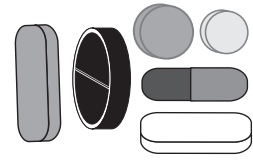


Dr. Rimland's Favorite Supplements: Vitamins B6 & C, Magnesium and DMG



Dr. Bernard Rimland, to whom DDR is dedicating this newsletter, became famous for challenging the “refrigerator mother” theory of autism, and replacing it with the theory that autism is a biological disorder, which could be partially treated by nutritional supplements. Here are some of his favorites.

Vitamin B6 and Magnesium

Dr. Rimland stated that, “No biological treatment for autism is more strongly supported in the scientific literature than the use of high dosage vitamin B6.” In fact, eighteen studies have shown conclusively that high dose vitamin B6 confers considerable benefits to about half of all children and adults with autism who use it. Mild side effects such as irritability, sound sensitivity and bedwetting occur when B6 is taken without magnesium. Vitamin B6 in conjunction with magnesium results in better eye contact, less self-stimulatory behavior, more interest in the world, fewer tantrums and improved speech. For more on Magnesium, see Volume 11:2.

Dietary Sources of B6 and Magnesium

Bell peppers, greens, chicken, fish, pork, liver, kidney, whole grains, nuts, and legumes are excellent sources of B6. Magnesium can be found in leafy greens, avocados, beans almonds, Brazil nuts, cashews, pumpkin and sunflower seeds, whole grains, fish, kiwis, and molasses. While eating natural sources of B6 and magnesium is important, no one can get the therapeutic amount from food, even if they ate kale all day.

Dosing Vitamin B6 and Magnesium

An Autism Research Institute study found that the average amount of B6 necessary to be beneficial is around 8 mg of B6 per pound of body weight per day. For most children in the study, daily dosage levels of B6 ranged between 300 mg and 500 mg. The suggested dosage of magnesium is 3 or 4 mg per pound of body weight, up to 400 mg per day for adults. The upper limits advised for adults or those above 120 pounds is 1,000 mg/day. Another way to supplement magnesium is transdermally, through Epsom salt and magnesium oil baths.

In addition, several hundred mg/day of magnesium and a multiple-B tablet are recommended, to guard against B6-induced deficiencies of other nutrients. Kirkman Laboratories <www.kirkmanlabs.com> has developed a pleasant tasting chewable for children with the appropriate ratio of B6 to magnesium.

Dr. Rimland suggests that people start with one-quarter the target amount and increase slowly over a ten to fourteen day period. Minor side effects such as hyperactivity, nausea, or diarrhea can occur rarely if the dosage is too high or increased too quickly. B6/magnesium will often produce benefits within a few days.

If no improvement is seen in a month, termination is suggested. For more on vitamin B6, magnesium and other supplements for autism, read *Children with Starving Brains* by Jaquelyn McCandless. For the role of B6 and magnesium in ADD, read *The ADD Nutrition Solution* by Marcia Zimmerman. (See booklist.)

Dimethylglycine (DMG)

Rimland also enthusiastically endorsed the use of DMG for individuals with autism. DMG is a nutrient that contains an amino acid and/or protein. It is found naturally in animal and plant cells and in foods such as cereal grains, liver, and beans. The reported benefits of DMG are better eye contact, increased frustration tolerance, as well as a greater interest in speech and an improvement in speech ability. DMG has long been known to enhance the effectiveness of the immune system and improve the physical and athletic performance of humans and other animals.

Dosing DMG

DMG is available in capsule, liquid, and sweet-tasting dissolving tablets. Dr. Rimland recommends starting with 1/2 of a 125 mg tablet a day with breakfast for a pre-school child and 125 mg for a larger child. After a few days, gradually increase to one to four tablets a day for a child, and two to eight tablets per day for an adult. If hyperactivity occurs initially, which is rare, reduce the dosage. Continued hyperactivity after dosage reduction may mean that the individual needs folic acid. Try 800 mcg tablets of folic acid per 125 mg of DMG.

Proper dosages vary greatly for each individual, so a bit of trial and error is necessary. Dr. Rimland recommends trying DMG for two to three weeks before starting the B6/magnesium regimen. However, if a child is already on B6/magnesium, all can be taken concurrently, if no side effects are apparent.

Learn more about DMG from the McCandless book cited above, as well as from *Building Wellness with DMG* by Roger Kendall. This new title has chapters on DMG for cancer and heart disease, as well as for autism.

Vitamin C

Dr. Rimland was a strong supporter of Vitamin C for any condition, including cancer and autism. Because the “right” dosage of vitamin C varies, expert Robert Cathcart proposes the “bowel tolerance” method of determining an individual’s vitamin C requirements. In other words, administer as much vitamin C as the stomach can tolerate, before it becomes a laxative. For those in good health, the well-tolerated level tends to be about 10 to 15 grams of vitamin C per day. One study found that 8 grams benefited adolescents and adults with autism.

Supplements, not Drugs for Autism

After years of study, Dr. Rimland and others studying the biomedical treatment of autism have concluded that nutritional supplements such as the ones described above are far safer, and far more effective, than drugs. Unlike drugs which block or interfere with natural bodily processes, nutrients such as vitamin B6, magnesium, DMG, folic acid, and vitamin C permit or enhance these processes. As this information becomes more widespread, increasing numbers of parents are turning to these nutrients for their children with autism, and finding them extremely helpful.