A Guide to Your Health

Fish are nutritious, but some fish contain chemicals such as polychlorinated biphenyls (PCBs), chlordane, and mercury. These chemicals get into the water fish live in and the food they eat. Some of these chemicals build up in fish over time and can cause harm to people who eat them. It is important to keep your exposure to these chemicals as low as possible. Illinois issues a fish advisory to help you to plan what sport fish to eat and how often they can be eaten. The advisory is not intended to discourage you from eating fish but should be used as a guide to eating fish low in contaminants.

Health Benefits

Eating fish is good for you! When properly prepared, fish provide many health benefits. These benefits come from a healthy type of fat known as omega-3 fatty acids, which our bodies cannot produce. The omega-3 fatty acids found in fish include docosahexaenoic acid (DHA) and eicosapentaneoic acid (EPA). Many doctors suggest eating a half pound of fish each week to help lower your risk for several chronic diseases, such as heart disease and cancer. Almost any kind of fish can have real health benefits when it replaces a high-fat source of protein, such as red meat, in the diet. Pregnant and nursing mothers can also pass omega-3’s to their infants in-utero and through breastmilk. You can get the health benefits of fish and reduce your exposure to chemicals by following the guidelines in the fish advisory.

Health Risks

Eating contaminated fish does not necessarily mean that you will get sick. However, over time, harmful levels of PCBs and mercury can build up in your body. This is of special concern if you are pregnant or are nursing a baby. Mercury causes problems with the nervous system that can lead to learning difficulties in children. PCBs are known to cause low birth weights and delays in physical development. If you follow the recommendations in the fish advisory, you will minimize your exposure.

Cleaning and Cooking

Many chemicals are found at higher levels in the fat of the fish. You can reduce the amount of these chemicals and your exposure by properly trimming, skinning, and cooking your catch. Cooking does not destroy these chemicals, but it melts the fat and allows some of the contaminated fat to drip away. Do not use the drippings to prepare broth, sauce, chowder, or soup.

The cleaning and cooking precautions above will not reduce the amount of mercury in fish, as mercury is found throughout a fish’s muscle tissue (the part you eat) rather than in the fat or skin. Therefore, the only way to reduce mercury intake is to reduce the amount of contaminated fish you eat. Check the fish advisory for the body of water where you fish to see if mercury is a concern.

Protect Yourself

- Keep smaller fish for eating: Practicing selective catch-and-release can help reduce the amount of contaminants you consume. Besides tasting better, younger, smaller fish tend to be less contaminated than older, larger fish.

- Eat less contaminated fish: Panfish tend to have fewer contaminants. Some chemicals build up in large predatory fish to a much greater extent than in panfish.

- Eat smaller meals of big fish: Try freezing part of your catch and space the meals over time. This will give your body time to eliminate the contaminants.
• Eat less fried fish: Frying seals in the chemicals that might be present in the fish’s fat.

Tips for Cleaning Fish

1. Remove the head and carefully filet the fish with a sharp, long-bladed knife.
2. Trim the fat along the top center of filet.
3. Trim fat along edges of filet.
4. Bake, broil, or barbeque fish on a rack to allow fat to drip off.

How to Get More Information
For questions about the health effects associated with eating contaminated fish, call the Illinois Department of Public Health (IDPH) at 217-782-5830, email IDPH at DPH.Tox@illinois.gov, or visit the IDPH website at http://dph.illinois.gov/. An interactive map of Illinois fish advisories for specific bodies of water is available at http://dph.illinois.gov/topics-services/environmental-health-protection/toxicology/fish-advisories/map.

For the most recent copy of the Illinois Department of Natural Resource’s Fishing Regulations booklet, visit https://www.ifishillinois.org/.

This project has been funded wholly or in part by the U.S. Environmental Protection Agency (USEPA) under assistance agreement GL00E02467 - 1 to IDPH. The contents of this document do not necessarily reflect the views and policies of the USEPA, nor does the USEPA endorse trade names or recommend the use of commercial products mentioned in this document.

Special thanks go to the University of Wisconsin-Madison and the Illinois Department of Natural Resources for the fish cleaning illustrations.