Dietary Supplement: Super Nu-Thera

Autism Spectrum Disorder

- Autism Spectrum Disorder (ASD) is a group of developmental brain disorders.
- It includes diagnoses of Autism, Asperger's and Pervasive Developmental Disorder—Not otherwise specified (PDD—NOS).
- Children with ASD often have impairments in communication and social interaction skills, they exhibit repetitive and restrictive behaviors, have sensory issues and are selective in their food choices.
- There is no cure or treatment available for ASD. Early intervention approaches including behavior therapies are the most effective intervention strategies².

Complementary and Alternative Medicine (CAM) - Super Nu-Thera

- Parents of children with ASD are constantly on the lookout for new therapies and treatment opportunities for ASD and its symptoms¹.
- As of now, Risperidone and Ariprizaole (anti-psychotic drugs) are the only FDA approved drugs for managing some of the symptoms of ASD⁵.
- CAM therapies such as gluten-free and casein-free diet are becoming increasingly popular in children with ASD.
- Super Nu-Thera is one such CAM therapy popular among children with ASD. It is a multivitamin with increased doses of Vitamin B6 (50mg/ serv) and other B vitamins.

- It is available as caps, caplets and powders and in different flavors.
- Suggested use:
 - 3 caplets/day
 - Optimize the dosage for individual
 - 6—8 week trial and discontinue if no positive benefits
- Rationale: Higher doses of Vitamin B6, when supplemented along with magnesium are thought to improve some of the symptoms of ASD¹.
- Claimed benefits: Improvements in language function, eye contact, self-stimulatory behavior, increased interest in surroundings and reduced tantrums.



What does research show?

- No major side effects have been associated with increased Vitamin B6-Magnesium supplementation.
- Recent systematic reviews and Cochrane review concluded that, there is no sufficient evidence to demonstrate efficacy of Vitamin B6—Magnesium supplementation as a treatment for ASD^{2,3}.
- Well-designed randomized controlled trials are needed in the future to further study the effectiveness of Super Nu-Thera in treating/managing the symptoms of ASD.

Regulation of dietary supplements: Manufacturers of dietary supplements are responsible for ensuring the safety of their products but not the efficacy. Manufacturers do not have to demonstrate the safety of their products to FDA before marketing⁵

Recommendations for Dietetic Professionals:

- All children with ASD should receive a complete assessment of dietary supplement and CAM use as a routine component of their nutrition status assessment, including dose/frequency and brand/chemical form⁶.
- Educate parents regarding the lack of evidence for using Super Nu-Thera as a treatment for ASD.
- Report any adverse reactions of supplement use to FDA.

References:

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- 4. Murza et al. Vitamin B6-magnesium treatment for autism: the current status of the research. Magnesium Research 2010; 23 (2): 115-7
- 5. Food and Drug Administration: <u>http://nccam.nih.gov/health/supplements/wiseuse.htm</u>

6. Academy of Nutrition and Dietetics <u>http://www.eatright.org/About/Content.aspx?id=8145</u>

Srilekha Karunanithi Graduate Student and Dietetic Intern, Nutrition Sciences University of Washington, Seattle