Methylmercury in Fish

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Mercury is everywhere in the environment. It occurs naturally from degassing of the earth’s crust and oceans, burning of industrial and household wastes, and combustion of fossil fuels such as coal. Mercury vapor thus released to the atmosphere is deposited on land and in bodies of water, where bacteria can convert it to the more toxic form, methylmercury. Fish absorb methylmercury as water passes through their gills. They are further exposed to this poison when they feed on aquatic organisms and smaller fish. Because methylmercury binds tightly to proteins in fish tissues, and because cooking does not significantly reduce its presence, nearly all the fish we consume contains traces of mercury.

On March 19, 2004, the U.S. Food and Drug Administration (FDA) and Environmental Protection Agency (EPA) announced their joint consumer advisory on methylmercury in fish and shellfish for reducing exposure to high levels of mercury in women who may become pregnant, pregnant women, nursing mothers, and young children. This advisory supercedes ones given by these agencies in 2001.

To modify the amount and type of fish one consumes, follow these three recommendations:

1. Do not eat shark, swordfish, king mackerel, or tilefish, because they contain high levels of mercury.

2. Eat up to 12 ounces (two average meals) a week of a variety of fish and shellfish that are lower in mercury, such as the following:
   - Five of the most commonly eaten fish that are low in mercury are shrimp, canned light tuna, salmon, pollock, and catfish.
   - Another commonly eaten fish, albacore (“white”) tuna, has more mercury than canned light tuna. When choosing your two meals of fish and shellfish, you may eat up to 6 ounces (one average meal) of albacore tuna per week.

3. Check local advisories about the safety of fish caught by family and friends in lakes, rivers, and coastal areas. If no advice is available, eat up to 6 ounces (one average meal) per week of fish you catch from local waters, but don’t consume any other fish during that week.

These same recommendations apply for young children, but serve smaller portions.

Both FDA and EPA emphasize the benefits of eating fish and shellfish as important parts of a healthy and balanced diet. These foods are good sources of high-quality protein and other essential nutrients. The new guidelines allow consumers to make educated dietary choices about eating fish they catch or buy.

For additional information, visit the following Web pages:
www.cfsan.fda.gov
www.epa.gov/ost/fish