

# FISH CONSUMPTION FOR PREGNANT WOMEN

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 servings<sup>1</sup> 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.<sup>2</sup> In 2014, the FDA finished a nine-year study<sup>3</sup> 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.

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

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



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

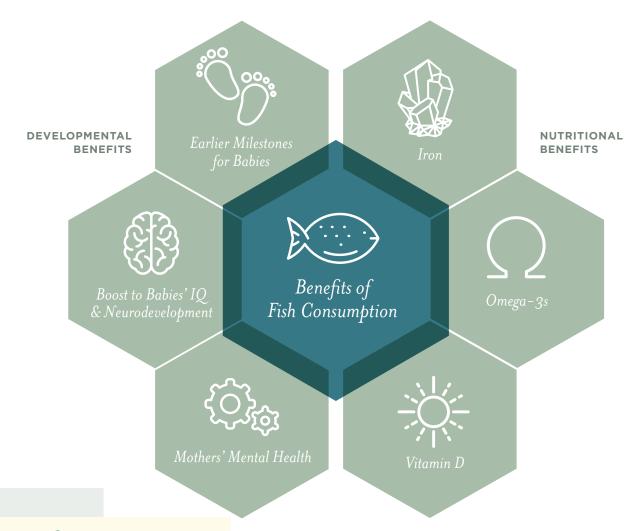
**Omega-3s.** The human body needs three types of polyunsaturated fats referred to as the omega-3 fatty acids. Unlike other types of fat, omega-3s are considered "essential" fats and can be absorbed only from food.

These fatty acids are critical for a mother's brain and heart health. They also promote a baby's normal brain development.<sup>4</sup> 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.<sup>5</sup> 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.<sup>6</sup> Mothers' mental health may also benefit from fish.<sup>7</sup>

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 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.



## FAST facts

### 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. <sup>8</sup> 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 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.

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.



### 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.

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The National Coalition for Infant Health educates and advocates on behalf of premature infants from birth to age two. NCfIH envisions safe, healthy infants whose families can access the information, care and treatment their babies need.