

Omega 3 Fatty Acids And Children with Attention Deficit Disorder

Although usually discussed in a negative light, fat is very important to our children's health. While it is true that excess fat can contribute to many disorders and diseases, not including enough of certain types of fats in the diet can also be detrimental to our health. The truth of the matter is our children are not eating enough *healthy* fat.

The fats in our foods are made up of different fatty acids that have various functions in our bodies. They are classified as either saturated or unsaturated. Saturated fats come from animal sources, such as beef and butter, but are also found in some plant sources (palm and coconut oils). Unsaturated fats are found mainly in plant sources. Fish is the only main animal source for unsaturated fats.

Trans fatty acids are another type of fat created in food processing, but can also be found in small amounts in meat and dairy products. Trans fatty acids major sources are cakes, cookies, chips, and other snack and fried foods.

Saturated fats raise blood cholesterol (LDL or bad cholesterol), which is the major risk factor for heart disease and stroke (1). Trans fatty acids not only increase LDL cholesterol, but also lower your HDL cholesterol (your body's good cholesterol)(2). HDL cholesterol helps the body dispose of your LDL – bad – cholesterol, thereby decreasing your risk of heart disease.

All unsaturated fatty acids lower LDL cholesterol, and some increase HDL cholesterol. Unsaturated fatty acids can also be broken down into monounsaturated fatty acids (olive oil, canola oil, avocados, nuts and seeds) and polyunsaturated fatty acids.

Polyunsaturated fatty acids can be further broken down into Omega-6 fatty acids (corn, safflower, soybean, and sunflower oils) and Omega-3 fatty acids (flaxseed, rapeseed, evening primrose oils, walnuts, micro-algae and fish oil). It has been found that American children are currently eating high amounts of the Omega-6 fatty acids, but are deficient in the Omega-3 fatty acids.

A diet low in Omega-3 fatty acids has been associated with attention deficit disorder, asthma, decreased cognitive performance, and many other negative conditions (3, 4, 5). In contrast, children who received supplemental Omega-3 fatty acids were found to have decreased cholesterol levels, improved behavior, and reduced asthma symptoms (6, 7, 8). In particular, a study at Purdue University found supplementation of Omega 3 fatty acids led to a significant improvement in behavior in children with attention deficit disorder (13).

Fit4Kids™ includes a very important, essential fatty acid – DHA (docosahexanoic acid). DHA is necessary for optimal development of the brain and eye. It has been shown to improve concentration in children and adults. Researchers have also found DHA to help protect against heart disease, stroke, dementia, and Alzheimer's. Though normally found in fish, the DHA in our Fit4Kids™ Shake comes from micro-algae oil – the only available vegetarian source.

The Omega-3 fatty acids found in micro-algae oil are also converted into DHA (docosahexanoic acid), another fatty acid associated with many beneficial health effects. DHA is important for the development of the brain, eye, and has been found to protect against heart disease.

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