

NORDIC NEWS

professional sales

AUGUST 2009

RESEARCH SPOTLIGHT *by Bradley West, ND*

EPA, DHA, and GLA for the Treatment of ADHD

Research continues to link EPA, DHA, and GLA in children and adults to mood, thinking, reasoning, memory, behavior, and attention deficit disorders. Many studies have identified abnormalities in membrane fatty acids in subjects with attention deficit hyperactivity disorder (ADHD), and success has been reported using EPA and DHA. Fish oil + GLA has been shown to reduce a range of ADHD symptoms, including psychosomatic issues, anxiety, and cognitive problems. Animal studies have also shown that diet-induced lack of DHA in the brain leads to alterations in cognitive processes and ADHD-like behavior.

In a study just published in the July 2009 *Acta Paediatrica*, Swedish researchers found a clear link between fish consumption and higher cognitive scores among adolescent males, reporting that 15-year old males who ate fish at least once a week had higher cognitive scores than those who ate it less frequently.

Another recent study showed that although ADHD children consumed equivalent amounts of omega-3 and omega-6 fatty acids as control subjects, they nonetheless had significantly lower levels of DHA and total omega-3 fatty acids, higher omega-6 fatty acids, and a lower ratio of omega-3:omega-6 fatty acids than controls. This suggests that there are metabolic differences in fatty acid metabolism in ADHD children, and provides rationale for the use of omega-3 supplements.

Other studies have also indicated the importance of the ratio between omega-3 and the omega-6 arachidonic acid by giving high doses of omega-3 (equivalent to Japanese levels) to normalize behavior; while another possible explanation, or at least contributing factor, was shown when children with ADHD had higher exhalant levels of ethane in their breath, a non-invasive measure of oxidative damage to omega-3 fatty acids. In contrast, levels of butane, a marker of protein oxidation, were unaltered. This metabolic abnormality coupled with the western diet ratio imbalances may help explain the problem, as well as provide further rationale for omega-3 supplementation in the treatment of ADHD.

Aberg MA, Aberg N, Brisman J, Sundberg R, Winkvist A, Torén K. *Acta Paediatr* 2009 Mar;98(3):555–60. Epub 2008 Oct 29.

Johnson M, Ostlund S, Fransson G, et al. Omega-3/omega-6 fatty acids for attention deficit hyperactivity disorder: a randomized placebo-controlled trial in children and adolescents. *J Atten Disord* 2009;12(5):394–401.

Colter A, Cutler C, Meckling K. Fatty acid status and behavioural symptoms of Attention Deficit Hyperactivity Disorder in adolescents: A case-control study. *Nutr J* 2008;7(1):8.

Sorgi P, Hallowell E, Hutchins H, et al. Effects of an open-label pilot study with high-dose EPA/DHA concentrates on plasma phospholipids and behavior in children with attention deficit hyperactivity disorder. *Nutr J* 2007; 6:16; doi:10.1186/1475.

Matsudaira T. Attention deficit disorders—drugs or nutrition? *Nutr Health* 2007;19(1-2):57–60.

Stevens L, Zentall S, Deck J et al. Essential fatty acid metabolism in boys with attention-deficit hyperactivity disorder. *Am J Clin Nut* 1995;62:761–768.

Stevens, LJ, et al. *Lipids* 2003.

Ross BM, McKenzie I, Glen I, Bennett CP. Increased levels of ethane, a non-invasive marker of n-3 fatty acid oxidation, in breath of children with attention deficit hyperactivity disorder. *Nutr Neurosci* 2003; 6(5):277–281.

Richardso AJ, Puri BK. A randomized DB PC study of the effects of supplementation with highly unsaturated fatty acids on ADHD-related symptoms in children w/ specific learning difficulties. *Prog Neuropsychopharm Biol Psych* 2002 ;26(2):233–239.

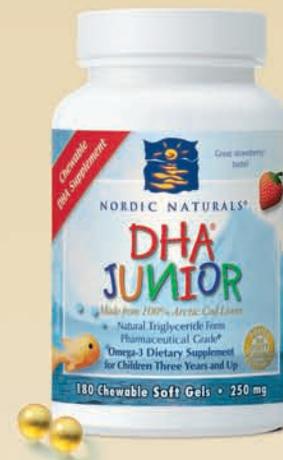
FEATURED PRODUCT

DHA Junior

- Made from 100% Arctic Cod Liver Oil
- Ideal source of EPA+DHA for ages 3+

ProEFA Junior

- Fish oil + borage oil
- Ideal source of EPA, DHA, and GLA for ages 5+



Available in:

180/360 count—strawberry



Available in:

90 count—lemon

Call for current pricing

PROFESSIONAL & EXCLUSIVE

NORDIC NATURALS 
Pure and Great Tasting Omega Oils

For more information, please contact:

800.662.2544 x1 • prosales@nordicnaturals.com

For more research on fish oil, please visit: omega-research.com

This document is for educational purposes of medical professionals, and is not intended for patients.

* 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.