EATING FISH.

Know when to keep it or let it go.

Signs posted at boat launches across the United States warn anglers to limit the amount of fish they eat. In Maine, for example, pregnant and nursing women, women who may get pregnant, and children under age eight are told to avoid all freshwater fish except for brook trout and landlocked salmon, of which one meal per month is safe. All other adults and children over age eight can eat two meals per month of most inland fish and one meal per week of brook trout and landlocked salmon. Why the worry?

It has to do with water pollution and chemicals that end up in our fish. "The two biggest contaminants are mercury and PCB [polychlorinated biphenyl], an industrial chemical that's extremely persistent in the environment," explains Sean Strom, a fisheries toxicologist with the Wisconsin Department of Natural Resources. "Both bio-accumulate when one fish eats another fish. It builds up through the food chain. The bigger and older the fish, the more [toxins] it contains." Where do these toxins come from?

Mercury

Mercury is released into the air by coal-fired power plants and other sources that burn mercury-containing materials and can drop directly into streams and lakes or come down with precipitation. Although some coalfired utilities have switched to natural gas and others have installed systems to decrease emissions, the problem persists.

Mercury can cause neurological and kidney problems in people. Even small amounts can affect brain development in young children. Nearly all fish and shellfish contain traces of mercury. However, large fish that are long-lived (swordfish, shark, king mackerel, and tilefish) have the highest levels. Follow the guidelines set by the U.S. Environmental Protection Agency and the Food and Drug Administration as well as your local wildlife agency.



PCBs

These man-made chemicals were used in hundreds of industrial and commercial applications – from electrical equipment to paint and dyes until they were banned in 1979 due to adverse health effects, including cancer. PCBs do not break down in the environment — they continue to circulate in the air, water, and soil.

PCBs can accumulate in animals over time and up the food chain. They tend to accumulate in fat (whereas mercury accumulates in muscle tissue), which means that fattier fish contain the most PCBs if they come from a contaminated area. To avoid ingesting PCBs yourself, limit your intake of fatty fish. And if you catch a salmon or lake trout, "trim away the fat," suggests Strom, a lifelong angler.

Fishing for Good Health

With these chemical concerns, why should you eat fish at all? Because it's still good for you!

According the Journal of the American Medical Association, in addition to protein and nutrients such as vitamin D and selenium, fish contain omega-3 fatty acids that reduce the risk of heart disease and stroke; lower blood pressure, depression, and mental decline; and aid brain development in infants.

"It's a fine line between the benefits of eating fish and the contaminants

IT'S A FACT

Fish is a waistline-friendly food. For example, 3 ounces of walleye contain only 1.3 grams of fat and 101 calories compared with 13 grams of fat and 213 calories in the same amount of beef (85% lean).

WORD WISE

The word "angler" dates back to the 1490s. It comes from the Indo-European root "ank," which means "to bend." The original use of the word referred to the hook, not the rod, line, or person doing the fishing.

that might be in them," adds Strom. "The safest bet is to eat small fish."

Bottom line: there's no way to tell if a fish contains mercury or PCBs by looking at it. Your state's fish and wildlife agency and state department of health are the best sources of information about the safety of fish caught in a local body of water.

"People should enjoy fishing but be aware of the guidelines," urges Strom. "They're not meant to scare you or deter you from fishing. They're just meant to be useful."

An avid angler from Red Lodge, Montana, Lisa Ballard has fished throughout the United States. She usually releases what she catches. www.LisaBallardOutdoors.com