The Lowdown on Mercury

You know that eating fish is an important part of your diet. You may have also heard that eating fish can be risky. So, what is the real story? Fish are a healthy, low-fat source of protein, however some fish can contain harmful levels of contaminants. If you are pregnant, planning on being pregnant, nursing or have young children then you should be concerned.

Looking at a fish, or tasting or smelling a fish will not tell you if a fish is contaminated. This publication discusses mercury and the possible health effects associated with eating mercury contaminated fish.

What is mercury?

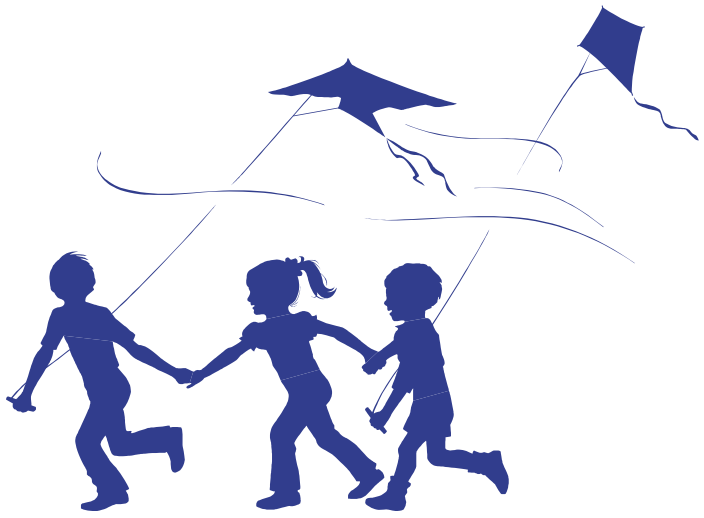
Mercury is a toxic metal that occurs in the environment naturally and through human activity. For example, it can be emitted from coal-fired power plants or when mercury-laden garbage is incinerated. Once in the air, mercury eventually falls to the ground with rain and snow, landing on soil or in bodies of water. Lakes and rivers are also contaminated when there is a direct discharge of mercury-laden industrial or municipal waste into these water bodies.

In the environment, this toxin can be converted by microorganisms into methylmercury, one of the most poisonous forms of mercury. Fish that live and feed in contaminated waters can accumulate methylmercury in their bodies. Over time, methylmercury concentrations can build up in the meat (muscle) of fish. We are exposed to contaminants when we eat fish with high levels of contaminants. Some fish have higher mercury levels than others. They include swordfish, shark, tilefish, king mackerel and fresh tuna. If you are in the high risk or sensitive group (pregnant, planning upon being pregnant, nursing or a young child) then you should not eat these fish at all.

How can mercury affect your child?

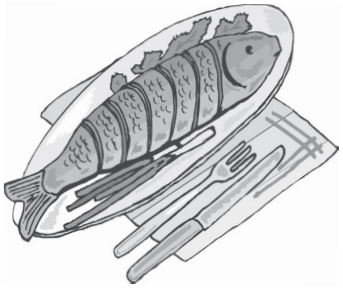
Without even knowing it, you can build up harmful levels of mercury in your body. This can be a problem if you are pregnant or breastfeeding because mercury can be passed on to your baby, which may result in developmental problems.

The effects on your infant may be subtle or more dramatic, depending on the amount to which the fetus or young child was exposed. In instances where exposure was limited, the effects may not be apparent, such as a small decrease in IQ. In cases where exposure to mercury is substantial, the impact to the developing fetus may be serious. For example, a child may appear normal at birth but may experience developmental problems, such as walking and talking later than normal children.



What can you do to reduce your family's risk of exposure?

You or your children may be exposed to mercury when eating certain types of fish caught from contaminated waters. Most states issue fish consumption advisories to warn people about eating contaminated fish. A fish consumption advisory will specify which bodies of water have restrictions. It will indicate the types and sizes of fish that are of concern. The advisory may completely ban eating certain types of fish and/or tell you to limit your meals of various types and sizes of fish. Fish advisories are primarily directed at protecting pregnant women, women planning upon becoming pregnant, nursing women and young children and, therefore, have very strict guidelines. You should still follow the suggested advisories even if you do not belong to the high risk group. To obtain more information on the fish advisory in your state, you need to contact your local environmental agency or state health department.



Other ways to reduce exposure

- Avoid eating older, larger fish that have had time to build up contaminant levels in their tissue.
- Choose fish that do not eat other fish. Fish that eat contaminated fish are more likely to accumulate higher contaminant levels in their tissues.
- Avoid fatty fish. Even though mercury accumulates in the tissue or muscle of fish, contaminants such as PCBs accumulate in the fat of fish.
- Always check your state fish advisory before taking a fresh-caught fish home with you for dinner. Follow the recommended guidelines.
- If you are given fresh-caught fish, ask where it was caught and the name of the fish, and then check the advisory to see if it is listed. Follow the guidelines.

What species of fish can you eat from Lake Michigan?

Currently, there are no mercury advisories for fish caught within Illinois' Lake Michigan waters (http://www.idph.state.il.us/envhealth/fishadv/fishadvisory02.htm). The following fish have no meal restrictions due to mercury contamination: chinook salmon, coho salmon, rainbow trout, brown trout, channel catfish, lake trout, yellow perch, carp, smelt and lake whitefish. However, all these species have advisories based on PCBs. Each advisory should be checked for meal restrictions.

For Cook County anglers, a mercury advisory has been released for largemouth bass in Marquette Park Lagoon. Please check the 2005 Illinois Fish Advisory for more information.

Where can you get more information?

Environmental Protection Agency: www.epa.gov/ost/fish/

Food and Drug Administration: vm.cfsan.fda.gov/~dms/admehg.html

Illinois Department of Natural Resources: www.dnr.state.il.us/fish/index.htm

Illinois Department of Public Health:
www.idph.state.il.us//envhealth/factsheets/fishadv.htm

Illinois Environmental Protection Agency: www.epa.state.il.us

Illinois-Indiana Sea Grant College Program: www.iisgcp.org

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