THERE'S SOMETHING FISHY ABOUT GOVERNMENT TUNA GUIDELINES[1]

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The evidence keeps piling up: For pregnant women, or women who could become pregnant, eating tuna is not a good idea. But advice to stay away from tuna is inflammatory. So inflammatory that, even though the U.S. Food and Drug Administration (FDA) data show that canned light tuna contains above-average mercury levels, the FDA currently says it's OK for women of childbearing age (and young children) to eat it. Canned tuna remains the single largest source of mercury in the American diet.

THE DETAILS: Pressure from fishing industry lobbyists, the National Fisheries Institute (NFI), and particularly what was once called the National Tuna Foundation (now part of NFI), makes it very difficult for the agency to properly warn against the mercury levels in the popular fish. It's not that the FDA hasn't had time to examine the facts about tuna and mercury. I've written about the hazards of mercury in fish since the early 1990s, and watched as the evidence has grown that mercury can cause cognitive impairment in children whose mothers ingested too much during pregnancy—including learning disabilities, motor skills impairment, and short-term memory loss. There is evidence now that safe-exposure levels for mercury are far lower than previously thought.

However, evidence has also accumulated that children of women who eat two or more servings of fish a week have better cognitive function than children of women who eat one serving or less. The FDA and the U.S. Environmental Protection Agency (EPA) have been working jointly on updating a 2004 consumer advisory about fish consumption, which could perhaps clarify the risks of mercury contamination and the benefits of eating fish. Edward Groth, PhD, an environmental health expert and retired senior scientist at Consumers Union, and Michael Bender, head of the Mercury Policy Project, have written to the FDA and EPA with what seems very sensible advice to include in the policy.

Groth and Bender base their suggestions on studies that have appeared since 2004. One is a 2005 study done in Boston, the first with American subjects, that shows that "maternal fish consumption during pregnancy can significantly benefit prenatal cognitive development, while exposure to methylmercury during gestation can significantly damage prenatal cognitive development." Additional evidence, based on an epidemiological study done in New York in 2008, shows the positive effects of fish consumption. The lead author of the Boston study, Emily Oken, MD, of the Harvard Medical School, wrote, "We observed the highest cognitive scores among offspring of mothers with higher fish intake but lower mercury levels. Beneficial and adverse effects have now been associated with ordinary American levels of fish consumption and methylmercury exposure."

When the agencies were asked what they planned to do with their 2004 advisory policy, both said essentially the same thing: They are aware of the issues Groth has brought up. The FDA stated, "We look forward to engaging our colleagues at EPA, and in the scientific and public-interest communities, to achieve a science-based resolution."

[1] Rodale News, August 02, 2010

WHAT IT MEANS: While waiting for the updated policy, the public remains totally confused. Some people have stopped eating fish altogether. Others believe (as the industry does) that tuna is perfectly safe, and eat it frequently. Even some experts believe that the benefits of eating any fish, including tuna, outweigh the risks. Other groups, including Consumers Union, publisher of *Consumer Reports*, recommend that women of childbearing age and children skip tuna altogether.

Groth says there is no need to choose between benefits and risks. There is a very simple solution to the problem: "Eat fish and choose wisely to minimize methylmercury exposure." It's not quite that simple, but with the aid of Groth's guide to mercury levels in fish and shellfish (based on FDA data), it's not so hard, either.

Mercury content of fish and shellfish:

Low:	Below average:	Above average:
Shrimp	Pollock	Pacific mackerel (chub)
Sardines	Atlantic mackerel	Smelt
Tilapia	Anchovies, herring, and shad	Atlantic tilefish
Oysters and mussels	Flounder, sole, and plaice	Cod
Clams	Crabs	Canned light tuna
Scallops	Pike	Spiny lobster
Salmon	Butterfish	Snapper, porgy, sheepshead
Crayfish	Catfish	Skate
Freshwater trout	Squid	Freshwater perch
Ocean perch and mullet	Atlantic croaker	Haddock, hake, monkfish
	Whitefish	

Moderately high:	High:	Very high:
Halibut	Canned albacore tuna	King mackerel
Sea trout	Spanish mackerel	Swordfish
Sablefish	Fresh/frozen tuna	Shark
Lingcod and scorpionfish	Grouper	Gulf tilefish
Sea bass	Marlin	Tuna sushi/bluefin tuna
Pacific croaker	Orange roughy	
American lobster		
Bluefish		

Groth's advice to the FDA: First, STOP RECOMMENDING CANNED LIGHT TUNA AS A LOW-MERCURY CHOICE. Let canned light tuna's above average mercury level (as reflected in the FDA's own analyses) speak for itself, he says. Then, he recommends the FDA abandon the current recommended upper limit of fish intake of 12 ounces per week and explicitly advise women of childbearing age to eat fish twice a week or more, as long as the fish is in the "very low" category. He applies that advice to the rest of the population as well. Groth also wants the FDA to categorize fish and shellfish according to their levels of omega-3 fatty acids, the nutrients that make fish so good for us.

What about adults who are not women of childbearing age? Groth notes that, while eating fish has cardiovascular benefits, adults can, and do, get mercury poisoning. Symptoms include lethargy, muscle weakness, memory loss, and rashes. Adults who aren't concerned about pregnancy and who want to increase the cardiovascular benefits derived from eating fish can eat

it four or five times a week as long as “Four of the five are low mercury,” he says. He adds, “If they want to indulge in high-mercury fish, like a tuna steak, by all means do so now and then.” (Again, that's for adults who aren't pregnant or can't become pregnant. And it should be noted that bluefin is a bad choice from an ecological perspective because of the way they're fished. Populations of bluefin, which consequently have the highest level mercury of any tuna, have been severely depleted.)