Reference:

Prenatal Docosahexaenoic acid (DHA) and Pregnancy Outcomes

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(The present report is filed on-site by the DHA/EPA Omega-3 Institute from the 10th Congress of the International Society for the Study of Fatty Acids and Lipids being held in Vancouver, BC)

Summary:

This recently-completed clinical trial evaluated the potential benefits of supplementing pregnant women with a relatively high dose of DHA omega-3 fatty acid on the health outcomes of their infant offspring. For this purpose, 350 women (average age of 25 yrs and at 14 weeks gestation) were randomly assigned to either receive daily supplementation with 600 mg DHA omega-3 per capsule or a control capsule (‘placebo’ lacking DHA) until delivery. A high level of compliance (approx. 80%) to supplementation was confirmed as supported also by the marked rise in DHA levels (as a % of total fatty acids) from an average of 4.3 to 7.3 % in the circulating blood from the DHA group and up to 7.3 % in the cord blood.

The average body weight of the infants from the DHA-supplemented mothers (3359 grams) was significantly greater than that (3187 grams) from the mothers not receiving supplemental DHA. Also, the infants in the DHA group had significantly greater body lengths and head circumferences. Interestingly, the prevalence of low body weight infants (below 1500 grams) was only 0.1 % via the DHA mothers but much higher at 4.1 % via the controls. Further, the prevalence of early preterm infants (below 33 weeks gestation) was only 1.3 % in the DHA group but 5.4 % in the controls. For those infants who had to be admitted to the neonatal intensive care unit, the average number of hospitalization days was much lower in the DHA group (5.5 days) versus 31.0 days for the controls.
Dr. Holub’s Comments:

Following her lecture, I asked Dr. Carlson if she believed that pregnant women should be consuming at least 600 mg DHA/day as opposed to 200 mg/day as recommended by the PERLIP group (via the European Union). Her response was a single word answer – "yes". It should be pointed out that current DHA intakes during pregnancy in North America average approximately 80 mg/day. Numerous clinical trials in expectant mothers have employed DHA intakes up to 1000 mg/day without reported adverse effects. Dr. Carlson also suggested that there could be approx. 30,000 fewer low birth weight deliveries per year in the US if intakes of 600 mg DHA/day as used in her clinical study were applied to all pregnant women.