



# FOODFACTS

From the U.S. Food and Drug Administration

## Fresh and Frozen Seafood *Selecting and Serving it Safely*

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Fish and shellfish contain high quality protein and other essential nutrients and are an important part of a healthy diet. In fact, a well-balanced diet that includes a variety of fish and shellfish can contribute to heart health and aid in children's proper growth and development. As with any type of food, however, it is important to handle seafood safely in order to reduce the risk of foodborne illness, often called "food poisoning." Follow these basic food safety tips for buying, preparing, and storing fish and shellfish — and you and your family can safely enjoy the fine taste and good nutrition of seafood.

### Buy Right

#### Fresh Fish and Shrimp

Only buy fish that is refrigerated or displayed on a thick bed of fresh ice that is not melting (preferably in a case or under some type of cover).

- Fish should smell fresh and mild, not fishy, sour, or ammonia-like.
- A fish's eyes should be clear and bulge a little.
- Whole fish and fillets should have firm, shiny flesh and bright red gills free from milky slime.
- The flesh should spring back when pressed.
- Fish fillets should display no discoloration, darkening or drying around the edges.
- Shrimp flesh should be translucent and shiny with little or no odor.
- Some refrigerated seafood may have time/temperature indicators on their packaging, which show if the product has been stored at the proper temperature. Always check the indicators when they are present and only buy the seafood if the indicator shows that the product is safe to eat.



### Selecting Shellfish

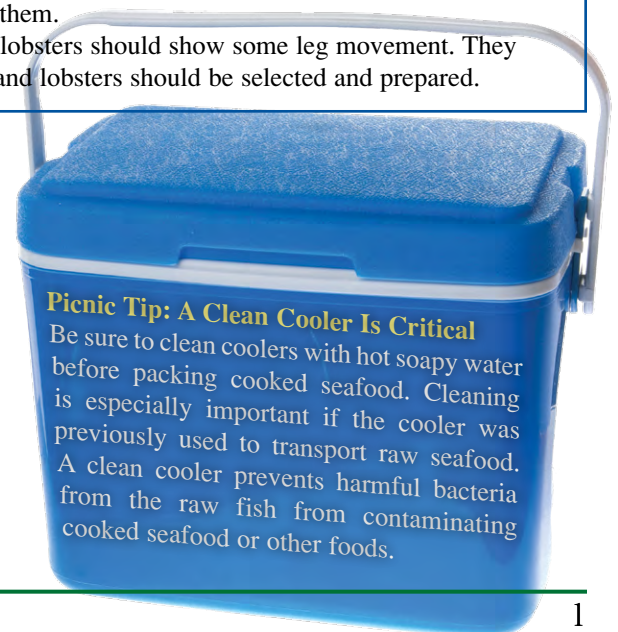
Follow these general guidelines for safely selecting shellfish:

1. **Look for the label:** Look for tags on sacks or containers of live shellfish (in the shell) and labels on containers or packages of shucked shellfish. These tags and labels contain specific information about the product, including the processor's certification number. This means that the shellfish were harvested and processed in accordance with national shellfish safety controls.
2. **Discard Cracked/Broken Ones:** Throw away clams, oysters, and mussels if their shells are cracked or broken.
3. **Do a "Tap Test":** Live clams, oysters, and mussels will close up when the shell is tapped. If they don't close when tapped, do not select them.
4. **Check for Leg Movement:** Live crabs and lobsters should show some leg movement. They spoil rapidly after death, so only live crabs and lobsters should be selected and prepared.

### Frozen Seafood

Frozen seafood can spoil if the fish thaws during transport and is left at warm temperatures for too long.

- Don't buy frozen seafood if its package is open, torn, or crushed on the edges.
- Avoid packages that are positioned above the "frost line" or top of the freezer case.
- Avoid packages with signs of frost or ice crystals, which may mean the fish has been stored a long time or thawed and refrozen.



#### Picnic Tip: A Clean Cooler Is Critical

Be sure to clean coolers with hot soapy water before packing cooked seafood. Cleaning is especially important if the cooler was previously used to transport raw seafood. A clean cooler prevents harmful bacteria from the raw fish from contaminating cooked seafood or other foods.



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## Store Properly

Put seafood on ice or in the refrigerator or freezer soon after buying it. If seafood will be used within 2 days after purchase, store it in the refrigerator. Otherwise, wrap it tightly in plastic, foil, or moisture-proof paper and store it in the freezer.

## Separate for Safety

When preparing fresh or thawed seafood, it's important to prevent bacteria from the raw seafood from spreading to ready-to-eat food. Take these steps to avoid cross-contamination:

- When buying unpackaged cooked seafood, make sure it is physically separated from raw seafood. It should be in its own display case or separated from raw product by dividers.
- Wash your hands for at least 20 seconds with soap and warm water *before* and *after* handling any raw food.
- Wash cutting boards, dishes, utensils, and counter tops with soap and hot water between the preparation of raw foods, such as seafood, and the preparation of cooked or ready-to-eat foods.
- For added protection, kitchen sanitizers can be used on cutting boards and counter tops after use. Or use a solution of one tablespoon of unscented, liquid chlorine bleach to one gallon of water.
- If you use plastic or other non-porous cutting boards, run them through the dishwasher after use.

## Prepare Safely

### Thawing

Thaw frozen seafood gradually by placing it in the refrigerator overnight. If you have to thaw seafood quickly, either seal it in a plastic bag and immerse it in cold water or — if the food will be cooked immediately thereafter — microwave it on the “defrost” setting and stop the defrost cycle while the fish is still icy but pliable.



### Cooking

Most seafood should be cooked to an internal temperature of 145°F.

If you don't have a food thermometer, there are other ways to determine whether seafood is done.

- **Fish:** The flesh should be opaque and separate easily with a fork
- **Shrimp and Lobster:** The flesh becomes pearly and opaque
- **Scallops:** The flesh turns opaque and firm
- **Clams, Mussels, and Oysters:** The shells open during cooking — throw out ones that don't open

Uncooked spoiled seafood can have an ammonia odor. This odor becomes stronger after cooking. If you smell an ammonia odor in raw or cooked seafood, do not eat it.

### Serving

Follow these serving guidelines once your seafood is cooked and ready to be enjoyed.

- Never leave seafood or other perishable food out of the refrigerator for more than 2 hours or for more than 1 hour when temperatures are above 90°F. Bacteria that can cause illness grow quickly at warm temperatures (between 40°F and 140°F).
- Carry picnic seafood in a cooler with a cold pack or ice. When possible, put the cooler in the shade and keep the lid closed as much of the time as you can.
- When it's party time, keep hot seafood hot and cold seafood cold:
  - ✧ Divide hot party dishes containing seafood into smaller serving platters. Keep platters refrigerated until time to reheat them for serving.
  - ✧ Keep cold seafood on ice or serve it throughout the gathering from platters kept in the refrigerator.

