

The Importance of Magnesium to Human Nutrition

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Magnesium is an extremely important and valuable mineral, whose value for good health is just being recognized by conventional physicians.

Virtually, all chemical reactions in the body require an enzyme system to help the biochemical reaction take place. An enzyme system generally consists of three parts. They are a specific protein molecule, another smaller organic compound, which is often a vitamin, such as pyridoxine or vitamin B6, and finally a charged mineral, such as zinc, copper, manganese or magnesium. Magnesium is a critical co-factor in more than 300 enzymatic reactions in the human body. Each mineral when dissolved in fluids has a characteristic electrical charge, called its valance. Minerals with a charge of plus 1, or univalent cations, include sodium and potassium. Minerals with a charge of plus 2, or divalent cations, include copper, zinc, manganese and magnesium. Potassium and magnesium are the most abundant cations found within the cells of the body with magnesium being the most abundant divalent cation.

In the USA, magnesium supplementation is dramatically under utilized by conventional physicians and is more important in patient therapy than most physicians realize. There are over 200 published clinical studies documenting the need for magnesium. In fact, at the 1992 American College of Cardiology annual meeting, a limited biography on magnesium was the most often requested item at the National Council on Magnesium and Cardiovascular booth.

Up until recently, conventional medicine's interest in magnesium has been only by obstetricians, who have used injectable magnesium sulfate extensively in the treatment of high blood pressure and pre-eclampsia and eclampsia of pregnancy. But, recently conventional physicians have become interested in treating patients with acute heart attacks, chronic cardiovascular disease, heart arrhythmias, diabetes, asthma, chronic fatigue syndrome and many other disorders.

Symptoms of Magnesium Deficiency?

What are some of the symptoms of magnesium deficiency? They are outlined beautifully in a recent article by Dr. Sidney Baker. Magnesium deficiency can affect virtually every organ system of the body. With regard to skeletal muscle, one may experience twitches, cramps, muscle tension, muscle soreness, including back aches, neck pain, tension headaches and jaw joint (or TMJ) dysfunction. Also, one may experience chest tightness or a peculiar sensation that he can't take a deep breath.

Sometimes a person may sigh a lot.

Symptoms involving impaired contraction of smooth muscles include constipation; urinary spasms; menstrual cramps; difficulty swallowing or a lump in the throat-especially provoked by eating sugar; photophobia, especially difficulty adjusting to oncoming bright headlights in the absence of eye disease; and loud noise sensitivity from stapedius muscle tension in the ear.

Other symptoms and signs of magnesium deficiency and discuss laboratory testing for this common condition. Continuing with the symptoms of magnesium deficiency, the central nervous system is markedly affected. Symptoms include insomnia, anxiety, hyperactivity and restlessness with constant movement, panic attacks, agoraphobia, and premenstrual irritability. Magnesium deficiency symptoms involving the peripheral nervous system include numbness, tingling, and other abnormal sensations, such as zips, zaps and vibratory sensations.