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# **Consumer Tips For Handling Seafood Safely**

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## Purchasing Seafood

- Always purchase seafood from a dealer that maintains high quality. Know the characteristics of high quality seafood, and avoid low-quality products.
- *Purchase raw shellfish carefully.* Buy raw clams, oysters and mussels only from reputable markets. If in doubt, ask the seafood market personnel to show you the certified shipper's tag that accompanies "shell on" products or check the shipper number on shucked oyster containers.
- When you leave the seafood market, keep your seafood cold. Leaving a sackful of groceries in the car on a hot day speeds up spoilage and may make seafood unsafe to eat.

## Storing Fresh Seafood

- When you get home from the seafood market, place seafood in the refrigerator immediately.
- Wrap fresh seafood in "cling wrap" or store in air-tight containers. Store fresh, pasteurized, or smoked seafood products refrigerated at 32° to 38°F.
- Refrigerate live clams, oysters, mussels, crabs, lobsters, and crayfish in well ventilated containers covered with a damp cloth or paper towels.

Do not store live shellfish in air-tight plastic bags or containers. Storing live shellfish in salt water shortens their shelf life, and storing them in fresh water kills them.

- Keep "live" shellfish alive. Do not cook or eat shellfish such as clams, oysters, mussels, crabs, lobsters, and crayfish that have died during storage. Live clams, oysters and mussels are tightly closed, or will close when tapped. Live crabs, lobsters and crayfish move their legs. Dead shellfish spoil rapidly and develop off-flavors and off-odors.

## Storing Frozen Seafood

- Store frozen seafood products in the freezer in their original moisture/vapor proof package immediately after purchase, unless they are to be thawed for cooking.
- Frozen seafoods packaged in over-wrapped trays should be repackaged in "cling wrap," plastic "freezer" wrap, freezer paper, or other moisture/vapor proof material before being stored in the freezer.
- Keep frozen seafood products frozen at 0°F or below until ready to use.

## Thawing Frozen Seafood

- Many frozen seafood products do not need to be thawed before being cooked. Follow the processor's directions when heating or cooking frozen seafoods.
- If frozen seafood needs to be thawed before cooking, thaw in the refrigerator (about 18 hours per pound) or under cold running water (about ½ hour per pound).
- *Do not* thaw frozen seafood at room temperature or under warm running water. Thinner parts of the seafood thaw faster than thicker parts, and the outer edges may start to spoil before the center has thawed.

## Handling and Preparation

- ***Don't cross-contaminate!*** Food poisoning and spoilage bacteria can be spread from live and raw seafood to cooked seafood products. Handle raw and cooked seafood products separately.

Thoroughly wash and rinse knives, containers, and cutting boards between handling raw and cooked seafoods. Keep raw and cooked seafoods from coming in contact with each other.

- **Cook fish and shellfish thoroughly.** Fish is cooked when it begins to flake and reaches an internal temperature of 140°F.
- **All raw foods contain bacteria.** Handle seafoods as you would any perishable food product...keep properly refrigerated, cook adequately, and handle with safety in mind.

## Raw Seafoods

Many consumers enjoy raw or lightly marinated seafood products. Just as the consumption of raw or rare meat, raw eggs, and raw milk carries a degree of risk of food poisoning, so does consumption of raw fish (sashimi, sushi, ceviche, gravlax and cold-smoked fish) and raw clams, oysters and mussels.

Follow these tips to reduce this risk:

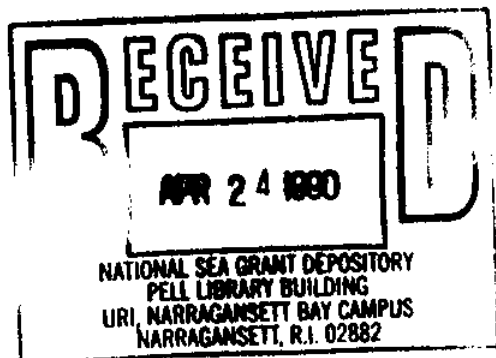
- **Use commercially frozen fish, or freeze fish to be used for the preparation of sashimi, sushi, ceviche, gravlax, or cold-smoked fish for seven days at -4°F, to avoid the risk of problems from parasites that may be present in the fish.**
- **Be certain that clams, oysters, and mussels to be consumed raw come from certified shellfish growing waters. Make sure they are kept well refrigerated until use.**

## High Risk Individuals

Individuals with chronic liver disease or compromised immune systems should avoid eating raw or partially cooked oysters. The U.S. Food and Drug Administration has advised that a common salt water bacteria, *Vibrio vulnificus*, carried at times by oysters, especially in summer months from Gulf Coast waters, can be the cause of severe illness and death for individuals with such medical conditions as:

- Liver disease, including cirrhosis and hemochromatosis;
- Chronic alcohol abuse;
- Cancer, especially if taking anti-cancer drugs or radiation treatment;
- Diabetes mellitus;
- Chronic kidney disease;
- Inflammatory bowel disease (or any person receiving immunosuppressive drugs);
- Steroid dependency (as used for conditions such as chronic obstructive pulmonary disease, etc.);
- Achlorhydria (a condition in which the normal acidity of the stomach is reduced or absent).

Since the bacteria, *Vibrio vulnificus*, is destroyed by heat during cooking, consumers with these conditions can enjoy cooked shellfish preparations.



Seafoods, like many other foods, are perishable and must be handled properly to avoid spoilage and food poisoning.

## **Know Your Seafood Seller**

## **Purchase Raw Seafood Carefully**

## **Keep Seafoods Cold**

## **Keep "Live" Shellfish "Alive"**

## **Refrigerate Live Shellfish Properly**

## **Don't Cross-Contaminate**

## **Cook Seafood Thoroughly**

## **Freeze Fish Before Making Sashimi, Sushi, Ceviche, Gravlax, or Cold-Smoked Fish**

The author is Robert J. Price, Seafood Technology Specialist, Department of Food Science & Technology, University of California, Davis, California 95616

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