On Nutrition: by Helayne Waldman, Ed.D., N.E.

Something Fishy?

If you've been paying attention during the past few years, you've probably encountered numerous items about the health benefits of eating fish – health benefits that range from lowered blood pressure to better mood to enhanced memory. But amidst all this good news reins a degree of confusion. Which fish is best to eat? How big a problem is mercury toxicity? How does wild compare with farmed? Let's take a look.

Fat is best

On a fish, fat looks good! In fact, fat from ocean dwelling fish is prized worldwide for its DHA content – a special form of Omega 3 fat that's been well researched for its many brain boosting benefits. Fatty fish – like tuna, salmon, halibut, mackerel, herring, and sardines – are also rich in another Omega 3 fat called EPA, and this one gets accolades for its protective effects on the heart, the blood vessels and the entire cardiovascular system.

Here's what Science Daily had to say on this:

"Older individuals are less likely to die from a heart attack if they eat at least one serving of fatty fish per week, according to a study presented today at the American Heart Association's 41st Annual Conference on Cardiovascular Disease, Epidemiology and Prevention. Eating fatty fish at least once per week was associated with a 44 percent lower risk of dying from a heart attack among a group of older adults, average age 72. In

contrast, eating fried fish -- which is typically lean -- was not associated with a lower risk of dying from a heart attack."

Lean fish, by the way, are usually white, and are often fried, like sole, cod and snapper.

Born to be Wild

Since salmon is among the most popular of American seafood delicacies, the distinction between wild and farmed salmon is noteworthy. Like factory-farmed cows, farmed salmon are fed a diet that differs from their wild cousins, who roam the oceans munching on wild krill, tiny shrimp-like crustaceans. That's where they get their famous orange colored flesh. But farmed fish eat pellets of fishmeal that leave their flesh a pale gray instead. Gray salmon have little shelf appeal, so fish farmers add dye to their feed to make them more attractive to humans.

In addition, it turns out that the farmed fish also absorb more than their share of PCBs from contaminated sediments in their fishmeal. Until 1977, PCBs were used as coolants and lubricants in transformers, capacitors, and other electrical equipment. The manufacture of PCBs stopped in that year, however, as evidence surfaced that they build up to toxic levels in the environment and can cause adverse health effects. Unfortunately, to this day, PCBs persist in the environment

In July 2003, the Environmental Working Group (EWG) reported that farmed salmon purchased in the U.S. contain the highest level of PCBs in the entire food supply. And in January 2004, a study reported in the journal Science warned that farmed salmon have 10 times more toxins than wild salmon.

To boot, fish farms are so densely populated that a typical one-pound Atlantic salmon is within fifteen inches of his or her neighbors. Disease spreads quickly in such crammed quarters, so the fish are fed antibiotics just like factory-raised cows and chickens. According to the Union of Concerned Scientists, farmed salmon have more antibiotics administered by weight than any other form of livestock. Nevertheless, the fish still develop infections and harbor parasites. In Norway, in fact, desperate measures have been taken to quell the problem. Authorities there have chosen to treat twenty-four rivers with rotenone - which kills all aquatic life - in an attempt to eradicate sea lice and a lesion-causing disease spread by farmed salmon.

What about mercury?

Fish absorb methyl mercury from water as it passes over their gills

and as they feed on aquatic organisms. Larger predator fish such as swordfish, tilefish and tuna are exposed to higher levels of methyl mercury from the smaller fish they eat.

Nearly all fish contain trace amounts of methyl mercury, some more than others. In areas where there is significant mercury pollution, the levels in the fish can run quite high. Atlantic salmon, for example, contains higher levels of mercury than Alaskan salmon. A good rule of thumb to use is this: the larger the fish, the higher the mercury content. So watch your canned tuna intake, particularly if you are pregnant -- and eat swordfish, king mackerel, shark and seabass on an occasionally-only basis. On the other hand, go all out for wild Pacific salmon, trout, flounder and haddock where mercury poses little problem.

Keep in mind that in terms of overall nutritional value and healthy fat, you'll get the most bangs for your buck from the salmon. They may spend more time in school, but you'll be all the smarter for it!

Helayne Waldman, Ed.D , N.E.,. is a health and nutrition educator, a writer, and an Adjunct Professor in the Dept. of Holistic Health Studies at JFK University. She can be reached at hwaldman@turning-the-tables.com, or on the web at www.turning-the-tables.com

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