

# Handling Your Catch

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Have you ever wondered why sometimes fish you catch doesn't taste as good as expected, or worry that you've done something that could make yourself or someone else who eats your catch, ill? Fish is highly perishable and it must be handled properly. You can keep your catch safe by following a few simple tips and keeping it cool.

Changes in fish quality begin when it is hooked, and continue after it dies. When a fish is hooked, it engages in a struggle that depletes its energy reserves, and this changes the muscles (the part we eat). The longer the struggle, the more metabolic by-products accumulate in the muscles that affect the flavor and texture. Physical damage also causes bruises, blood clots, damage to internal organs and other problems that affect quality.

Bacteria from the environment and gut begin to multiply after a fish dies, and the rate depends on the temperature. Bacterial growth at 90°F is rapid and fish spoils within a day. In contrast, spoilage takes 7 to 14 days at 32°F (the temperature of melting ice) for most fish. Keeping your catch as cold as possible is important, especially for certain species of fish that are likely to develop scombrototoxin or histamine. Once scombrototoxin forms in fish it cannot be removed, and it can cause a "food poisoning" type illness that could be life threatening for most people. Scombrototoxin poisoning is the most common food borne illness associated with fish consumption in the U.S., and it can be prevented if fish are handled and chilled properly. The types of fish most at risk for developing scombrototoxin are bluefish, bonito, herrings, jacks, mackerels, mahi-mahi, marlin, shads, tunas and wahoo.



## Tips for Handling Fish Properly

### Land your fish quickly and carefully.

Avoid puncturing the gut and edible parts if you use a gaff or other aids. Kill the fish quickly to prevent it from being bruised. Bleed the fish to improve the quality of the meat.

### Chill fish as quickly as possible. Ice is an inexpensive way to cool fish. Use crushed or flaked ice to maximize the surface area contact with the fish. Cover the bottom of a cooler with a layer of flaked or crushed ice, place the fish on the ice, and cover it with more ice. Make an ice-slurry by mixing 8 parts ice to one part sea or fresh water in a cooler and use it to cool the fish faster. Remember to add more ice as it begins to melt, and make sure that you use ice made from potable (drinkable) water. Use ice only if you have any doubts about the water quality, or don't have access to clean water.

Clean fish carefully. Get the fish on ice as soon as it is caught and leave the cleaning until after the fishing trip. However, gut large fish as soon as it is captured, and pack the gut cavity with ice to cool it faster. Be careful not to cut or puncture the gut and internal organs while cleaning the fish. This will release bacteria and enzymes that cause the fish to spoil faster, and increase the likelihood that scombrototoxin could develop. Rinse the entire fish thoroughly, including the gut cavity, before packing it in ice. Do not gut small fish if you plan to fillet them the same day. When you have proper facilities, remove the fillets from the whole fish and rinse them with potable water; place the fillets in plastic storage bags before putting them on ice.

### Store and cook your catch properly.

Transport your catch with plenty of ice and store it in the coldest part of your refrigerator in a container that won't leak and drip onto other foods. Freeze your catch if you won't be able to cook it within two or three days. Fish should be cooked to an internal temperature of 140°F for one minute. Use the 10 minute rule for cooking — cook fish on high heat (425°F) for 10 minutes per inch of thickness. Double the cooking time if the fish is frozen or if you add many ingredients.

### Check for advisories before you go fishing.

Lakes, ponds, rivers, streams and even certain saltwater bodies, and fish species may have a history of elevated levels of contaminants like PCBs or mercury from environmental pollution. The health authority in each state issues advisories to let people know which fish from each body of water have elevated levels of contaminants. The NYS Department of

Health updates these advisories every year in spring before the freshwater fishing season opens. Check these advisories before fishing, or at least once per year at the website [www.health.state.ny.us/nysdoh/fish/fish.htm](http://www.health.state.ny.us/nysdoh/fish/fish.htm).

By following these few simple precautions you can enjoy eating your catch as much as you enjoyed fishing!

