



Seafood Health Facts: Making Smart choices

Balancing the Benefits and Risks of Seafood Consumption

Resources for Healthcare Providers and Consumers

[Man-made Pollutants \[1\]](#)

[October 18, 2006, Fish Intake, Contaminants, and Human Health: Evaluating the risks and the benefits, Clinical Review, Journal of the American Medical Association, 296: 1885-1899 \[2\]](#)

Abstract (excerpts)

Context Fish (finfish or shellfish) may have health benefits and also contain contaminants, resulting in confusion over the role of fish consumption in a healthy diet.

Evidence Acquisition We searched MEDLINE, governmental reports, and meta-analyses, supplemented by hand reviews of references and direct investigator contacts, to identify reports published through April 2006 evaluating (1) intake of fish or fish oil and cardiovascular risk, (2) effects of methylmercury and fish oil on early neurodevelopment, (3) risks of methylmercury for cardiovascular and neurologic outcomes in adults, and (4) health risks of dioxins and polychlorinated biphenyls in fish.

Evidence Synthesis Levels of dioxins and polychlorinated biphenyls in fish are low, and potential carcinogenic and other effects are outweighed by potential benefits of fish intake and should have little impact on choices or consumption of seafood (women of childbearing age should consult regional advisories for locally caught freshwater fish).

Conclusions For major health outcomes among adults, based on both the strength of the evidence and the potential magnitudes of effect, the benefits of fish intake exceed the potential risks. For women of childbearing age, benefits of modest fish intake, excepting a few selected species, also outweigh risks.

[Click for full abstract \[2\]](#)

[Code of Federal Regulations \[3\]](#)- 21 CFR 109.30-- Tolerances for polychlorinated biphenyls (PCB's)

Daniels JL, Longnecker MP, Klebanoff MA, Gray KA, Brock JW, Zhou H, Chen Z & Needham LL. 2003. [Prenatal exposure to low-level polychlorinated biphenyls in relation to mental and motor development at 8 months \[4\]](#). Am. J. Epidemiol. 157:485-492.

Grandjean P, Weihe P, Burse VW, Needham LL, Storr-Hansen E, Heinzow B, Debes F, Murata K, Simonsen H, Ellefsen P, Budtz-Jørgensen E, Keiding N & White RF. 2001. Neurobehavioral deficits associated with PCB in 7-year-old children prenatally exposed to seafood neurotoxicants. Neurotoxicol. Teratol. 23:305-317.



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