



Seafood Health Facts: Making Smart choices

Balancing the Benefits and Risks of Seafood Consumption

Resources for Healthcare Providers and Consumers

Recreationally Caught Fish and Shellfish [1]

This section describes food safety issues associated with fish and shellfish that may be harvested from fresh waters or near shore marine waters with elevated levels of pollutants like PCBs or pesticides. This information focuses on how recreational anglers can select and prepare products to minimize potential risks.

Introduction

Fish and shellfish are unique foods in that large amounts are harvested by individuals for their own personal consumption. It is estimated that one-fifth of the fish and shellfish eaten in the U.S. comes from recreational or subsistence fishing in the ocean, in marine bays or estuaries, or in freshwater lakes, ponds, rivers or streams.

Food Safety Issues

Individual fishermen may catch fish from waters that are known to contain elevated levels of contaminants or pollutants like PCBs or pesticides, even though commercial fishing in these waters is banned. The presence of environmental contaminants from certain areas can cause long term health effects if fish and shellfish from these areas are consumed. Repeated exposure to these chemicals over time may affect reproduction, growth and development in children, and may increase lifetime cancer risks. Pregnant women and children who eat large amounts of sport caught fish from contaminated waters are at greatest risk. State health authorities issue fish consumption advisories that advise all anglers and high risk individuals to limit their consumption of certain types of fish or fish of a particular size from specific bodies of water. These advisories may be distributed with fishing licenses in some states or can be found on the website of the state health authority. The U.S. Environmental Protection Agency has a Website with links to each state's fish consumption advisories. [Click here to view this site](#) [2].

Naturally occurring toxins are sometimes produced in the marine environment. These toxins are usually associated with certain kinds of fish or shellfish that come from specific geographical areas. For example, the toxin known as ciguatera is associated with certain types of reef fish from specific tropical areas. These toxins are not destroyed by cooking, so potential risks can best be managed by exercising caution when eating recreational fish or shellfish from unfamiliar waters and checking to make sure that there are no local advisories.

Another type of toxin, called scombrototoxin, is caused by improper fish handling. Scombrototoxin is produced when certain species of saltwater fish like tuna, mackerel, bluefish, mahi-mahi, and amberjacks begin to spoil. When these fish are exposed to temperatures that allow rapid bacterial growth, histamine is formed which can cause an allergic-type reaction when the fish is eaten. This toxin is not destroyed by cooking, but it can be prevented by properly handling and cooling these types of fish. This toxin can be rapidly produced when fish are allowed to remain in warm water or on the deck of a fishing boat or dock for several hours in warm weather. Recreational fisherman should plan ahead and have plenty of ice available to get these fish as cold as possible as soon as they are taken out of the water and keep them cold until they are safely stored in the home refrigerator.

Tips to Manage Risks That Could be Associated with Recreational Fish or Shellfish

The following guidelines can help recreational anglers and the people who eat these fish manage potential safety risks:

Before you go fishing, check to see if there are any health advisories for the body of water or type of fish or shellfish that you intend to catch. Advisories are available from local or state health

departments, fisheries agencies, or you can check the [EPA Website](#) [2].

To minimize risks associated with chemical contaminants or toxins do not eat excessive amounts of any single type of fish or shellfish from contaminated waters and do not eat the internal organs of fish, the tomalley of lobsters, or the mustard in crabs. These organs can contain significantly higher amounts of contaminants or toxins.

Individuals at greater risk for exposure to chemical contaminants, including pregnant women, women of child bearing age, and children under age 15, should take special care to avoid species known to have elevated levels of contaminants.

If you choose to eat sport fish that may contain elevated levels of chemical contaminants, trim away fatty areas (for example the skin and belly area) and use cooking methods like baking or broiling that allow fats and juices to drain away.

Plan ahead to keep the fish you catch cold. Bring enough ice to completely surround the fish and a cooler to keep the ice from melting so the fish will stay cold.

Use clean drinkable water when rinsing or cleaning your catch and keep all cutting boards, knives and other equipment clean.

Adapted from: Seafood Savvy by Ken Gall, New York Sea Grant and Cornell University



© Copyright 2019. Project partially funded through a grant from from the National Aquaculture Extension Initiative of the National Sea Grant Program (Grant No. NA13OAR4170203), NOAA, U.S. Department of Commerce and the National Integrated Food Safety Initiative (Grant No. 2007-51110-03815) of the National Institute of Food and Agriculture, U.S. Department of Agriculture. This website is owned and maintained by Delaware Sea Grant.

Source URL:

<https://www.seafoodhealthfacts.org/seafood-safety/general-information-patients-and-consumers/seafood-safety-issues-specific-products-2>

Links

[1]

<https://www.seafoodhealthfacts.org/seafood-safety/general-information-patients-and-consumers/seafood-safety-issues-specific-products-2>

[2] <http://water.epa.gov/scitech/swguidance/fishshellfish/fishadvisories/states.cfm>