

Q&A with a USANA Scientist

John Cuomo, Ph.D, Discusses Omega-3 Fatty Acids and Early Childhood Development

Studies seem to come out daily touting the benefits of omega-3 fatty acids for good health. There is exciting new research that suggests a link between omega-3 fatty acids and early childhood development. USANA's Executive Director of Research and Development John Cuomo, Ph.D., answers some questions on this new hot topic:

Why should every woman of childbearing age consume omega-3 fatty acids as part of an overall healthy diet?

There are three reasons: First is the area of heart health. There are hundreds of studies that show omega-3 fatty acids benefit the heart.* Two, there are potential benefits for the immune system.* The third and most important reason is the clear link between an adequate nutritional supply of two omega-3 fatty acids, EPA and DHA, and proper development of a child's brain and eyes.* A child must get these important nutrients for normal, healthy cognitive and visual function.* There is only one place for a developing fetus to obtain these nutrients and that's from its mother. In fact, the fetus' nourishment takes priority over the available supply of omega-3 fatty acids, and therefore this constant drain on the mother's fatty-acid reserves could easily lead to a deficiency. But most important, if the mother's supply of these fats is low, the child may not get adequate amounts for normal development. The best way to ensure a sufficient supply for both the child and the mother is to get plenty of omega-3s into the diet before, during, and after pregnancy. 1,2,3

What are the benefits of omega-3 fatty acids for the child?

A number of very good clinical studies show that when the mother consumes omega-3 fatty acids during pregnancy, there is measurable support for both visual and mental development in the infant.* In fact, these studies show that omega-3 fatty acids consumed by the mother during pregnancy

support continued development in normal cognitive and visual function in children for several years after birth.* This seems to occur even if that child doesn't get any additional EPA or DHA. High quantities of DHA are especially important in the functioning of normal cells in the brain and visual systems.*4,5

Are there benefits to the infant if a woman supplements with omega-3 fatty acids while nursing?

Yes. Many of the best studies include women who supplemented with omega-3 fatty acids during pregnancy and while breast feeding. It is very well documented that supplementation by nursing mothers increases the levels of DHA in their breast milk.* This in turn increases the infant's levels of DHA.* And studies show that higher levels of DHA provide increased support for cognitive developments in infants.*6,7

Are there any concerns for women eating fish?

Yes, in fact the Food and Drug Administration and the Environmental Protection Agency warn pregnant women, women who may become pregnant, nursing mothers, and young children to limit the intake of certain fish because of high levels of mercury. This includes shark, swordfish, tilefish, and king mackerel. There are even warnings for canned tuna. They suggest women should not eat more than two cans per week of chunked light tuna, which has the lowest amount of mercury. If women eat albacore tuna, the levels of mercury are even higher, so the EPA recommends no more than one can per week. Mercury is a developmental toxin, which may undo any benefit women get from DHA. The warnings are primarily against eating those fish that have the highest levels of mercury and other toxins.

So, could USANA's BIOMEGATM supplement be a good option?

Because of the EPA advisory, women are eating less fish, especially during pregnancy. So, I think our product is an

excellent addition to the diet because the amount of measurable toxins is so low that it's virtually non-existent. While we can't guarantee that it's completely free of any of those toxins, we have set our specifications for these compounds at what the EPA has called the lowest detection limit (.01 parts per million for mercury), and BIOMEGA doesn't even reach that limit. The double molecular distillation process used to manufacture the product essentially removes any toxins that might have accumulated in the fish to provide the highest quality, ultra-pure fish oil.

Are there any benefits to the vitamin D that has been added to **BIOMEGA?**

Not specifically for pregnancy. The statistics show that most people are deficient in vitamin D. And, there is data that shows vitamin D is important to immune function, which is important to the mother.^{8,9} All women should obtain sufficient amounts of vitamin D so their bodies can efficiently use calcium. You can't efficiently absorb and utilize calcium unless you have adequate supplies of vitamin D.

Should parents give BIOMEGA to their child?

The dosage for **BIOMEGA** has been formulated for adults, so parents should not give their child BIOMEGA capsules. If parents want to supplement their child's omega-3 intake in addition to other dietary sources, they could slice open a capsule and mix it with food.

*These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease

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