Consuming Swordfish:
Health Risks and Benefits

Luncheon Speaker

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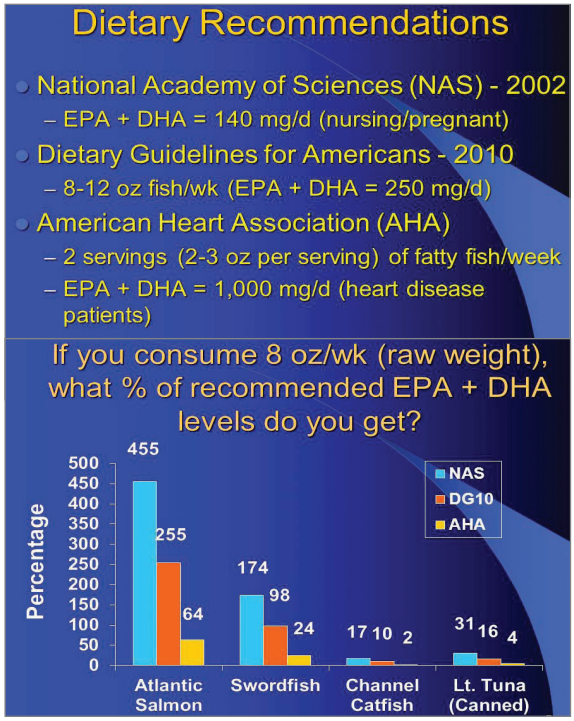
There is much concern about the safety of consuming seafood, especially by pregnant or nursing women and young children, because certain types of seafood can contain environmental pollutants. Fetuses and infants are exceptionally sensitive to the adverse long-term health effects resulting from exposure to environmental toxicants. Exposure to methylmercury, a developmental toxicant found primarily in some fish species, has been predicted to negatively impact the health of 400,000 newborns every year in the U.S., with adverse effects (e.g., abnormal memory, attention, and language skills) possibly lasting past childhood. However, pregnant or nursing women need to consume seafood because it provides nutritionally important lipids which promote healthy brains and eyes during perinatal development. Since maternal transfer of mercury and omega-3 fatty acids are the primary routes for fetal (placental transfer) or infant (maternal milk) exposure/nourishment, there is a critical need to communicate specific advice to women of childbearing-age so they can make informed decisions about their seafood consumption.

The best advice for pregnant or nursing women is to: consume 8-12 ounces of seafood per week; avoid eating certain types of commercial or recreationally-caught seafood that is high in mercury or other environmental pollutants; avoid eating raw seafood when pregnant or serving infants/children; and include species that are a good source of omega-3 fatty acids. We developed Fish4Health that provides specific information that can help sensitive populations to make informed decisions about their seafood consumption. Fish4Health includes free iPhone & Android apps that women can use to track their seafood, mercury, and omega-3 fatty acid intake (see Appendix C for the link to these tools).

When consumed in moderation, swordfish can be part of a healthy diet for non-sensitive populations. Our research has demonstrated that swordfish below 300 pounds in size will typically have a mercury concentration that is below the Action Limit of 1,000 parts per billion as established by the Food and Drug Administration (FDA). Swordfish that is greater than 300 pounds can contain mercury which is twice the FDA limit. The FDA has not done any further testing of commercial seafood for mercury and the Agency also has not limited the size of the swordfish allowed in domestic markets. Swordfish should be avoided prior to and during pregnancy, by nursing women, or when feeding a young child. It can be introduced back into the diet after this time.



Dietary recommendations for consuming fish with essential omega-3 fatty acids (DHA and EPA) (top) and the associated levels of intake for various types of seafood (bottom).