B Vitamins May Benefit Autistic Children

A recent clinical trial suggests that supplementation with the B vitamins methylcobalamin and folinic acid may benefit autistic children.* Scientists believe that metabolic abnormalities underlie some neurobehavioral conditions such as autism, and that targeted nutrients may be therapeutic.

Investigators at Arkansas Children's Hospital Research Institute treated 40 autistic children for three months with methylcobalamin (a form of vitamin B12 that is active in the central nervous system) and folinic acid, which has vitamin activity equivalent to folic acid.

At the study's onset, autistic subjects had significantly different levels of biomarkers associated with oxidative stress and detoxification capacity, compared with healthy control subjects. After treatment, these biomarkers improved significantly, although not to the level seen in unaffected control children. Glutathione levels also increased significantly among autistic subjects.

"The significant improvements... suggest that targeted nutritional intervention with methylcobalamin and folinic acid may be of clinical benefit in some children who have autism," researchers concluded.

—Dale Kiefer

Magnesium May Decrease Blood Pressure

According to a study from South Korea, magnesium supplementation decreases blood pressure in adults with hypertension.* The study was conducted to determine the effects of magnesium on insulin sensitivity and blood pressure in overweight adults who had normal magnesium levels and no diabetes. A total of 155 participants were randomly assigned to receive either a placebo or 300 mg of magnesium per day for 12 weeks.

The results showed no meaningful differences between the overall groups in insulin sensitivity. However, when the groups were subdivided by blood pressure level at baseline, those with hypertension who received magnesium had significant decreases in systolic and diastolic blood pressure at 12 weeks, by an average of 5.6 and 2.0 mmHg, respectively, when compared with those who received placebo. Magnesium had no apparent effect on participants with normal blood pressure at baseline.

The authors concluded that "magnesium supplementation may help prevent the progression of hypertension" in healthy overweight adults.

—Laura J. Ninger, ELS

High Folate Levels Could Help Prevent Allergic Reactions and Reduce Symptoms

An article published in The Journal of Allergy and Clinical Immunology revealed the discovery of a role for the B vitamin folate in lessening allergy and asthma symptoms.* Pediatric allergist Elizabeth Matsui, MD, MHS and colleagues reviewed the medical records of 8,083 individuals aged 2 to 85 to obtain information on folate levels and respiratory and allergy symptoms.

Compared to subjects whose folate levels were highest, those whose levels were among the lowest were found to have a 30% greater risk of having high amounts of the immune system markers known as IgE antibodies, which are elevated in allergy. Subjects with low folate levels were also more likely to report allergies, wheezing, or asthma.

The finding adds evidence to those of previous studies that support a regulating effect for the vitamin on inflammation, the phenomenon that produces allergy symptoms.

—Dayna Dye