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Supplementing babies' formula with DHA boosts cognitive development

Research has shown that children who were breast fed as infants have superior cognitive skills compared to those fed infant formula, and it's thought that this is due to an essential fatty acid in breast milk called docosahexaenoic acid (DHA). Now a new study has found that babies fed formula supplemented with DHA have higher cognitive skills than babies fed regular formula.

The study, which used a more sensitive test of the babies' cognitive abilities and higher concentrations of DHA than previous research, was carried out by researchers at the Retina Foundation of the Southwest and the University of Texas Southwestern Medical Center. It appears in the September/October 2009 issue of the journal *Child Development*.

The researchers studied 229 infants, who received either formula supplemented with DHA or traditional infant formula. The babies were given the different formulas either shortly after birth, after 6 weeks of breastfeeding, or after 4 to 6 months of breastfeeding. When they were 9 months old, they were given a problem-solving test in which they had to complete a sequence of steps to get a rattle.

Babies who were fed formula supplemented with DHA were more likely to get the rattle and showed more intentional behaviors that allowed them to get the rattle.

"Currently, there is no clear consensus on whether infant formula should be supplemented with DHA," notes lead author James R. Drover, a former postdoctoral fellow at the Retina Foundation of the Southwest who is now assistant professor of psychology at Memorial University in Canada.

"However, our results clearly suggest that feeding infants formula supplemented with high concentrations of DHA provides beneficial effects on cognitive development. Furthermore, because infants who display superior performance on the means-end problem-solving task tend



to have superior IQ and vocabulary later in childhood, it's possible that the beneficial effects of DHA extend well beyond infancy."

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Summarized from *Child Development*, Vol. 80, Issue 5, Three Randomized Controlled Trials of Early Long-Chain Polyunsaturated Fatty Acid Supplementation on Means-End Problem Solving in Nine-Month-Olds by Drover, JR, Hoffman, DR, Castañeda, YS, and Morale, SE (Retina Foundation of the Southwest), and Birch, EE (Retina Foundation of the Southwest and University of Texas Southwestern Medical Center). Copyright 2009 The Society for Research in Child Development, Inc. All rights reserved.