

Oxford-Durham Study

The first research trials in the area of omega-3 oils and childhood developmental/ behavioral disorders focused on using DHA as the intervention of choice. The basis for this approach stemmed from evidence demonstrating efficacy of DHA in newborn infants for visual and hearing acuity, as well as mental development. These trials however failed to demonstrate significant efficacy from intervention with DHA.

Upon learning of the efficacy achieved with EPA in adult depression and schizophrenia, interest surfaced in reexamining childhood developmental and behavioral disorders using EPA as the principal active constituent. The results achieved in the one human intervention trial conducted thus far using such an approach are tremendously encouraging. This trial was published in May of 2005. A summary of the study appears below (Richardson 2005);

A randomized, controlled trial of dietary supplementation with omega-3 and omega-6 fatty acids, compared with placebo, was conducted with 117 children with developmental coordination disorder (DCD). The children were 5-12 years of age. Treatment for 3 months in parallel groups was followed by a 1-way crossover from placebo to active treatment for an additional 3 months. (Half the children received omega-3 oils, and the other half received placebo for 3 months. Thereafter, the half that were receiving placebo were switched to omega-3 oils, while the other half remained on omega-3 oils). 558mg EPA, 174mg DHA were delivered per day.

No effect of treatment on motor skills was apparent, but significant improvements for active treatment versus placebo were found in reading, spelling, and behavior over 3 months of treatment in parallel groups. After the crossover, similar changes were seen in the placebo-active group, whereas children continuing with active treatment maintained or improved their progress.

32 children were determined to have ADHD at enrollment. 16 were in the treatment group, 16 in the placebo group. After 3 months, 7 of the 16 children in the treatment group no longer met the criteria for ADHD. 1 of the 16 children in the placebo group no longer met the criteria for ADHD.

This study demonstrates impressive efficacy of EPA rich omega-3 oil for the treatment of childhood developmental/ behavioral disorders. It directly contrasts the lack of efficacy produced by very high DHA omega-3 oils produced in four trials conducted previous to this trial.

Reference:

Richardson AJ, Montgomery P. The Oxford-Durham study: a randomized, controlled trial of dietary supplementation with fatty acids in children with developmental coordination disorder. Pediatrics. 2005 May;115(5):1360-6.