



### Antioxidant Status

Oxidative imbalance is prevalent in ADHD patients and likely plays a causative role; Deficiency of glutathione common in ADHD.<sup>3,4,5,6</sup>

### Folate

Low folate status in pregnancy linked to hyperactivity in children; People with the MTHFR(methyl tetrahydrofolate reductase) gene are predisposed to folate deficiency and more likely to have ADHD.<sup>1,2</sup>

### Vitamin B6

Evidence suggests high dose supplementation of B6 is as effective as Ritalin for ADHD, probably due to its role in raising serotonin levels.<sup>7,8,9</sup>

### Magnesium

Deficiency linked to poor function of the neurotransmitters that control emotion, social reactions, hyperactivity and attention; Synergistic effect with Vitamin B6.<sup>8,9,10</sup>

### Choline

Precursor to neurotransmitter acetylcholine, which regulates memory focus and muscle control (hyperactivity).<sup>24,25,26</sup>

# ADHD

### Zinc

Cofactor for dopamine synthesis which affects mood and concentration in ADHD; Low zinc depresses both melatonin and serotonin production which affect information processing and behavior in ADHD.<sup>11,12,13,14</sup>

### Glutamine

Precursor for the calming neurotransmitter GABA (gamma-aminobutyric acid) that affects mood, focus and hyperactivity; Disruption of the glutamine-containing neurotransmission systems may cause ADHD.<sup>21,22,23</sup>

### Serine

Administration of phosphatidylserine with omega 3 fatty acids improved ADHD symptoms (attention scores) significantly better than omega 3 fatty acids alone, suggesting a synergistic effect; Phosphatidylserine increases dopamine levels.<sup>18,19,20</sup>

### Carnitine

Reduces hyperactivity and improves social behavior in people with ADHD due to its role in fatty acid metabolism; Some consider it a safe alternative to stimulant drugs.<sup>15,16,17</sup>

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