



Seafood Health Facts: Making Smart choices

Balancing the Benefits and Risks of Seafood Consumption

Resources for Healthcare Providers and Consumers

Man-made pollutants [1]

PCBs and Dioxins

Polychlorinated biphenyls (PCBs) and dioxins are persistent organic pollutants that can accumulate in the food chain, mainly in the fatty tissue of animals. PCBs were banned in the United States in 1977 and dioxins are now heavily regulated, with emissions reduced by over 90% since 1987. However, these compounds are very stable and still persist at low levels in the environment. Some studies have suggested that PCBs and dioxins are carcinogenic and may have immune system or neurological 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 these contaminants. Ocean species that spend their entire life far from the shore are less likely to have contaminants than those that stay in near-shore or freshwater areas.

Pesticides

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 suggests that children are more susceptible to adverse health effects from exposure to pesticides. 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. **Patients should be advised to check with their State Health Department for advisories or go to [epa.gov/waterscience/fish/states.htm](https://www.epa.gov/waterscience/fish/states.htm) [2] before eating recreationally-caught seafood.**

Resources for More Information

[Information from the U.S. Environmental Protection Agency on the health effects of PCBs](#) [3].

[Information from the U.S. Environmental Protection Agency on health and safety issues associated with pesticides](#) [4].



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<https://www.seafoodhealthfacts.org/seafood-safety/general-information-healthcare-professionals/seafood>

ood-safety-topics/man-made

Links

[1]

<https://www.seafoodhealthfacts.org/seafood-safety/general-information-healthcare-professionals/seafood-safety-topics/man-made>

[2] <http://epa.gov/waterscience/fish/states.htm>

[3] <http://www.epa.gov/osw/hazard/tsd/pcbs/pubs/effects.htm>

[4] <http://www.epa.gov/pesticides/health/index.htm>