

Abstract

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Cognitive effects of polyunsaturated fatty acids in children with attention deficit hyperactivity disorder symptoms: a randomised controlled trial.

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OBJECTIVE: This study investigated effects of PUFA and micronutrient supplementation on cognition in children with ADHD symptoms.

METHODS: In a randomised controlled trial, 7-12-year-old children with symptoms 2 S.D. on Conners' ADHD Index were given PUFA, PUFA+multivitamins/minerals (MVM), or placebo for 15 weeks, and then all children were given PUFA+MVM for an additional 15 weeks.

RESULTS: After 15 weeks there were improvements in a test of the ability to switch and control attention (Creature Counting) in the PUFA groups compared to placebo (N=129, p=0.002). This improvement was also observed in the placebo group after taking PUFA from weeks 16 to 30 (N=104). There were no significant improvements in other cognitive measures, or with additional micronutrient supplementation.

CONCLUSIONS: However, improvements in cognitive performance mediated previous parent-reported improvements in inattention, hyperactivity and impulsivity are [N. Sinn, J. Bryan, Effect of supplementation with polyunsaturated fatty acids and micronutrients on ADHD-related problems with attention and behaviour, J. Dev. Behav. Pediatr. 28 (2) (2007) 82-91] suggestive of a common neurological mechanism for these symptoms.

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