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Fish Consumption for Pregnant Women



The National Coalition for Infant Health is a collaborative of more than 150 professional, clinical, community health, and family support organizations focused on improving the lives of premature infants through age two and their families. NCFIH's mission is to promote lifelong clinical, health, education, and supportive services needed by premature infants and their families. NCFIH prioritizes safety of this vulnerable population and access to approved therapies.

Dear Colleagues,

Pregnant women today are mindful about the importance of prenatal care and prevention, particularly with respect to nutrition. However, with a steady barrage of new information, some of it seemingly contradictory, even the most conscientious mother-to-be may struggle to determine the best choices for her baby.

This Fast Facts outlines current scientific research and clarifies potentially confusing information.

Q. Should pregnant women eat cooked fish?

The experts unequivocally say: yes. The U.S. Food and Drug Administration and the 2015-2020 Dietary Guidelines for Americans recommend that pregnant women eat at least two to three servings¹ of adequately cooked fish each week. Pregnant women should avoid undercooked seafood, which may contain listeria or other harmful bacteria.

Greater maternal fish intake overall has been proven to be associated with higher child developmental scores.² In 2014, the FDA

finished a nine-year study³ weighing the risks and benefits of fish consumption during pregnancy. It examined 120 peer-reviewed studies and concluded that eating fish during pregnancy can benefit a child's developing nervous system.

The findings aligned closely with a joint study by the Food and Agriculture Organization of the United Nations and the World Health Organization. Other prominent organizations like the American Heart Association and American Academy of Nutrition and Dietetics also recommend two to three servings of seafood weekly for its health benefits.

The following table lists just some of the most important studies over the past 20 years that confirm the net beneficial effect of eating seafood during pregnancy.

Q. What benefits does fish consumption provide during pregnancy and childhood?

Omega-3s. The human body needs three types of polyunsaturated fats referred to as the omega-3 fatty acids. Unlike other types of fat, omega-3s are considered "essential" fats and can be absorbed only from food.

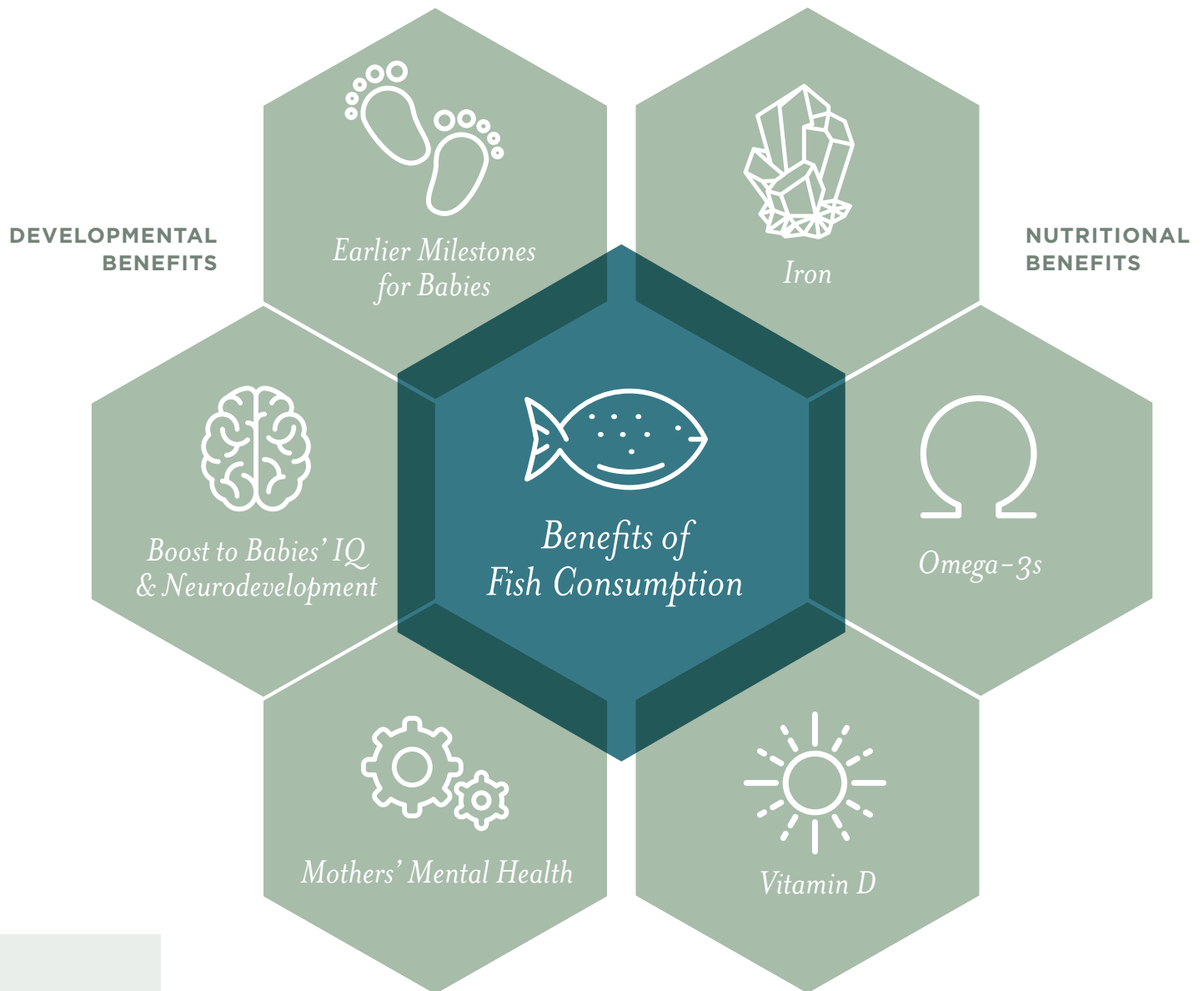
These fatty acids are critical for a mother's brain and heart health. They also promote a baby's normal brain development.⁴ During the last trimester, a fetus's brain and nervous system rapidly develops, requiring about 65 milligrams a day of the omega-3 known as DHA. The heightened demand for DHA continues to two years of age.

Research shows that consuming two to three servings of seafood each week boosts brain development by 2.63 IQ points.⁵ It also suggests that babies of moms who eat seafood-rich diets reach milestones such as sitting up and putting words together sooner than babies of moms who don't eat fish.⁶ Mothers' mental health may also benefit from fish.⁷

Vitamin D and Iron. Fish provides high amounts of iron and vitamin D, which are otherwise difficult to obtain naturally. Both iron and vitamin D are important for healthy circulation and bones, for

Figure 1. Scientific Milestone Studies Confirm the Benefits of Eating Fish during Pregnancy

YEAR	AUTHOR(S)	SOURCE
2008	Innis, et al.	<i>American Journal of Clinical Nutrition</i>
2008	Jacobson, et al.	<i>Journal of Pediatrics</i>
2008	Oken, et al.	<i>American Journal of Epidemiology</i>
2008	Oken, et al.	<i>American Journal of Clinical Nutrition</i>
2007	Budtz-Jorgenson, et al.	<i>Environmental Health Perspectives</i>
2007	Hibbein, et al.	<i>The Lancet</i>
2006	Mozaffarian, et al.	<i>Journal of the American Medical Association</i>
2005	Oken, et al.	<i>Environmental Health Perspectives</i>
2005	Cohen, et al.	<i>American Journal of Preventative Medicine</i>
2003	Meyers, et al.	<i>The Lancet</i>
1998	Davidson, et al.	<i>Journal of the American Medical Association</i>



both mother and baby. Seafood is also a valuable alternative to meat because it is a plentiful source of energy and high-quality protein necessary to encourage growth in young children, yet typically much lower in saturated fat.

Q. What's the cause of mothers' confusion?

The average pregnant woman in the United States currently eats 1.89 ounces of seafood weekly, a quarter of the minimum recommendation.⁸ This discrepancy may stem in part from a misguided and misleading media narrative.

In 2004 the FDA and the U.S. Environmental Protection Agency (EPA) published joint advice that encouraged fish consumption, stating that "women and young children in particular should include fish or shellfish in their diets due to the many nutritional benefits." The balanced advice also contained an innocuous acknowledgement that "nearly all fish and shellfish contain traces of mercury."

Some media outlets transferred that very limited mercury statement to their headlines, amplifying that message while minimizing—or overlooking entirely—the overwhelming value of fish consumption. Sensationalized interpretations led to widespread confusion about the matter.

Understandably, concerned mothers mostly heard the warning rather than the advice to eat fish. Some health care providers responded similarly. So by 2012, average fish intake among pregnant mothers was far below the official 2004 FDA/EPA recommendation of up to 12 ounces per week.

Q. Are all fish good for pregnant women?

The FDA and EPA advise avoiding four types of fish with high levels of mercury: tilefish, shark, swordfish, and king mackerel. The advice also recommends checking local fish advisories about the safety of fish caught non-commercially in lakes, rivers, and coastal areas.

The FDA and EPA also offer several examples of fish to include in a prenatal diet for their nutritional value: shrimp, salmon, canned light tuna, pollock, catfish, tilapia, and cod.

Q. What's the most current advice on pregnant women, nutrition and fish consumption?

Various elected officials and other leaders have called on the agencies to "speak with one voice" on the matter. Fortunately, the U.S. Departments of Agriculture (USDA) and Health and Human Services (HHS) released 2015 Dietary Guidelines for Americans

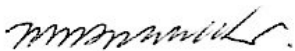
recommending that pregnant and breastfeeding women consume at least two to three seafood meals each week. When the EPA and FDA released updated guidance in 2017, however, they conveyed a message that may perpetuate rather than clear up confusion. The one-page guidance document prioritizes choices based on mercury content instead of emphasizing the nutritional benefits of fish consumption. It also assigns fish to “best,” “good” and “avoid” categories based on distinctions that may be hard for consumers to follow.

“The FDA and EPA offer several examples of fish to include in a prenatal diet: Shrimp, Salmon, Canned Light Tuna, Pollock, Catfish, Tilapia, and Cod.”

The agencies’ approach could have the unintended consequence of increasing the number of pregnant women who err not by eating too much fish, but by eating too little.

Conclusion:

The FDA, EPA and Dietary Guidelines for Americans advice to eat two to three servings of low-mercury seafood is based in scientific consensus. Yet some media continue to sensationalize the message, emphasizing limited risks over significant and proven health benefits. Consequently, mothers have incorrectly understood the message and, on average, do not eat seafood in the necessary weekly amounts. Seafood promotes brain and heart health in mothers and their babies. Mothers and health care providers need to hear accurate, concise information based on the latest research.



Mitchell Goldstein, MD
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National Coalition for Infant Health Values (SANE)

Safety. Premature infants are born vulnerable. Products, treatments and related public policies should prioritize these fragile infants’ safety.

Access. Budget-driven health care policies should not preclude premature infants’ access to preventative or necessary therapies.

Nutrition. Proper nutrition and full access to health care keep premature infants healthy after discharge from the NICU.

Equality. Prematurity and related vulnerabilities disproportionately impact minority and economically disadvantaged families. Restrictions on care and treatment should not worsen inherent disparities.