Man-made pollutants [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. Information that primarily focuses on how recreational anglers can select and prepare products to minimize risk is provided.

PCBs and Dioxins

Polychlorinated biphenyls (PCBs) and dioxins are organic pollutants that can accumulate in the food chain, mainly in the fatty tissue of animals. Some studies have suggested that PCBs and dioxins are cancer-causing agents and may have immune or nervous system effects. Sources of exposure to PCBs and dioxins in the diet include meats, dairy products, seafood and vegetables. Most commercial species of fish are well below federally established limits for PCBs and dioxins. Ocean species that spend their entire life far from the shore are less likely to accumulate organic pollutants than those that stay in near-shore areas.

Pesticides

A pesticide is any substance used to kill, repel, or control certain types of plants or animals that are considered to be pests. Pesticides are widely used in agriculture and people are exposed to low levels through their diets. Ongoing exposure to pesticides may be harmful to the nervous and immune systems and evidence suggest that children are more susceptible to adverse health effects from exposure. Like PCBs and dioxins, pesticides can accumulate in the fatty tissue of animals and they may be present at low levels in many different types of foods, including meats, dairy products, vegetables, and fish.

Who should be concerned?

Concerns with regard to environmental pollutants in seafood are primarily for fresh waters, estuaries, and near-shore coastal waters rather than the open ocean. Recreational and subsistence anglers, pregnant women, and children who eat large amounts of sport fish and shellfish caught from contaminated waters are at greatest risk. Exposure from fish can be lowered by up to 40% by removing the skin and trimming the fat. State and tribal environmental programs and departments of health test local waters and issue fish and shellfish consumption advisories. **Before eating recreationally-caught seafood, check with your State Health Department for advisories or go to epa.gov/waterscience/fish/states.htm [2].**

Additional guidelines to help individuals concerned about man-made pollutants

Eat a variety of different fish and shellfish.

Avoid eating excessive amounts of any single type of fish or shellfish.

Avoid eating the internal organs of fish, the tomalley of lobsters, and the mustard of crabs. They can contain significantly higher amounts of contaminants than the flesh.

When catching your own fish, check and follow all applicable health advisories. Advisories are available from local and state health departments, as well as the U.S. Environmental Protection Agency (**epa.gov/waterscience/fish/states.htm** [2]).

If you choose to eat sport fish that may contain elevated levels of contaminants trim away the fatty areas and use cooking methods like baking or broiling, which allow fats and juices to drain away.

Source URL:
https://www.seafoodhealthfacts.org/seafood-safety/general-information-patients-and-consumers/seafood-safety-topics/man-made-pollutants

Links
[1] https://www.seafoodhealthfacts.org/seafood-safety/general-information-patients-and-consumers/seafood-safety-topics/man-made-pollutants
[2] http://epa.gov/waterscience/fish/states.htm