

Guidelines for Keeping Seafood Safe to Eat

Freezing. After shopping, immediately store commercially wrapped frozen seafood in your freezer. Put it in the coldest part of the freezer, at a temperature as close to -20° F as possible. As with other frozen foods, avoid prolonged storage by planning your purchases, keeping in mind “first in, first out.” Commercially frozen seafood can be stored in the freezer for up to six months.

Thawing. Plan ahead; defrost fish overnight in the refrigerator. This is the best way to thaw fish to minimize loss of moisture. A one-pound package will defrost within twenty-four hours. Never defrost seafood at room temperature or with hot or warm water as bacteria on the surface will begin to multiply. If you forget to take the seafood out of the freezer in time, place it in the sink (still in the package) under cold, running water. A one-pound package will defrost in about an hour.

You can use your microwave oven to partially defrost fish. Use the lowest defrost setting (10% – 30% power). A pound of fillets defrosts in five to six minutes. The fish should feel cool, pliable, and slightly icy. Be careful not to overheat it and begin the cooking process. Foods defrosted in the microwave oven should be cooked immediately after thawing.

Preparation. Be sure all surfaces and utensils that will touch the food are clean.

Always wash your hands with soap and warm water for at least twenty seconds before starting food preparation, before working with a new food or utensil, after finishing food preparation, before serving, and after going to the bathroom.

Don't let juices from raw seafood, meat, or poultry come into contact with other food.

Wash cutting board, utensils, counter, sink, and hands with hot, soapy water immediately after preparing raw seafood, meat, or poultry.

Cooking. Cook fish and shellfish thoroughly. Fish is cooked when it begins to flake and loses its translucent (raw) appearance. Cook fish until it reaches an internal temperature of 145° F for at least fifteen seconds.

Seafood is usually cooked under moderate to high heat (425° F). You need a reliable, continuous heat source. So don't cook it on a hot plate. Avoid interrupted cooking — completely cook the seafood at one time.

If you're microwaving fish, you need to compensate for uneven heating and shorter cooking times. Be sure to rotate or stir halfway through the cooking process, cover to retain moisture, heat to an internal temperature of 170° F for fifteen seconds, and allow to stand covered for two minutes after cooking.

Scallops and shrimp turn firm and opaque when cooked. It takes three to five minutes to boil or steam one pound of medium-sized shrimp, and three to four minutes to cook scallops.

Shucked shellfish, such as clams, mussels, and oysters, become plump and opaque when cooked. The FDA recommends that shucked oysters be boiled or simmered for at least three minutes, fried in oil for at least ten minutes at 375° F, or baked at 450° F for at least ten minutes. Steam clams, mussels, and oysters in the shell for four to nine minutes after water reaches a full boil. Use small pots to steam shellfish. If too many shells are cooking at once, the centers may not cook thoroughly. Discard clams, mussels, or oysters that don't open during cooking. They may not have received adequate heating.

When cooking frozen clams, mussels, or oysters in the shell, follow the directions on the package.

Marinades. Marinate seafood in the refrigerator in a glass or plastic container; avoid metal. Avoid cross-contaminating other foods by cleaning all utensils, bowls, or surfaces the marinade comes in contact with after it has been combined with raw seafood. Don't save marinades that have been combined with raw seafood unless they are immediately cooked in a sauce. Bring the marinade to a rolling boil before adding other ingredients. Then cook the sauce to at least 160° F.

If fish is to be consumed raw, use only previously frozen fish. Do not consume raw or undercooked fish or shellfish if your immune system is compromised in any way.

Serving. Never put cooked seafood back on the plate that held the raw product. Place leftovers in smaller containers and refrigerate them within two hours when the temperature of the food serving area is below 90° F and within one hour when the air temperature is 90° F or above.



This publication was produced by the University of Delaware Sea Grant College Program and the National Seafood HACCP Alliance.



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Seafood Safety: What Consumers Need to Know



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Using HACCP to Keep Seafood Safe

What Is HACCP?

HACCP (pronounced “has-sip”) is an acronym for *Hazard Analysis Critical Control Point*. It’s an effective way of ensuring the safety of food. It works by preventing food safety problems from developing rather than testing food after production to see if it’s safe.

HACCP was developed in the late 1950s and early 1960s as a way to assure that the food produced for the space program was safe. The Pillsbury Company, in cooperation with NASA, worked out this method of controlling food safety problems.

There are two parts to HACCP. Part one includes making a list of things that can cause the food to be unsafe — we call this *hazard analysis*. Part two is deciding at which place in the production of the food the hazards can best be controlled — we call this the *critical control point* for that hazard.

How Does HACCP Make Seafood Safe?

All parts of the seafood processing operation are examined for hazards including raw materials, ingredients, processing steps, storage, and distribution. Hazards include disease-causing organisms, toxins, environmental contaminants (like pesticides), chemicals (cleaners, sanitizers, lubricants, etc.), and physical hazards (wood, metal, and glass). For each hazard, a critical control point is identified where the potential food safety problem is controlled.

Records are kept at each critical control point so inspection agencies can be certain the HACCP system is operating to provide safe food. As an extra measure of safety, certain sanitation activities also must be conducted and documented.

Under the new U.S. Food and Drug Administration regulations, all seafood processors will be required to operate under the HACCP program. All imported seafood also will be covered.

What Do Consumers Need to Do to Keep Seafood Safe?

The most important considerations in safe handling of seafood at home are cleanliness, temperature, and time. Keep your hands, preparation area, and utensils clean. Never let raw seafood come in contact with cooked seafood or other raw (or cooked) foods.

Seafood is highly perishable. If you are buying seafood at the supermarket, make it one of your last purchases. Use your eyes, hands, and nose when selecting fresh fish or shellfish. Your purchase should feel cold to the touch. And it shouldn’t smell “fishy.” The odor should be similar to that of a sea breeze.

Be aware of temperatures — of the air, of your refrigerator and freezer, of cooking. Keep foods out of the danger zone (40°F – 140°F). Be aware of time — limit how long the fish and shellfish are unrefrigerated.

Finally, to help keep your seafood safe, keep it clean, keep it cool, and keep it moving! By abiding by these rules and adopting the following guidelines, you can be confident that your efforts and the HACCP program are working together to keep seafood safe.

What’s the Right Way to Handle and Store Seafood?

The storage life of seafood depends on how well you take care of it, whether a whole fish or a live oyster. When your seafood purchase arrives home, store it immediately in your refrigerator or bury it in ice. When purchasing fresh-frozen seafood, place it in the freezer immediately.

Fish. The shelf life of fish depends on the variety and its quality at the time of purchase. In general, you should use fish quickly — within one to two days.

Shellfish. Buy live shellfish from reputable dealers, or ask to see the certification tags that indicated the shellfish were harvested from safe waters.

Store live shellfish, such as oysters and mussels in the shell, in a shallow dish covered with damp

towels or moistened paper towels. Never put live shellfish in water or in an airtight container. Scrub shells with a stiff brush just prior to shucking or cooking.

Mussels live in the shell should be used within two to three days; clams and oysters in the shell, within seven to ten days. If some shells open during storage, tap them. They will close if alive; if not, discard them.

Store shrimp, squid, and shucked shellfish in a leak-proof bag or container. Squid and freshly shucked clams have a shelf life of one to two days. Shrimp and scallops have a shelf life of about two to three days. And freshly shucked oysters have a shelf life of five to seven days.

Live lobsters and crabs should be cooked the day they are purchased. Store cooked, whole lobsters or crabs in a rigid airtight container and use them within two to three days. Cooked, picked lobster or crab meat may be stored in a sealed moisture-proof container or bag for three to four days. Pasteurized crab meat can be refrigerated for up to six months before opening; use it within three to five days after opening. Follow the “use by” dates on the package.

