

# ADHD In Early Life Support Protocol



## CLINICAL PROTOCOL TO SUPPORT MENTAL FOCUS AND CLARITY\*

**Attention-deficit/hyperactivity disorder (ADHD) is a neurodevelopmental condition often diagnosed during childhood. In the United States, its prevalence is 11.3% among children aged 5-17 years.<sup>1,2</sup>**

Genetics are a critical factor in the ADHD conversation; it's estimated that the heritability of ADHD may be over 75%. In addition, genes associated with neuro-development,<sup>1</sup> angiogenesis, and neurotransmitter (serotonin and dopamine) receptors have been associated with ADHD.<sup>1</sup> Certain genetic polymorphisms may lead to difficulties maintaining and producing neurotransmitters including serotonin and melatonin. These polymorphisms may require additional support for neurotransmitter balance.<sup>3</sup>

While the complete etiology of ADHD is still unknown, the activation of the HPA axis (hypothalamic-pituitary-adrenal) by pro-inflammatory cytokines or other stressors plays a role in its pathogenesis.<sup>4</sup> In addition, evidence suggests that the communication between the gut microbiome and the central nervous system may also influence neuroinflammation and the pathophysiology of ADHD.<sup>4</sup>

Nutritional status is an important dimension to ADHD management. Research indicates that certain key micronutrients may contribute to aspects of the pathophysiology of ADHD. For example, in instances when baseline levels of vitamin D were insufficient or deficient, a combination of magnesium and vitamin D was shown to improve ADHD symptoms.<sup>5</sup>

**This protocol focuses on evidence-based recommendations for supporting nutritional foundations, a balanced neuroinflammatory response, and healthy gut-brain communication for mental focus and attention in early life.**

## DIAGNOSTIC CONSIDERATIONS FOR ADHD

Diagnosis of ADHD requires a clinical evaluation by a trained professional and is based on DSM-5-TR diagnostic criteria. Further medical testing is not usually indicated for routine assessment,<sup>1</sup> however, research suggests that targeted testing for certain nutrients may be warranted. Relevant nutrients for testing may include vitamin D, magnesium, iron, and zinc.<sup>5,6</sup>

## THERAPEUTIC DIET AND NUTRITIONAL RECOMMENDATIONS

- Assess for potential nutritional deficiencies and melatonin disturbances. In addition, multinutrient nutritional supplementation may help provide optimal support for the brain and nervous system, including for optimal cellular function, cell membrane fluidity, cerebral blood flow, antioxidative status, and inflammatory balance.<sup>1,7</sup>
- Polyunsaturated fatty acids (PUFAs) including omega-3

and omega-6 may help improve certain symptoms

related to ADHD according to a 2023 Cochrane Review.<sup>8</sup>

A comprehensive balance between EPA and DHA is recommended. EPA (eicosapentaenoic acid) helps support a healthy mood, cognitive, and neurological function.\* DHA (docosahexaenoic acid) promotes brain and nerve health, cellular repair, and fetal development.\*

- While some evidence suggests the potential for elimination of certain foods or dyes from the diet, there is mounting conflicting evidence. The DASH diet currently has the best evidence for supporting symptoms related to ADHD. In addition, since there may be a neuroinflammatory link to ADHD, consider dietary interventions and/or supplementation for antioxidative status and inflammatory balance such as a Mediterranean-style diet.<sup>9</sup>
- Consider probiotic-rich foods or supplementation with probiotics. Evidence suggests that the gut-brain axis helps optimize cognitive and neuronal health.<sup>1,4</sup>

## LIFESTYLE INTERVENTIONS

- Consider behavior management or strategies including mindfulness-based practices, cognitive training, and body therapies such as acupuncture or auricular therapy.<sup>1,7</sup>
- Advise regular physical activity; according to a 2023 systematic review and meta-analysis, physical exercise may help improve executive function, cognition, and functional outcomes.<sup>10</sup>
- Screen for common comorbid emotional or behavioral conditions, including anxiety, depression, and developmental conditions.<sup>1</sup> In addition, medication-induced side effects including sleep disturbance should also be monitored.<sup>1</sup>

# Supplement Protocol



## VitaChews For Kids

**Dose:** Children age 4 and over: Chew 2 tablets per day with meals.

**Duration:** Ongoing

**Formula Highlights:** A balanced mix of 26 important nutrients in a well-tolerated, easy-to-absorb form is supplied in a base of all-natural sweeteners and flavors

- VitaChews contain higher potencies for certain nutrients than typically found in most other children's multivitamins and many adult formulations
- Two chewable tablets provide three times the RDA for vitamins C and E, and two times the RDA for most B-vitamins
- Both preformed vitamin A (retinol) and its carotene precursor are included to help ensure more complete vitamin A nutrition
- Mixed, natural-source carotenes are used instead of synthetic beta-carotene for more complete antioxidant action
- Metafolin L-5-methyltetrahydrofolate (L-5-MTHF), an active form of folate, is included to help ensure more immediate effects on metabolism compared to folic acid, the form commonly used in fortified foods and supplements



## Probiotic ENT Defend

**Dose:** As a maintenance dose, after your bedtime oral hygiene routine, chew one tablet slowly and thoroughly before swallowing. Not recommended for children aged four or younger.

**Duration:** Ongoing

**Formula Highlights:** Probiotic ENT Defend is a pleasant-tasting chewable that activates inside the oral cavity to support ear, nose, and throat health. As you chew, Probiotic ENT Defend releases *Streptococcus salivarius*, a beneficial and necessary bacterium in healthy mouths.\*

Benefits of using Probiotic ENT Defend may include:

- Immune support\*
- Fresher breath\*
- Improved gum health\*
- Decreased tooth decay\*
- A less hospitable environment for harmful mouth bacteria\*



## OmegaCell 1600 TG

**Dose:** Take 1 softgel daily. Children and adults can either swallow whole or chew (discarding the casing).

**Duration:** Ongoing

**Formula Highlights:** OmegaCell 1600 TG is a comprehensive, high-potency omega-3 formulated with an equal ratio of EPA (eicosapentaenoic acid) and DHA (docosahexaenoic acid). The fish oil in OmegaCell 1600 TG is sustainably sourced from pristine Norwegian waters to minimize exposure to heavy metals and toxins. The 1:1 ratio between EPA and DHA mirrors the natural composition found in seafood. Both EPA and DHA help support inflammatory balance; DHA in particular helps support neuronal health, brain cell integrity, and cognition, and is found in a clinically relevant amount in OmegaCell 1600 TG.\*



## PEA Soothe Topical

**Dose:** Apply to the skin, up to 4 times per day or as directed by healthcare practitioner. **Duration:** Ongoing

**Formula Highlights:** PEA Soothe Support Topical is a highly bioavailable formula featuring palmitoylethanolamide (PEA), a naturally occurring molecule for optimal cellular functioning, inflammatory balance, and temporary relief from minor pain.\*

PEA Soothe Support Topical is designed for skin absorption to reach target tissues for maximal comfort and recovery.\* It may be ideal for those who struggle with swallowing or absorption through the GI tract.\*

\*These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any diseases.

## References

1. Attention Deficit Hyperactivity Disorder (ADHD) in Children and Adolescents - DynaMed. Accessed January 15, 2025. <https://www.dynamed.com/condition/attention-deficit-hyperactivity-disorder-adhd-in-children-and-adolescents>
2. Reuben C. Attention-Deficit/Hyperactivity Disorder in Children Ages 5–17 Years: United States, 2020–2022. 2024;(499).
3. Amare AT, Schubert KO, Baune BT. Pharmacogenomics in the treatment of mood disorders: Strategies and Opportunities for personalized psychiatry. *EPMA J*. 2017;8(3):211-227. doi:10.1007/s13167-017-0112-8
4. Bull-Larsen S, Mohajeri MH. The Potential Influence of the Bacterial Microbiome on the Development and Progression of ADHD. *Nutrients*. 2019;11(11):2805. doi:10.3390/nu11112805
5. Pinto S, Correia-de-Sá T, Sampaio-Maia B, Vasconcelos C, Moreira P, Ferreira-Gomes J. Eating Patterns and Dietary Interventions in ADHD: A Narrative Review. *Nutrients*. 2022;14(20):4332. doi:10.3390/nu14204332
6. Granero R, Pardo-Garrido A, Carpio-Toro IL, Ramírez-Coronel AA, Martínez-Suárez PC, Reivan-Ortiz GG. The Role of Iron and Zinc in the Treatment of ADHD among Children and Adolescents: A Systematic Review of Randomized Clinical Trials. *Nutrients*. 2021;13(11):4059. doi:10.3390/nu13114059
7. Sibley MH, Bruton AM, Zhao X, et al. Non-pharmacological interventions for attention-deficit hyperactivity disorder in children and adolescents. *Lancet Child Adolesc Health*. 2023;7(6):415-428. doi:10.1016/S2352-4642(22)00381-9
8. Gillies D, Leach MJ, Algorta GP. Polyunsaturated fatty acids (PUFA) for attention deficit hyperactivity disorder (ADHD) in children and adolescents - Gillies, D - 2023 | Cochrane Library. Accessed January 15, 2025. <https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD007986.pub3/full>
9. Dunn GA, Nigg JT, Sullivan EL. Neuroinflammation as a Risk Factor for Attention Deficit Hyperactivity Disorder. *Pharmacol Biochem Behav*. 2019;182:22-34. doi:10.1016/j.pbb.2019.05.005
10. Zhu F, Zhu X, Bi X, et al. Comparative effectiveness of various physical exercise interventions on executive functions and related symptoms in children and adolescents with attention deficit hyperactivity disorder: A systematic review and network meta-analysis. *Front Public Health*. 2023;11:1133727. doi:10.3389/fpubh.2023.1133727