

Omega 3 Fatty Acids and ADHD: A Brief Summary

By Judith Aronson-Ramos, M.D.

Why do Omega 3 fatty acids matter?

Omega three fatty acids, EPA and DHA, are incorporated into neurons in the brain. They are vital to optimal neurological health. They are out of balance in the current western diet.

Why do we need them?

Omega 3 fatty acids are “essential” meaning the human body cannot produce them; we need to get them from nutritional sources. They are also hard to obtain from our foods in sufficient quantities as diets have shifted and traditional sources of omega 3's are not as plentiful. Instead our diets are too rich in omega 6 (also essential but abundant in the diet) and 9 fatty acids (inessential, we produce them from precursors) which are produced from grain fed animals and fish, and oils used in processed foods (sunflower, safflower, corn, palm, oils etc.).

The ratio of omega 6 fatty acids to omega 3 fatty acids in our diets have shifted from 16:1 to over 100:1 in the past 25 years. Omega 6 and 3 fatty acids compete for enzymes and incorporation in cell membranes in the brain, this all boils down to a real physiological effect from the dietary shift in the western diet. More omega 6 means nerve conduction, neurotransmitter binding and other effects may occur. With ADHD this can mean more impairment in neurotransmitter function and effect.

What can we do to get the right amount of Omega 3's for ADHD?

The neurologically significant omega three fatty acid for ADHD is EPA. Omega 3 fatty acids consist of two types: DHA and EPA. DHA is necessary for early growth and brain development; it is added to infant formula. However, for the positive benefits we are striving for with ADHD we need predominantly EPA and in high dosages of 1-2 g/day.

What makes a good supplement?

1. Mercury Free
2. EPA:DHA in a ratio of 3:2 or higher
3. EPA totaling 500mg - 2 g/day

4. Take it consistently for at least three months
5. If no response increase the EPA content higher or find a product with alpha linolenic acid (GLA) in addition to EPA and DHA.
6. You do not need omega 6 or 9 they are abundant in the diet
7. Take it with food to eliminate “fish burps”
8. Find a good quality product by checking with websites such as www.consumerlabs.com, www.supplementquality.com , www.naturalstandard.com and other consumer advocacy groups
9. Read labels carefully and remember claims made by advertisers do not need to be proven or tested; these supplements are not regulated by the FDA.

Why should Omega 3 fatty acids be trialed?

They are considered safe, effective, and reasonable. Even as medical guidelines are undergoing development and there is not universal agreement there is a growing body of evidence and research to support their usage. It may be possible to decrease medication dosages or requirements if successful. They treat underlying physiology not just symptoms in the short term.

What else can I do with diet, nutrition and supplements?

Eat healthy whole foods, meaning less processed food and more naturally occurring products – nuts, fruits, vegetables, proteins etc. Take a multivitamin with at least 7.5mg of zinc. Drink clean water and avoid dyes and preservatives. Organic may offer benefit if there are impaired detoxification systems which some studies have shown to be the case.