

Nutrient Deficiencies in Autism: One-Page Evidence Summary (Titles Only)

1. Vitamin D

Study #1 – Meta-analysis

Title: The Association between Vitamin D Status and Autism Spectrum Disorder (ASD): A Systematic Review and Meta-Analysis

Authors: Wang Z., Ding R., Wang J., et al.

Journal/Year: Nutrients, 2021

Study #2 – Supplementation Meta-analysis

Title: The Effect of Vitamin D Supplementation in Treatment of Children with Autism Spectrum Disorder: A Meta-Analysis

Authors: Wang D., Shen Y., et al.

Journal/Year: Clinical Psychopharmacology & Neuroscience, 2020

2. Omega-3 Fatty Acids (DHA/EPA)

Study #1 – Randomized Controlled Trial

Title: The Effect of Omega-3 Fatty Acids Supplementation on Social and Behavioral Disorders of Children with Autism: A Randomized Clinical Trial

Authors: Doaei S., Bourbour F., Teymoori Z., et al.

Journal/Year: Pediatric Endocrinology, Diabetes, and Metabolism, 2021

Study #2 – Review of Clinical Trials

Title: Omega-3 Polyunsaturated Fatty Acids and/or Vitamin D in Autism Spectrum Disorders: A Review of Clinical Trials and Future Directions

Authors: Jiang Y., et al.

Journal/Year: Frontiers in Psychiatry, 2023

3. Zinc

Study #1 – Meta-analysis

Title: Association Between Zinc Status and Autism Spectrum Disorder in Children and Adolescents: A Systematic Review and Meta-Analysis of Case-Control Studies

Authors: Liu H., Chen J., He J., Li X.

Journal/Year: Frontiers in Nutrition, 2025

Study #2 – Systematic Review

Title: Zinc Status and Autism Spectrum Disorder in Children and Adolescents: A Systematic Review

Authors: da Silva Bezerra do Nascimento P.K., et al.

Journal/Year: Nutrients, 2023

4. Magnesium

Study #1 – Human Biochemical Study

Title: Exploring the Association Between Serum Magnesium Level and Autism Spectrum Disorder Using a Validated Spectrofluorimetric Method

Authors: Almalki A.H., et al.

Journal/Year: European Journal of Medical Research, 2025

Study #2 – Randomized Controlled Trial (Mg + B6)

Title: Effects of High Dose of Vitamin B6 With Magnesium in Preschool Children with Autism Spectrum Disorder and Controlled Epilepsy: A Double-Blind Randomized Controlled Trial

Authors: Alosy et al.

Journal/Year: Journal of Ideas in Health, 2025