

Healthy Oils Research Synopsis

Dr. Jacqueline Stordy's first study focused on her hypothesis, which was later proven through research using blood work to learn about each research participants' genetic profile, DNA. Researchers found "that in the women who had a family history of dyslexia, their diet had not made any difference. Women with such a predisposition were obviously getting the precursor fatty acids in their diet but were unable to convert them to DHA and AA, the longer-chain omega form demanded by the hungry brain (pg. 105). Additional studies found supplementation with just DHA from microalgae, and not fish oil, resulted in no improvements. Thus, Dr. Stordy focused on creating a combination of DHA fish oils using research that analyzed participant's blood samples and DNA results. She also evaluated dietary habits, vitamin supplementation, and effects of decreasing stress through educational and home modifications.

Improving Vision With Efalex

Dyslexia: Children who adapted poorly to the dark significantly improved their abilities to adapt and see in the dark once supplemented with DHA as well as vitamins A and D (pg. 107, 108). Brain imaging studies were completed by a team at Oxford University. They concluded, "The metabolism of membrane phospholipids is heavily influenced by their Essential Fatty Acid composition; findings are also consistent with Essential Fatty Acid deficiency in dyslexia (123)." These fatty substances form the structure of nerve membranes.

Dyspraxia and Attention Deficit Hyperactivity Disorder study: "Motor skills are related to ways in which nerves control the muscles (pg. 114)." After four months of supplementation, some participants had improved so much they no longer needed occupational physical therapy. All participants' motor skills improved along with concentration and self-control.

I believe that improved levels of fat in the brain allowed sensory information to travel more efficiently and effectively within the brain. There are also many muscles in the eyes.

Attention Deficit Hyperactivity Disorder

"Hyperactive children had significantly lower levels of the long chain fatty acids called DHA, DGLA, and AA in their blood cell membranes (pg. 115)." (Dr. Mitchell and colleagues in 1987, *Clinical Pediatrics*)

Additional Research Findings:

Dr. Burgess and Laura Stevens in 1995, published in the *American Journal of Clinical Nutrition* a study that showed that children with a diagnosis of Attention Deficit Hyperactivity Disorder:

- “Displayed clinical signs of long chain fatty acids deficiency such as excessive thirst and the need to urinate frequently.
- Had much lower levels of the omega chains AA and DHA in their red blood cell membranes even though, like the control group, they consumed plenty of the LA and ALA precursors in their diet.
 - Ø Participants were unable to convert LA and ALA into the long-chain derivatives AA and DHA.
 - Ø They also had more omega-6 DPA in their cell membranes. Past studies had already proven that too much omega-6 is found when an individual is deficient in DHA (pg. 115).”

“The boys with Attention Deficit Hyperactivity Disorder were also:

- Less likely to have been breast-fed (or fed for shorter lengths of time)
- More likely to suffer from asthma & other health problems.”

According to research, long chain fatty acid deficiency makes the lining tissues of the skin, the lungs, and the stomach more permeable. As a result, materials that do not normally penetrate the body manage to get inside which causes inflammation and other allergic responses. When omega supplements were given, the lining tissues become less permeable. (pg. 43)

Purdue researchers published in 1996, *Physiology and Behavior*, (pg. 117,118) additional symptoms associated with LCP deficiencies which include:

- Increased thirst
- Frequent urination
- Dry skin
- More frequent and excessive temper tantrums
- Difficulty falling asleep and getting up in the morning
- Significantly greater learning problems”

Japan – researchers studied aggressive behavior and omega health:

Supplements were given for three months to students with the end of the study occurring during finals; a time of acute mental stress. “The group of students who received *NO DHA* supplementation exhibited significant, aggressive behaviors against others (pg. 120).” Thus, there is a correlation between behavior and omega levels.

University of South Australia: Research showed an improvement in behavioral and learning problems in children with Attention Deficit Hyperactivity Disorder when taking

omega-3 fish oil combined with evening primrose oil. Of the 132 children tested, almost 50 percent showed improvement during the study. This equates to a success rate greater than Ritalin, the most common Attention Deficit Hyperactivity Disorder drug. A similar study, published in the May 5, 2005, issue of *Pediatrics* backs up these results. According to Paul Montgomery, D.Phil, "A lack of certain polyunsaturated fatty acids may contribute to dyslexia and attention-deficit/hyperactivity disorder." Follow the links to learn more: <http://www.oilofpisces.com/attentiondeficitdisorder.html>
<http://www.nutraingredients.com/Research/More-support-for-omega-3-calming-ADHD-kids>