

Magnesium, Part I

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One evening last summer I was flipping through Dr. Melvyn R. Werbach's latest textbook, Foundations of Nutritional Medicine (Dr. Werbach is the author of Nutritional Influences on Illness, a source book of clinical research and an absolute must for anyone who practices clinical nutrition). The first chapter, "Disorders Due to Abnormal Nutriture," summarizes how nutrient deficiencies and excesses affect various disorders.¹

In chiropractic school we learned the importance of the mineral magnesium, and that it is required for literally hundreds of biochemical reactions in the body. If you forgot or didn't realize how critical adequate amounts of magnesium are, take a look at the following list of conditions where magnesium deficiency may exacerbate and/or contribute to the problem (this is not to say abnormal magnesium is the only cause or only cure for these disorders):

Agitation
Anorexia
Anxiety
Apathy
Arrhythmias
Ataxia
Behavioral Disturbances
Cognitive Impairment
Cold Sensitivity
Coma
Delirium
Depression
Diplopia
Dry Mouth
Dysphagia
Edema
Epilepsy
Fatigue
Growth Impairment
Hemolytic Anemia
Hyperactivity
Hypertension
Hypotension
Insomnia
Irritability
Kidney Stones
Lethargy

Muscle Fasciculations
Muscle Spasms
Muscle Tremors
Muscle Twitches
Muscle Wasting
Myalgia
Myopathy
Nausea
Nervousness
Neuromuscular Excitability
Nystagmus
Peripheral Neuropathy
Psychosis
Sonophobia
Tachycardia
Tetany
Vertigo
Vomiting
Weakness

In the December 1996 issue of the American Journal of Natural Medicine, Dr. Michael T. Murray did an extensive review of the literature on magnesium supplementation.² In addition to Dr. Werbach's findings above, Dr. Murray also documented that magnesium may help in the following:

Acute Myocardial Infarction
Angina
Asthma
Cardiomyopathy
Cardiovascular Disease
Chronic Obstructive Pulmonary Disease
Congestive Heart Failure
Diabetes
Dysmenorrhea
Eosinophilia Myalgia Syndrome
Fatigue
Fibromyalgia
Glaucoma
Hearing Loss
Intermittent Claudication
Low HDL Cholesterol
Mitral Valve Prolapse
Osteoporosis
Pregnancy
Premenstrual Syndrome
Stroke

Although the vast majority of magnesium problems are due to insufficiency, too much magnesium can

cause, contribute, or exacerbate the following: diarrhea, hypotension, nausea, vomiting, dry mouth, cognitive impairment, depression, fatigue, flushing, respiratory insufficiency, and polydypsia.

Next month in part II, we will look at dietary sources and supplemental types of magnesium, along with a review of laboratory tests used to measure magnesium.

References

1. Werbach M. Foundations of Nutritional Medicine. Third Line Press, Tarzana, California, 1997.
2. Murray MT. American Journal of Natural Medicine December 1996, 3(10):8-19.

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