

MAG CITRATE



CLINICAL APPLICATIONS

- Superior "Magnesia" Laxative Formula ideal for Constipation
- Risk of Urolithiasis
- Asthma (mild to moderate)
- Nocturnal Leg Cramps
- Cardiovascular Conditions
- Diuretic Treatment Repletion

Magnesium supports cell, tissue, and organ function by acting as a cofactor for some 300 enzymes in the body. The citrate form has superior bioavailability in comparison to magnesium oxide and magnesium chelate forms other than the glycinate/lysinate and di-magnesium malate chelates in 3rd Opinion Inc's Mag Mal. The use of particular forms of magnesium appears to be condition-specific.

Mag Citrate is manufactured in a Federal Drug Registered and State Pharmacy cGMP laboratory

DISCUSSION

The superior bioavailability noted above was the conclusion of a 60 day randomized, double blind, placebo-controlled, parallel intervention study comparing a daily dose of 300 mgs elemental magnesium as Mag Citrate to the oxide and chelate forms. In this study Mg citrate showed the greatest increase in Mg concentration in the serum and saliva in both 24-hour and 60-day post -supplementation specimens.

In general, the administration of magnesium is an effective therapeutic option for a wide range of conditions. However, the bioavailability and pharmacokinetics of various magnesium salts correlate with their structure-activity relationship. Therefore, particular forms are condition-specific.

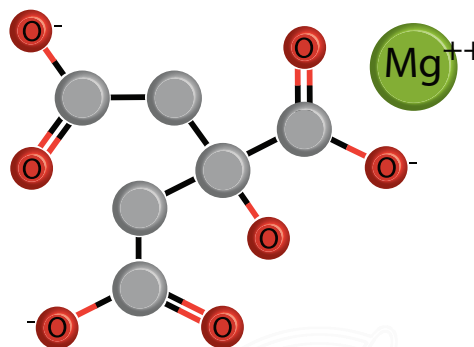
A study that evaluated 40 post M.I. patients found that after 3 weeks of Mg citrate supplementation extrasystoles significantly decreased. Other findings suggest that 6-month oral magnesium supplementation in patients with CAD can significantly improve exercise tolerance, exercise-induced chest pain, and quality of life.

The citrate form of magnesium was proven to be potent in inhibiting the growth of stone fragments after extracorporeal shock wave lithotripsy. Long term supplementation with Mag Citrate has been demonstrated to work well in childhood mild to moderate asthma. It is a form that in another study restored RBC Mg levels to patients with severe congestive heart failure on high dose diuretics.

In a six-week randomized, double-blind, cross-over, placebo-controlled trial that employed 300mg of elemental magnesium in the form of Mag Citrate, 78% of the subjects thought their nocturnal leg cramps had been helped.

Mag Citrate is the form of magnesium used for colonoscopy preparation.

Elemental Magnesium constitutes only 16% of the Mag Citrate compound.





Supplement Facts

Serving Size: 1 Capsule
Servings Per Container: 120

	Amount Per Serving	%Daily Value
Magnesium (as citrate)	100 mg	25%

Other Ingredients: HPMC, cellulose, stearic acid, silica, and magnesium stearate.

DOSING:

Take one capsule daily or as directed by your healthcare practitioner.

REFERENCES

1. Abdel-Halim RE. Urolithiasis in adults. Clinical and biochemical aspects. Saudi Med J. 2005 May;26 (5): 705-13 [PMID: 15951854]
2. Bede O, Suranyi A, Pinter K, Szlavik M, Gyurkovits K. Urinary magnesium excretion in asthmatic children receiving magnesium supplementation: a randomized, placebo-controlled, double-blind study. Magnes Res. 2003 Dec; 16(4):262-70 [PMID: 14979636]
3. "The Effect of Oral Magnesium Substitution on Pregnancy-Induced Leg Cramps," Dahl, Lars O., M.D. et al, American Journal of Obstetrics and Gynecology, July, 1995; 173(1):175-180 [Clinical Pearls Database 26217]
4. Roffe C, Sills S, Crome P, Jones P. Randomised, cross-over, placebo controlled trial of magnesium citrate in the treatment of chronic persistent leg cramps. Med Sci Monit. 2002 May; 8(5):CR326-30 [PMID: 12011773]
5. Shechter M, Merz CNB, et al. Effects of oral magnesium therapy on exercise tolerance, exercise-induced chest pain, and quality of life in patients with coronary artery disease. Am J Cardiol, Mar 1, 2003;91:517-521. [Clinical Pearls Database 40579]
6. Feyertag, J., et al. Oral magnesium supplementation in ventricular arrhythmias and parameters of magnesium status. Feyertag, J., et al, Magnesium-Bulletin, 1995;17(3):86-90.
7. Cohen N, Alon I, Almozni-Sarafian D, Zaidenstein R, Weissgarten J, Gorelik O, Berman S, Modai D, Golik A. Metabolic and clinical effects of oral magnesium supplementation in furosemide-treated patients with severe congestive heart failure. Clin Cardiol. 2000 Jun;23(6):433-6 [PMID: 10875034]
8. Laires MJ, Monteiro CP, Bicho M Role of cellular magnesium in health and human disease. Front Biosci. 2004 Jan 1;9:262-76 [PMID: 14766364]
9. Walker AF, Marakis G, Christie S, Byng M. Mg citrate found more bioavailable than other Mg preparations in a randomised, double-blind study, Magnes Res. 2003 Sep; 16(3):183-91. [PMID: 14596323]
10. Ranade VV, Somberg JC,. Bioavailability and pharmacokinetics of magnesium after administration of magnesium salts to humans. Am J. Ther. 2001 Sep-Oct;8(5): 345-57. [PMID: 11550076]
11. Garcia MC, Byrd RP Jr, Roy TM Lethal iatrogenic hypermagnesemia. Tenn Med. 2002 Aug;95 (8): 334-6. [PMID: 12174756]
12. Magnesium. Natural Medicines Comprehensive Database. Stockton, CA. [www.naturaldatabase.com]
13. Fox C, Ramsoomair D, Carter C; South Med J 2001; 94(12):1195-1201
14. Mauskop A, Altura BM. Role of magnesium in the pathogenesis and treatment of migraines. Clin Neurosci 1998; 5(1):24-7

Additional references available upon requests.

PRECAUTIONS

The UL (Tolerable Upper Level) of magnesium for healthy adults is 350 mgs/day. Although magnesium enjoys an acceptable safety record as a medical therapy, doses exceeding the UL should be under medical supervision. Typically, renal patients were the only population considered at a risk for toxicity. However, case reports suggest that consideration needs to be given in cases of intestinal hypomotility and chronic constipation. Some drugs such as Digoxin, diuretics, oral contraceptives, penicillamine, and possibly others can affect magnesium levels. Likewise, magnesium administration may interact with certain drugs.

*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.

