

Mercury and Fish in Arkansas

WHAT YOU SHOULD KNOW



You have probably been hearing a lot about mercury lately—about how it is showing up more and more in fish around Arkansas. And if you are like most people, you've been wondering about it. For instance, what does it mean to your health? Can it harm you in any way?

Mercury is an element that occurs naturally in rock, but it also is thought to come from burning coal and trash, as well as from some industry. A lot of the mercury in Arkansas is thought to come from nature. In fact, cinnabar (mercury ore) was mined in Arkansas in the past.

Mercury gets into lakes and streams several ways, which include rain and runoff. When conditions are right in the water, certain kinds of bacteria change inorganic mercury into methylmercury. This form of mercury is the one most likely to get in our food chain and cause health problems.

Beyond Our Borders

Mercury has surfaced as a problem in Arkansas only in the last ten to 20 years, and experts are still studying why. Acid rain may increase the amount of acid in our lakes and rivers, causing the mercury to break down and get into fish and other life forms more easily.

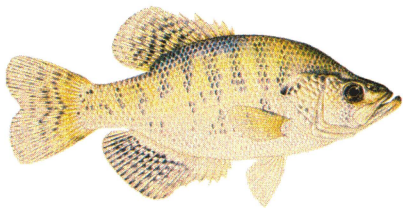
Mercury is not only a problem in Arkansas. All of the states across the country now have at least one mercury notice on fish.

Mercury is going to be here for a long time, but we can learn to live with it. With a little common sense, we can still enjoy fishing Arkansas.

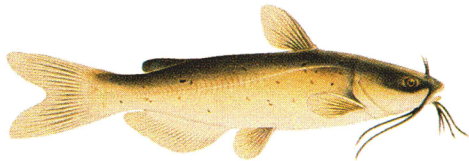
These fish are less likely to build up mercury in their bodies because they do not feed mostly on smaller fish.



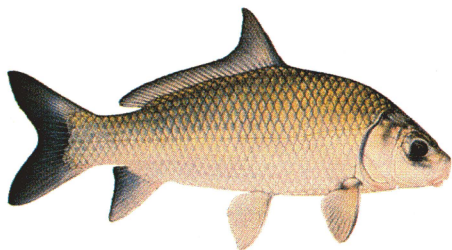
Bream



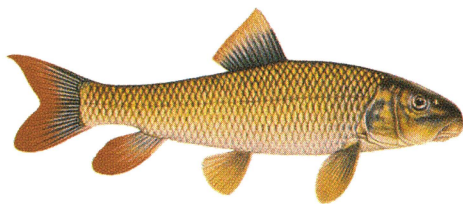
Crappie



Channel Catfish



Buffalo



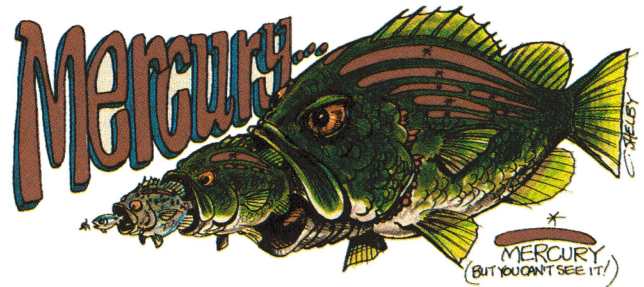
Red Horse/Sucker

Moving Up the Food Chain

The fact that mercury is found in water or in layers of dirt under the water does not mean it is a problem. Things like dead leaves, slightly acid water, and anaerobic (without oxygen) bacteria that change the inorganic mercury into methylmercury need to be in the body of water.

Methylmercury can then collect in the food chain. The mercury is taken up by tiny living things like snails, crayfish, and bugs, which are then eaten by small fish. The small fish are

then eaten by larger fish and on up the food chain. Since people are at the top of the food chain, if we eat fish with mercury, it can build up in our systems faster than our bodies can get rid of it.



BUILDS UP IN THE FOOD CHAIN AND IN YOU, TOO!

Mercury and Health

Eating fish with mercury will not make people sick right away, but as you eat more and more, it will build up in the body. Over time, it can damage kidneys or the nervous system.

Health effects can include:

- Tingling or numbness in the mouth, hands, and feet
- Vision and hearing problems
- Learning problems and birth defects in children (found at high mercury blood levels)

Groups who should be most careful when eating fish from notice areas:

- Children under seven years of age
- Pregnant women
- Women who are planning a pregnancy
- Women who are breastfeeding
- People who eat a lot of fish over a long period of time from notice areas

These groups should be most careful because unborn babies and children under seven have a nervous system that is still forming. Any effects on the nervous system at these ages are more likely to last forever. Pregnant women can pass mercury to their unborn babies, and mothers can pass it to their babies through breast milk.

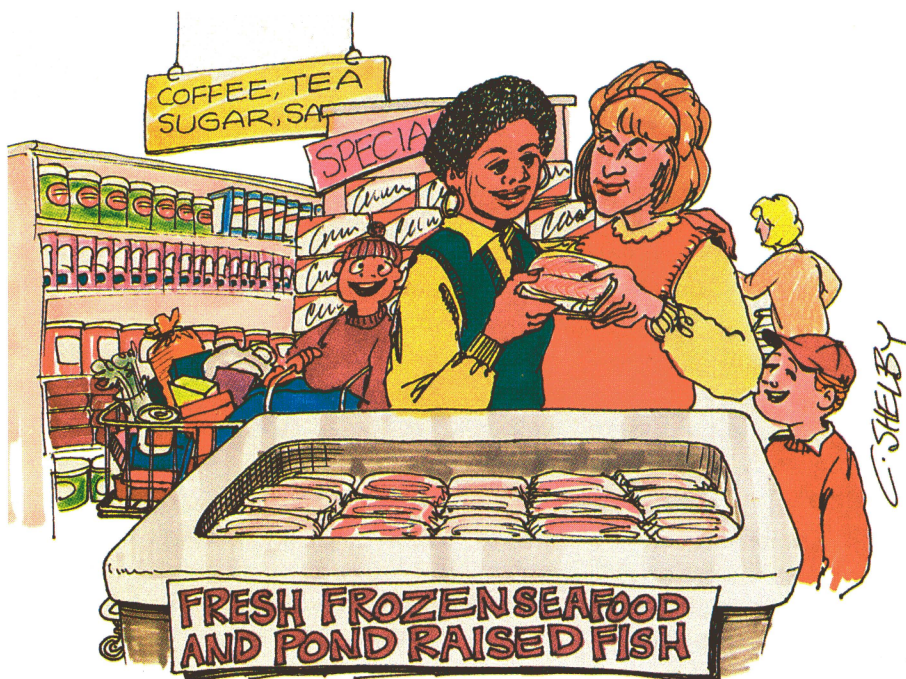
On the other hand, adults who have health effects from mercury can stop their intake of mercury. In most cases, their health effects go away as the body slowly gets rid of the mercury over time.

How to Eat Fish Safely

Fish is an important, low-fat source of protein. You just need to know the guidelines for eating fish from areas under a mercury notice.

There are not any special cleaning or cooking methods that will decrease the amount of mercury in fish. This is because mercury is stored in the meat portion of the fish instead of the fat or skin. But you can reduce health risks from mercury by doing these things:

- When you eat fish from lakes with notices, follow the fish notice guidelines available from the Arkansas Department of Health.
- Eat smaller fish instead of larger ones. (In most cases, younger, smaller fish contain less mercury.)
- Choose fish like bream, buffalo, red horse, and crappie that don't mainly eat other fish.
- Eat smaller amounts of small fish when eating a meal.
- Eat fish from many places like markets, restaurants, and lakes without a mercury notice.
- Eat farm/pond-raised catfish. They are low in mercury.



These are examples of fish that eat smaller fish and therefore can build up more mercury in their systems.



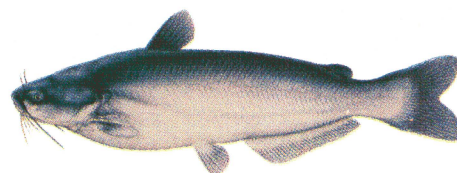
Bass



Pickerel



Flathead Catfish



Blue Catfish



Gar



Bowfin

Remember, mercury is a problem we can safely live with. Fish can be an important part of your diet because it is a good source of protein. You don't have to quit eating fish from Arkansas' lakes and rivers. Just learn to eat them safely!

Want To Know More?

A **free brochure** is available that lists all of the bodies of water under a mercury in fish notice. The brochure also shows maps of the affected areas and explains which fish are safe to eat and which are not. If you need a copy, please call **1-800-462-0599** and ask for the "Mercury in Fish Notice Brochure."

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Acknowledgments

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Layout/design by H. K. Stewart

Cartoon illustrations by Cliff Shelby

Color fish graphics by Joseph R. Tomelleri

Fish illustration on back cover by Bruce Sharp

Updates provided by Amanda Fincher, Lori Simmons, and Carrie Poston

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