



Safe seafood means satisfied customers

Educate consumers so they'll know how to maintain the quality of the fish you sell them

By Lisa Duchene

Retailers know that consumers who get sick after eating the fish they buy are hardly a source of repeat business, so preventing food-borne illness is essential. And prevention starts at the source.

Buy fresh, high-quality fish from reputable suppliers who keep fresh fish between 30 to 40 degrees F and frozen fish at 0 to minus 20 degrees F.

But there is still a lot that can go wrong once a consumer gets his or her purchase home. What can you do to ensure they enjoy the seafood from your case? Educate, educate, educate. Teach your customers about safe seafood-handling practices to prevent illness.

Here's some information to share with them.

Q. I usually eat fish in restaurants because I'm worried that if I buy it at the store it might spoil before I cook it at home. How can I make sure my seafood is safe to eat?

Buy fresh fish from a reputable retailer. Keep it cold. Handle and cook it properly. Buy fresh fish the day you're going to use it. Store fresh fish in the coldest part of the refrigerator, below 35 degrees F until ready to cook. Defrost frozen fish in the refrigerator at 32 to 35 degrees. Store frozen fish at a temperature of 0 to minus 20 degrees F.

Live shellfish need to breathe and will suffocate in a plastic bag. Store them covered, in the refrigerator with a clean, damp cloth. Lobsters, clams and mussels all must be alive before cooking. Check that lobsters are still moving. Tap the open shells of clams or mussels and discard any that don't close.

Q. How do I find a good place to buy fish?

Don't buy fish out of the back of a pickup truck or off a boat that doesn't have onboard refrigeration or freezing systems. To judge whether a retailer is trustworthy, look around and sniff. The seafood department should not smell fishy. Seafood clerks should be in clean clothing, wearing hair coverings and disposable gloves when handling food. They should change their gloves after doing non-food tasks and after handling raw seafood, according to the Food and Drug Administration.

Take your business elsewhere if you see flies or bugs or seafood clerks who are touching their hair or eating. The clerk should be able to tell you how

old the products are and be able to give you detailed assurance that the store's seafood is fresh.

The fish should be displayed on a thick bed of fresh ice under a case or other cover. Whole fish should be belly-down so that melting ice drains away from the fish.

Cooked seafood like shrimp, crabs or smoked fish should not be displayed in the same case as raw fish, as cross-contamination can occur.

Q. How do I know if the fish is fresh?

Look for clear eyes on whole fish. Look for firm, shiny skin. Fresh whole fish should have bright, red gills and fish should smell like the sea, not fishy or ammonia-like. If you're buying steaks or fillets, look for bright, shiny flesh without gaps. Dull or gaping flesh typically means the fish is old. The flesh should spring back when pressed and there should be no discoloration or darkening around the edges of the fish.

Don't buy frozen seafood in torn or open packages or packages that are crushed on the edges. If you can see ice crystals or frost on the product, the fish could have been stored a long time or thawed and refrozen, so you shouldn't buy it.

Q. How cold do I have to keep seafood? Should I bring a cooler to the store?

The FDA recommends putting seafood on ice immediately after buying it and refrigerating or freezing it quickly. For seafood, a temperature range of 40 de-



Clear eyes, shiny skin and firm flesh are indicators of freshness when buying whole fish.

grees to 140 degrees F is known as the "danger zone," because bacteria grow rapidly within that range. Seafood should pass through the danger zone as quickly as possible.

Consider how much time passes from when the fish is taken off the ice at the seafood counter to when it is placed in the coldest part of your refrigerator. An insulated bag or cooler with cold-pack is a good idea.

Q. Is there anything special I should know when preparing seafood at home?

Avoid cross-contaminating cooked foods with raw seafood, juices or dripped liquid from raw seafood by following these safeguards:

- Wash hands thoroughly with hot, soapy water before and after handling raw seafood.
- Keep towels, cloths and sponges clean, since bacteria lingers in them. Replace sponges frequently and do not re-use a dishcloth or sponge used to clean up juices from fish or shellfish without first washing it.
- Once you are finished handling raw products, wash everything the product has contacted before continuing food preparation. Dishes, knives, cutting boards and hands should all be washed with hot, soapy water.
- Don't use the same container that held raw products for storing or serving cooked products.

Q. How do I know when fish is cooked properly?

Cook fish to an internal temperature of 145 degrees F. Fish is cooked when the meat flakes easily and loses its translucence, says the National Fisheries Institute. If you are baking, broiling, grilling, steaming or poaching fillets, steaks or whole fish, use a 10-minute rule. Measure the fish at its thickest point. Cook it 10 minutes per inch of thickness at 450 degrees F, turning halfway through the cooking time. Add five minutes if cooking in foil or a sauce. Double the cooking time for frozen fish that hasn't been thawed. Steam mollusks 4 to 6 minutes. Discard any whose shells don't open.

Q. Can I eat fish raw?

Raw fish are more likely to contain parasites or pathogens than cooked fish and shellfish. *Vibrio vulnificus* is a naturally occurring bacterium found in warm, coastal waters and can be present in oysters from these areas. Most consumers have immune systems that can repel *Vibrio*. People with liver disorders, cancer, lymphoma, leukemia, AIDS, Hodgkins disease or diabetes mellitus, chronic kidney disease, or inflammatory bowel disease should avoid raw fish, as should people who abuse alcohol, are dependent on steroids or take medicine to reduce stomach acid.

Senior Editor Lisa Duchene can be e-mailed at lduchene@divcom.com