Mercury poisoning: Something fishy about too much tuna? [1]

Dear Alice,

I have been hearing more and more about how harmful eating big fish, such as tuna, can be because of high levels of methyl mercury in them. When searching for this on the internet, I found both spectrums of safe or not safe. I am worried because I eat 2-5 cans of tuna every single day, and besides having more protein than my body needs, am I at risk for mercury poisoning?

Answer

Dear Reader,

Fish can be an important part of a healthy diet; it's loaded with high-quality protein and omega-3 fatty acids and low in saturated fat and cholesterol. It's also true that nearly all fish have at least trace amounts of methylmercury. The good news is that many of the commonly purchased fish in the United States, including several varieties of tuna, typically have lower levels of mercury and are safe to eat if the amount you consume doesn't exceed the weekly recommended serving size.

To answer your question specifically, Albacore (white) tuna and light tuna are the two most common kinds of canned tuna. Due to its larger size, white tuna contains significantly more mercury — up to three times more — than light tuna. The EPA guidelines state that it's safe to eat up to twelve ounces of light tuna (or any fish low in mercury) a week or six ounces of white tuna a week. Considering that the standard weight of a can of tuna is six ounces, you may be putting yourself at a risk for mercury poisoning if you're eating two to five cans per day.
So why worry about mercury? It's considered a pollutant and is released into the environment, largely from factories and other industrial settings. It eventually travels to streams and oceans where microorganisms present in the water turn it into methylmercury. Fish then absorb this chemical into their bodies from the water. Mercury levels in the fish depend on what they eat, how long they tend to live, and where they are in the underwater food chain. Larger fish typically contain higher levels of mercury not only because they're heavier and have more surface area to absorb mercury, but also because they eat smaller mercury-containing fish, which increases the larger fish's mercury content. Because of this, the Environmental Protection Agency (EPA) recommends staying away from shark, swordfish, king mackerel, and tilefish from the Gulf of Mexico, since on average they have higher levels of mercury.

Most of the warnings about mercury poisoning are targeted to young children and pregnant women because exposure to mercury during development can cause neurological defects, including impairments in cognition, memory, attention, language, and fine motor skills. This is especially of concern because infants born with these impairments have been observed even when the mother showed no symptoms of poisoning. Mercury poisoning in adults can cause numbness in fingers and toes, muscle weakness, and speech, hearing, and walking impairments. And so far, research has not found that mercury exposure in humans is associated with cancer, but human studies are limited. If you find yourself experiencing any of these symptoms, it's best to visit your health care provider as soon as possible. If you feel fine but are scared of prematurely swimming with the fishes, you might want to switch up your fish or seafood meals to include a variety of low-mercury choices, such as salmon, shrimp, pollock, catfish, cod, or tilapia.

The National Resources Defense Council's Mercury Contamination in Fish - Consumer Guide to Mercury in Fish provides tools that can help make this transition proceed swimmingly. It contains a list that informs consumers of the frequency that a certain fish can be eaten safely, as well as a mercury calculator that generates a safe value for fish intake based on a person's weight and type of fish. Lastly, if cost is of concern, there are many additional options for protein and nutrients on the cheap. You could also try substituting the tasty and affordable tuna with non-fish sources of protein, such as chopped canned chicken, lean deli meats, or beans; these can also be part of a healthy diet without breaking the bank.

Alice!

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