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Autism and omega-3 fatty acids

Autism is one of the worst nightmares a family can have. The child regresses in social interaction and language skills and develops highly restrictive behavior patterns along with serious behavioral disturbances, including self-injury, aggression and tantrums.

No one knows the cause, but the incidents appear to be increasing. It has long been known that children with autism have lower levels of omega-3 fatty acids in their blood, but no one had ever conducted the obvious clinical trial of giving autistic children omega-3 fatty acids to see if any benefit would occur. That is until now.

A recent issue of Biological Psychiatry (2007; 61:551-553) published a small pilot study on omega-3 fatty acid supplementation in autistic children. **In this study 1.5 grams of EPA and DHA were used per day for six weeks.**

Of the all the parameters studied, it was only in the reduction of hyperactivity that a positive trend was found for those taking the omega-3 fatty acids compared to the placebo.

This is one of the **problems of using low doses of omega-3 fatty acids for neurological conditions**. For example, we have found using much higher levels of omega-3 fatty acids (nearly 10 times the amount of EPA and DHA as in this study) results in significant clinical improvement in all phases of hyperactivity in children with ADHD. The implication is that for children with autism, high levels of EPA and DHA may be required for significant behavioral changes to occur. However, that is a small price to pay for getting your child back.

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[Biol Psychiatry](#). 2007 Feb 15; 61(4):551-3. Epub 2006 Aug 22.

Omega-3 fatty acids supplementation in children with autism: a double-blind randomized, placebo-controlled pilot study.

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BACKGROUND: There is increasing evidence that fatty acid deficiencies or imbalances may contribute to childhood neurodevelopmental disorders.

METHODS: We conducted a randomized, double-blind, placebo-controlled **6-week pilot trial investigating the effects of 1.5 g/d of omega-3 fatty acids (.84 g/d eicosapentaenoic acid, .7 g/d docosahexaenoic acid)** supplementation in 13 children (aged 5 to 17 years) with autistic disorders accompanied by severe tantrums, aggression, or self-injurious behavior. The outcome measure was the Aberrant Behavior Checklist (ABC) at 6 weeks.

RESULTS: We observed an advantage of omega-3 fatty acids compared with placebo for hyperactivity and stereotypy, each with a large effect size. Repeated-measures ANOVA indicated a trend toward superiority of omega-3 fatty acids over placebo for hyperactivity. No clinically relevant adverse effects were elicited in either group.

CONCLUSIONS: The results of this study provide **preliminary evidence that omega-3 fatty acids may be an effective treatment for children with autism.**

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