



# Mercury in canned tuna still a concern

New tests reinforce a need for some people to limit consumption

**C**ANNED TUNA, Americans' favorite fish, is the most common source of mercury in our diet. New tests of 42 samples from cans and pouches of tuna bought primarily in the New York metropolitan area and online confirm that white (albacore) tuna usually contains far more mercury than light tuna.

Children and women of childbearing age can easily consume more mercury than

the Environmental Protection Agency considers advisable simply by eating one serving of canned white tuna or two servings of light tuna per week. A serving is about 2.5 ounces. Expect a 5-ounce can to contain about 4 ounces of tuna plus liquid.

The heavy metal accumulates in tuna and other fish in an especially toxic form, methylmercury, which comes from mercury released by coal-fired power plants

and other industrial or natural sources, such as volcanoes.

Fortunately, it's easy to choose lower-mercury fish that are also rich in healthful omega-3 fatty acids. That's especially important for women who are pregnant or might become pregnant, nursing mothers, and young children, because fetuses and youngsters seem to face the most risk from methylmercury's neurotoxic effects.

Results from our tuna tests, conducted at an outside lab, underscore the long-held concern for those people. We found:

- Every sample contained measurable levels of mercury, ranging from 0.018 to 0.774 parts per million. The Food and Drug Administration can take legal action to pull products containing 1 ppm or more from the market. (It never has, according to an FDA spokesman.) The EPA compiles fish advisories when state and local governments have found high contaminant levels in certain locally caught fish.

- Samples of white tuna had 0.217 to 0.774 ppm of mercury and averaged 0.427 ppm. By eating 2.5 ounces of any of the tested samples, a woman of childbearing age would exceed the daily mercury

## Lower-mercury choices

Federal agencies advise children and women of childbearing age to avoid four high-mercury fish: king mackerel, shark, swordfish, and tilefish. Our experts say the species at right are low in mercury and good sources of omega-3 fatty acids. The limits assume that no other mercury-containing seafood will be eaten during the same week and are based on a daily serving of about 6 ounces for adults and 3 ounces for young children.

Species	Limit
Clams, Alaskan salmon, shrimp, and tilapia	OK daily for everyone.
Oysters, pollock, and sardines	OK daily for all adults. For children, oysters and sardines OK daily; pollock several times a week.
Pacific flounder and sole, herring, mullet, and scallops	OK daily for men and postmenopausal women, several times a week for children and women of childbearing age.



intake that the EPA considers safe.

- Samples of light tuna had 0.018 to 0.176 ppm and averaged 0.071 ppm. At that average, a woman of childbearing age eating 2.5 ounces would get less than the EPA's limit, but for about half the tested samples, eating 5 ounces would exceed the limit.

In 2006 we scrutinized the results of the FDA's tests in 2002 to 2004 of mercury levels in hundreds of samples of canned tuna. The agency's white-tuna samples averaged 0.353 ppm; light tuna, 0.118 ppm. But we found that as much as 6 percent of the FDA's light-tuna samples had at least as much mercury as the average in white tuna—in some cases more than twice as much.

Given the uncertainties about the impact of occasional fetal exposure to such high levels, we urged the FDA to warn consumers about occasional spikes in mercury levels in canned light tuna. More than four years later, the FDA still hasn't issued such a warning. When we asked why, an FDA spokesman indicated that the agency had already taken the spikes into account when formulating its mercury advice.

**Bottom line.** Canned tuna, especially white, tends to be high in mercury, and younger women and children should limit how much they eat. As a precaution, pregnant women should avoid tuna entirely. Answers to these questions can help anyone get the nutritional benefits of fish and minimize exposure to mercury:

**Q: What's gained by eating fish?**

**A:** Fish are rich in protein, vitamin D, and omega-3 fatty acids, which reduce the risk of heart attack and stroke. The omega-3s

might also elevate mood and help prevent certain cancers, cognitive decline, and certain eye diseases. During pregnancy, omega-3s might help in developing the fetus's brain and visual system.

**Q: What could be the harm?**

**A:** Some studies of people who eat lots of fish have linked even low-level mercury exposure in pregnant women and young children to subtle impairments in hearing, hand-eye coordination, and learning ability. Other evidence suggests that frequent consumption of high-mercury fish might affect adults' neurologic, cardiovascular, and immune systems. Additional contaminants—PCBs and dioxins—found in some fish have been linked to cancer and reproductive problems. Mercury and PCBs can accumulate in people over time.

**Q: Are there low-mercury fish?**

**A:** Absolutely. Some popular seafood, including salmon and shrimp, contains relatively little mercury. Alaskan salmon, often sold in cans, tends to be lower in PCBs and possibly other contaminants. See the box on the facing page for specifics.

**Q: Can you get the benefits of fish without eating it?**

**A:** Foods labeled as fortified with the omega-3 fatty acids EPA and DHA are

worth considering, though levels in some fortified foods alone might be inadequate. Fish-oil supplements provide omega-3s and are "likely safe" for most people when taken in doses of 3 grams or less per day, according to the Natural Medicines Comprehensive Database, which is compiled by an independent research group. But talk with your doctor or pharmacist before taking fish-oil supplements because they can have side effects and might interact with medications.

If you decide to take a supplement, choose one labeled with a "USP Verified" seal. Products bearing that label meet standards for purity and potency set by the U.S. Pharmacopeia, a nongovernmental authority, and have what the USP considers acceptable limits of contaminants, including PCBs. For a list of products that have been verified by the USP, go to [www.uspverified.org](http://www.uspverified.org).

**Q: Which low-mercury fish are harvested sustainably?**

**A:** Alaskan salmon, farmed clams, pink shrimp from Oregon, sardines from the U.S. Pacific, and tilapia farmed in the U.S. are abundant, well managed, and fished or farmed in ways that minimize harm to the environment, according to research conducted by the nonprofit Monterey Bay Aquarium's Seafood Watch Program.

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**How much tuna is safe?**

The FDA and EPA say that women of childbearing age and young children may eat up to 12 ounces a week of light tuna or other "low in mercury" seafood, including, within that limit, up to 6 ounces per week of white tuna. Because our analysis of FDA data found occasional high mercury levels in light tuna, our fish-safety experts suggest a more cautious approach. Their advice, below, assumes that no other mercury-containing seafood will be eaten during the same week.

Who	Limit per week
<b>Children less than 45 pounds</b>	About 4 ounces of light tuna or 1.5 ounces of white (albacore) tuna.
<b>Children 45 pounds or more</b>	About 4 to 12.5 ounces of light tuna or 1.5 to 4 ounces of white tuna, depending on the child's weight.
<b>Pregnant women</b>	To be careful, avoid canned tuna. Choose a low-mercury fish instead.
<b>Women of child-bearing age</b>	About 12.5 ounces of light tuna or 4 ounces of white tuna.
<b>Men and older women</b>	About 14.5 ounces of light tuna or about 5 ounces of white tuna per week should be OK, but people who eat fish more often would be prudent to stick to low-mercury types.

