- Freeze fish before consuming raw

***For further information  
please contact your Fish  
Safety Officer (604.707.2458)  
or your local Health Authority***