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Eating Fish: Health Benefits and Risks

The foods we eat influence our health. Besides containing protein and other nutrients such as vitamin D and selenium, fish (either finfish or shellfish) contain a specific type of fat, omega-3 fatty acids, that may reduce the risk of developing heart disease and other medical problems. However, fish may also contain mercury and other contaminants that may have risks for health. The October 18, 2006, issue of *JAMA* includes an article about the health benefits and risks of eating fish.

HEALTH BENEFITS OF EATING FISH

- Omega-3 fatty acids are found in fish—especially oily fish such as salmon, sardines, and herring. These omega-3 fatty acids can help lower your blood pressure, lower your heart rate, and improve other cardiovascular risk factors.
- Eating fish reduces the risk of death from heart disease, the leading cause of death in both men and women. Fish intake has also been linked to a lower risk of stroke, depression, and mental decline with age.
- For pregnant women, mothers who are breastfeeding, and women of childbearing age, fish intake is important because it supplies **DHA**, a specific omega-3 fatty acid that is beneficial for the brain development of infants.

POSSIBLE RISKS OF FISH CONSUMPTION

- Some fish contain mercury. For men and women not of childbearing age, it is not clear that mercury exposure from typical levels of fish intake has any adverse health effects. In contrast, fish intake has significant benefits for reducing the risk of death from heart disease, the number one cause of death. So, mercury exposure from fish intake should not be a major concern for men or for women not of childbearing age. The benefits of fish intake can be maximized by consuming a variety of different seafood.
- Mercury may have subtle effects on the developing nervous systems of infants. Therefore, pregnant women, women who may become pregnant, those who are breastfeeding, and very young children should avoid 4 types of fish that are higher in mercury content: shark, swordfish, king mackerel, and golden bass. Other fish should still be consumed to ensure that infants receive the benefits of DHA for brain development. Light tuna has relatively low levels of mercury, and other fish, such as wild and farmed salmon and shrimp, contain very low levels of mercury.
- Chemicals called **dioxins** and **polychlorinated biphenyls (PCBs)** can accumulate in foods, including fish. The levels of these chemicals in fish, including farmed fish, are very low and similar to levels in meats and dairy products. Compared with the health benefits of fish intake, the health risks of these chemical levels are very low and should not influence individual decisions about fish intake. Compared with store-bought fish, locally caught freshwater fish may have higher chemical levels, so local advisories should be consulted.

Overall, the health benefits of eating fish greatly outweigh the potential risks—especially when guidelines are used to reduce the small chance of being affected by these risks.



FOR MORE INFORMATION

- Food and Drug Administration
Food Safety Information Line
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www.fda.gov
- American Heart Association
www.americanheart.org
- American Dietetic Association
www.eatright.org

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Sources: Food and Drug Administration, American Heart Association, American Dietetic Association

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