Magnesium is a critical mineral for human health, involved as a coenzyme in more than 300 metabolic reactions throughout the body. It is an important structural mineral found in bones, teeth, cell membranes and chromosomes, and has a relaxing effect on the body. Magnesium functions in opposition to contractive calcium and enables the relaxation of muscles and nerves throughout the body. Adequate magnesium levels are essential for cardiovascular system health, energy production, blood sugar regulation and insulin sensitivity.

Research suggests that magnesium deficiency is widespread in Western populations due to a combination of nutritional and lifestyle factors. In the US, dietary consumption of magnesium decreased by as much as 50% during the 20th century. Coffee, alcohol, phosphoric acid (found in soda pop), and high sodium intakes all have been shown to decrease magnesium levels in otherwise healthy people. As an alkalinizing, buffering mineral, magnesium is further depleted by acidic diets, intense prolonged stress, and exposure to metals such as lead and aluminum.

Magnesium is naturally present in nuts and seeds, whole unrefined grains, legumes and fresh well water, but it is virtually absent from today’s ubiquitous white flour products, processed grain-based foods and treated drinking water supplies. Chlorophyll-containing microalgae and green vegetables such as spinach are excellent sources of magnesium, but such foods are not common in the Standard American Diet. Excessive intake of calcium along with low vitamin D levels also can lead to magnesium depletion.

A 2005 study found that most Americans consume magnesium at levels below the RDA, and that these individuals were more likely to have elevated CRP levels, a marker for inflammation. Many chronic health conditions are characterized by an inflammatory stress component and have been associated with marginal-to-moderate magnesium deficiencies. These include heart rhythm and blood pressure irregularities, decreased bone density, blood sugar and insulin dysregulation, mood and memory disorders, obesity, muscle cramps and weakness, anxiety, irritability and premenstrual discomfort.

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Magnesium Citrate provides a well-researched, highly absorbable form of this critical, heart-healthy mineral. Similar to other chelated forms of magnesium, it exhibits superior absorption compared to inorganic forms such as oxide. A 2003 randomized, double-blind study comparing the bioavailability of three different forms of magnesium (citrate, amino acid chelate and oxide) found that in healthy adults, those taking 300 mg per day of magnesium citrate exhibited the greatest concentration of magnesium in both serum and saliva following acute (24-hours) as well as chronic (60 days) treatment.

Magnesium exhibits osmotic activity in the lower bowel and has been suggested to accelerate gastrointestinal motility, decrease intestinal transit time and activate the ileal brake. By virtue of this effect, magnesium is frequently used to prep the bowel for medical procedures, most often in an inorganic, poorly absorbed form such as oxide, hydroxide or sulphate, but occasionally as well-absorbed magnesium citrate. In everyday life, decades of anecdotal and clinical evidence support the use of bioavailable magnesium citrate supplements to help support healthy, normal bowel regularity. For this purpose, one or two capsules are generally taken at bedtime to begin. If needed, the dosage is increased by one capsule nightly until the desired effect is achieved.

Our Magnesium Citrate provides a significant 175 mg of elemental magnesium per vegetarian capsule, making it very convenient for patients to take in higher doses, as per provider recommendations.

REFERENCES

* These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.