

Omega-3 for child behaviour and learning: clinical trials in ADHD and the general population

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Adequate supplies of the main omega-3 LC-PUFA, EPA and DHA, are critical for the normal development and functioning of the brain and nervous system, and yet these nutrients are relatively lacking from modern, western-type diets. Evidence from epidemiological and biochemical studies shows that omega-3 LC-PUFA deficiencies are associated with childhood behavioural and learning difficulties – both in ADHD (Attention Deficit Hyperactivity Disorder) and related developmental conditions, and in the general population. Furthermore, clinical trials show that dietary supplementation with omega-3 LC-PUFA can reduce symptoms in ADHD and related conditions; and our Oxford University team recently reported similar findings from a randomised controlled trial involving 362 children aged 7-9 years from the UK general school population. In this study, supplementation with algal-source DHA (at 600mg/day for 16 weeks) improved not only reading and ADHD-type symptoms, but also the children's sleep. This presentation will provide a summary review of the above evidence, indicating its strengths and limitations, and highlighting its implications for research, policy and practice.