The Importance of DHA During Pregnancy & Nursing

DHA is a major structural fatty acid in the brain and retina, and is naturally found in breast milk. It is important for a mother to consume adequate amounts of DHA during pregnancy and while nursing to support her well-being and the health of her infant.

DHA for the Developing Infant

- DHA is important for optimal infant visual and mental development both in utero and throughout infancy.
- Developing infants cannot produce DHA efficiently, and must receive this vital nutrient from the mother through the placenta during pregnancy and in breast milk after birth.
- A workshop sponsored by the National Institutes of Health (NIH) and the International Society for the Study of Fatty Acids and Lipids (ISSFAL) recommended an intake of 300mg/day of DHA for pregnant and nursing women.
- On average, pregnant and nursing women in the U.S. consume 60-80mg of DHA a day, only 20-25% of the intake recommended by the NIH/ISSFAL sponsored workshop.
- Breast milk DHA levels are dependent on the mother's diet. Because of a low DHA dietary intake, American women reportedly have lower DHA levels in their breast milk than the levels recommended for inclusion in infant formulas by a joint Expert Committee of the World Health Organization (WHO) and the Food and Agriculture Organization (FAO).
- Maternal DHA supplementation was shown to increase the mother's blood and breast milk DHA levels. This, in turn, elevated the blood DHA levels of both the fetus and breast-feeding infant.
- DHA was cited as the likely component of breast milk influencing the significantly higher cognitive outcomes of breast-fed infants through the first 18-years of life (as compared to non-DHA supplemented formula-fed infants).
- Higher levels of DHA in breast milk were also associated with an infant's ability to easily adjust to changes in surroundings (measured using Brazelton Neonatal Behavioral Assessment scale).
- Infants whose mothers had higher blood DHA levels showed better sleep patterns suggesting greater central nervous system maturity.
- Maternal DHA supplementation resulted in mental development advantages in children including improved psychomotor development (such as eye-hand coordination) at 2.5 years of age and improved attention skills at 5 years of age.
- A study using a statistical model of risk-benefit, designed by Harvard Center for Risk Analysis, estimated that increasing maternal DHA intake by 100mg/day increases child IQ by 0.13 points.

DHA for Maternal Well-being

- DHA supplementation during pregnancy was shown to increase the length of gestation by about six days helping mothers carry to a healthy or full term.
- Increasing dietary intake of DHA during pregnancy and postpartum may help to support a mother's emotional well-being.

The best sources of DHA are: seafood, algae, and especially coldwater fish. Omega-3 fatty acids are nature's antifreeze. In general, the colder the water, the higher the omega-3 content in the fish oil. Popular sources of DHA are: salmon, sardines, and tuna. Eggs and organ meats have a small amount of DHA in them, but the healthiest source of dietary DHA is seafood. Two 4-ounce servings of omega-3-rich fish per week should yield a sufficient amount of omega-3 fatty acids, especially DHA. Besides fish oils, vegetable oils (primarily flaxseed, soy, and canola) are also rich sources of omega 3 fatty acids, with flaxseed oil being the best. The two F's, fish and flax, are the top brain-building foods for growing children, and adults. Those who eat little or no fish each day should take a DHA supplement, especially during pregnancy and lactation.