



New research shows real solutions to ADHD

A growing number of professionals (and countless parents) are recognizing that what was once considered the magic bullet for helping children with attention problems — Ritalin, Adderall, etc. — has not lived up to its promises.

Because such drugs often brought about a major reduction in symptoms, many felt little need to look further or to try to understand the causes for the symptoms. There is a mountain of research on stimulant drugs (mostly funded by pharmaceutical companies), and this gave the appearance that it was a well-documented solution. But most studies lasted a short time, and very little thought was given to the long-term effects. Newer research has shown that, even when there is an initial improvement, the benefits don't last.

When Dr. Feingold was helping children with behavioral and learning problems back in the 1970s, his success rate was acknowledged to be about 70% — the same as the success rate for Ritalin. But at that time, most doctors were more comfortable using medicine, believing the side effects of the drug were minimal.

Addition and Subtraction

Subtract the offending substances like harmful food additives, and add the beneficial ones such as good food and extra nutrients. Regardless of the causes of a child's problems (vision deficits, sensory dysfunction, environmental allergies, etc.) that may be contributing to his symptoms, a well-nourished body will be better able to cope with whatever challenges it faces.

Finally, attention is being focused on identifying the *reasons* for the ADHD symptoms and on looking for remedies that do not require a “black box” warning of the many potential dangers. Here are some of the studies that have explored treatments that offer many benefits, without dangerous side effects. The most promising treatments in these studies are healthy fats such as omega-3 essential fatty acids, vitamin/mineral combinations, and probiotics.

Healthy fats, vitamins & minerals, and probiotics

Beneficial fats

Here are three of the many recently published studies on the work being done in this area.

People with ADHD have been found to have lower levels of omega-3 polyunsaturated fatty acids (PUFAs) in their blood compared to those without ADHD symptoms. “In conclusion, there is evidence that a w-3 PUFA treatment has a positive effect on ADHD... Moreover, the dosage of stimulant medication could be reduced when used in combination with 2-3 PUFA supplements.” **Critical appraisal of omega-3 fatty acids in attention-deficit/hyperactivity disorder treatment.** Konigs A, Kilaan AI, *Journal of Neuropsychiatric Disease and Treatment*, 2016 July.

Continued

Beneficial Fats, *continued*

Researchers from Australia found that children with ADHD and autism spectrum disorders had low levels of omega-3 essential fatty acids (EFAs) and high levels of omega-6 EFAs. Modern processed foods typically have high levels of omega-6 and low levels of omega-3 EFAs. **Omega-3 and Omega-6 Polyunsaturated Fatty Acid Levels and Correlations with Symptoms in Children with Attention Deficit Hyperactivity Disorder, Autistic Spectrum Disorder and Typically Developing Controls.** Parletta et al. *PLoS One* May, 2016.

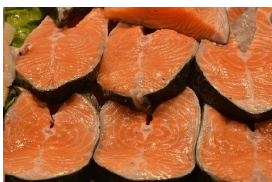


Here's a study from the Institute of Psychiatry, Psychology and Neuroscience at King's College in London. The authors write about polyunsaturated fatty acids (PUFAs), "...n-3 PUFA supplementation shows a significant effect on reducing symptoms of attention-deficit /hyperactivity disorder (ADHD)..." **The effect of omega-3 polyunsaturated fatty acid supplementation on emotional dysregulation, oppositional behavior and conduct problems in ADHD: A systematic review and meta-analysis.** Cooper et al. *Journal of Affective Disorders*, 2016 January.



Good sources of omega-3 EFAs include:

Flaxseed	Cod liver oil	Algae
Wild caught	Avocado	Egg yolks
Salmon	Avocado oil	Sea vegetables
Walnuts	Olive oil	Hemp seeds
Oysters	Tuna	Grass-fed beef
Spinach	Shrimp	Whitefish



Vitamin D

Children of mothers who took vitamin D during pregnancy, resulting in high levels of the vitamin in the umbilical blood, have fewer symptoms of ADHD at the age of 2 1/2 years. **Inverse associations between cord vitamin D and attention deficit hyperactivity disorders symptoms: A child cohort study.** Mossin et al. *Australian and New Zealand Journal of Psychiatry*, September 2016.



When a woman has sufficient levels of vitamin D during her pregnancy, her child has a lower risk of later being labeled as ADHD. **Vitamin D in Pregnancy and Attention Deficit Hyperactivity Disorder-like Symptoms in Childhood.** Morales et al. *Epidemiology*, 2015 July.

Exposing the skin to sunshine is the best way to obtain vitamin D3, but many things make this more difficult. Covering the skin with clothing and excessive use of sunscreen can make it hard to obtain D3. The further people live from the Equator, and the darker their skin, the more difficult it is to get enough of it, and the harder it is for the body to absorb it.

Supplementing with D3 can be beneficial.

Both iron and vitamin D deficiencies have been found to be related to the symptoms of ADHD. **Higher prevalence of iron deficiency as strong predictor of attention deficit hyperactivity disorder in children.** Bener et al. *Ann Med Health Sci Res* 2014 September.



"There is an association between lower 25-OH-vitamin D concentration (lower vitamin D levels) and ADHD in childhood and adolescence." **Vitamin D status in children with attention-deficit-hyperactivity disorder.** Goksugur et al. *Pediatr Intl*, August 2014.

More real solutions to ADHD

Studies using a combination of nutrients have shown impressive results.

“Nutrient deficiencies have been implicated in anti-social behavior in schoolchildren; hence, correcting them may improve sociability. On the Conners disruptive behavior scale, the group given the active supplements improved, whereas the placebo group worsened....supplementary nutrition might have a protective effect against worsening behavior.”

A randomised double-blind placebo-controlled trial investigating the behavioural effects of vitamin, mineral and n-3 fatty acid supplementation in typically developing adolescent schoolchildren. Tammam et al. *British Journal of Nutrition*, 2016 January.



“A small pilot study provided broad spectrum vitamins and minerals to three children who had extreme problems paying attention in school and behaving appropriately. Parents reported significant improvements as a result of the nutrients.”

Micronutrient treatment for children with emotional and behavioral dysregulation: a case series. Kaplan et al. *J Med Case Rep* 2015 October.



“Children with ADHD were given a broad spectrum of vitamins and minerals. The majority of children (71%) showed a reduction in symptoms on the supplements and a return of the unwanted symptoms when the nutrients were withdrawn.”

Clinically Significant Symptom Reduction in Children with Attention-Deficit/Hyperactivity Disorder Treated with Micronutrients: An Open-Label Reversal Design Study. Gordon, Rucklidge et al. *Journal of Child and Adolescent Psychopharmacology*, 2015 December.



This review of the research on using nutrients for ADHD shows that they hold great promise. “This approach makes physiological sense in that nutrients are required for many critical biochemical reactions to occur, ranging from manufacturing neurotransmitters, to providing the mitochondria with essential nutrients for energy production, to assisting the gut to heal from inflammation.”

Broad-spectrum micronutrient treatment for attention-deficit/hyperactivity disorder: rationale and evidence to date. Rucklidge JJ, Kaplan BJ *CN Drugs*, 2014 September.



Fermented foods are an ideal source of probiotics.

They are also available as supplements

Probiotics

The research on the benefits of these “good” bacteria is rapidly expanding.

Seventy-five infants were given probiotics or a placebo during their first 6 months of life and were followed up for 13 years. At this age, 17% of the children in the placebo group were diagnosed with ADHD or Asperger’s syndrome, but none of the children who received the probiotics had such a diagnosis.

A possible link between early probiotic intervention and the risk of neuropsychiatric disorders later in childhood: a randomized trial. Partty et al. *Pediatric Research*, 2015 June.

Ritalin vs. Nutrients

While there have been countless studies on Ritalin, there isn’t much data on how the drug compares with the use of nutrients. But here’s an interesting one from 2003.

“These findings support the effectiveness of food supplement treatment in improving attention and self-control in children with AD/HD and suggest food supplement treatment in AD/HD may be of equal efficacy to Ritalin treatment.”

Outcome-based comparison of Ritalin versus food-supplement treated children with AD/HD. Harding KL, Judah RD, Gant C *Alter Med Rev*, 2003 August.