AUTISM

Vitamin A
One cause of autism may be a defect in a retinoid receptor protein (G-alpha protein) which is critical for language processing, attention and sensory perception; Evidence suggests natural vitamin A fixes this protein defect in autistics.[1,2]

Vitamin D
High dose vitamin D therapy reversed autistic behaviors in severely deficient children; Maternal vitamin D deficiency may predispose children to autism.[3,4,5]

Carnitine
Transports fatty acids into cells; Low carnitine (common in autism) impairs the ability to use fatty acids for learning and social development.[6,7]

Zinc
Eliminates toxic mercury from brain tissue; Zinc/ copper ratio is particularly low in autistic kids; Low zinc impairs the protein (called metallothionein) that removes heavy metals from the body.[8,9,10]

Magnesium
Cofactor for the neurotransmitters that affect social reactions and emotion; Autistics have low levels; Improves effectiveness of B6 therapy.[11,12,13]

Folate
Oral folate therapy can resolve symptoms of autism in some cases, particularly in autistics with genes that impair folate dependent enzymes.[31,32,33]

Vitamin B6
Cofactor the neurotransmitters serotonin and dopamine; Conversion of B6 to its active form is compromised in many autistics; Supplementation trials with B6 resulted in better eye contact, speech and fewer self-stimulatory behavior in autistics; Some consider B6 in combination with magnesium to be a breakthrough treatment for autism.[14,15]

Glutamine
Blood levels of this amino acid which acts as a neurotransmitter are particularly low in autistics. Glutamine also helps prevent leaky gut syndrome, which can exacerbate autistic symptoms.[28,29,30]

Vitamin B12
Low B12 impairs methylation (detoxification) which causes the neurological damage responsible for many autistic symptoms; Deficiency of B12 can cause optic neuropathy and vision loss in autistics; B12 raises cysteine and glutathione levels.[16,17,18]

Vitamin C
Improved symptom severity and sensory motor scores in autistic patients possibly due to interaction with dopamine synthesis; Vitamin C also has a strong sparing effect on glutathione.[26,27]

Vitamin B1
Deficiency linked to delayed language development; Supplementation may benefit autistic patients.[19,20]

Glutathione & Cysteine
Commonly deficient in autistic patients, lack of these antioxidants impair detoxification and methylation processes; Low levels linked to neurological symptoms in autism which is often considered an oxidative stress disorder.[21,22,23,24,25]

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