Omega-3 Supplements Could Benefit Children's Brain Development

Researchers from Swansea University are looking to evaluate the impacts of omega-3 supplements on children's behavior, mood, and mental well-being. The research team plans to include children 6 through 12 years of age that reside in the United Kingdom.

Omega-3 fatty acids are present in fish and seafood, and aid proper brain function and development in children. These are essential because the body cannot dependably make these acids.

"Dietary omega-3 deficiencies have become the norm in UK children, despite the critical importance of these nutrients for mental as well as physical health and well-being. And we already know that a lack of sufficient omega-3 predicts the behavior, mood and learning difficulties of many different children," said Principal Investigator Hayley Young, PhD, in a news release.

Researchers have hypothesized that omega-3 could improve attention deficit hyperactivity disorder (ADHD) symptoms, reduce asthma, promote better sleep, and enhance brain health in children.² The authors of an article in *Healthline* said results from a 16-week study showed that 1300 mg daily of omega-3 fatty acids improved attention in boys with and without ADHD. Furthermore, results from a 10-month study found that 120 mg fish-oil capsule with eicosapentaenoic acid (EPA), and docosahexaenoic acid (DHA) decreased symptoms of asthma. An additional study demonstrated decreased sleep interruptions that resulted in 1 more hour of sleep per night when taking 600 mg of DHA over 16 weeks. Lastly, a 6-month study found that children who consumed a spread high in omega-3 fatty acids displayed improvements in verbal learning ability and memory.²

A previous study published in the *Journal of Child Psychology and Psychiatry* noted that children who present signs of aggressive behavior could also benefit from omega-3 vitamins and mineral supplementation.³

"If pharmacists are advising parents who have children showing significant aggressive behavior and who are not responding to other treatments, there would be little harm in trying omega-3 and multivitamins," said Adrian Raine, PhD, a professor at the University of Pennsylvania, in an interview with *Pharmacy Times*.³

However, the results from the study found the effects were in the "small-to-medium range," displaying evidence for the short-term efficacy of omega-3 in reducing child behavior issues.³

"Previous trials have shown that increasing omega-3 intakes can benefit at least some children, whether or not their difficulties meet full criteria for conditions like ADHD or autism. This new trial will help us find out which children may actually benefit most and how they might best be identified," said Young, in a news release.

To be included in the trial, parents and guardians will be required to complete questionnaires regarding their children's behavior before and after taking the supplement. To successfully complete the study the adult should note changes in behavior, mood, and sleep, according to the news release.

The study is being independently funded by The Waterloo Foundation in collaboration with Food and Behavior (FAB) Research, according to the news release.

"FAB Research has a long track record of research in this area – as does Swansea University's School of Psychology – so we're delighted to be collaborating on this important new study," said Alex Richardson, PhD, FAB Partner and Co-Investigator, in a news release. "We know many parents, teachers and health professionals are struggling to provide the help and support so many children need. We'd love them to get in touch, as we can then give them more information that might be useful to them."

References

- 1. New study to explore whether omega-3 supplements can boost children's brain development. Eurek Alert!. News release. May 3, 2024. Accessed May 23, 2024. https://www.eurekalert.org/news-releases/1043439.
- 2. Should Kids Take Omega-3 Supplements?. Healthline. News release. October 9, 2019. Accessed May 23, 2024. https://www.healthline.com/nutrition/omega-3-for-kids.
- 3. Vitamins and Supplements May Reduce Aggression in Children. *Pharmacy Times.* News release. May 26, 2016. Accessed May 23, 2024. https://www.pharmacytimes.com/view/vitamins-and-supplements-may-reduce-aggression-in-children.

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