**Magnesium CitraMal™**

**Fully Reacted**

**Magnesium Citrate/Malate Complex**

**150 mg**

**Product Summary**

As the second most abundant intracellular action and a cofactor for at least 300 metabolic reactions, magnesium is a critical regulator of numerous cellular functions, ion channels, signalling pathways, enzymes, and metabolic pathways including glycolysis, fatty acid oxidation and DNA synthesis. Substantial epidemiological evidence indicates that a low magnesium intake is quite common, and that it is associated with diverse pathological conditions, particularly metabolic and inflammatory disorders such as insulin resistance, obesity, diabetes and cardiovascular disease, but also to osteoporosis, cancer and hypertension.

Recent research has highlighted magnesium’s important role in glucose homeostasis, as supplementation improves insulin sensitivity and regulates beta-cell function, while deficiency exacerbates chronic inflammatory stress, contributing to obesity and the metabolic syndrome. Supplementation reduces serum glucose, increases HDL levels and improves insulin sensitivity, even among those with normal magnesium levels, and in both diabetic and non-diabetic populations. Magnesium also improves postprandial hyperlipidemia, and down-regulates genes related to metabolic and inflammatory pathways. In addition to improving magnesium bioavailability, citrate itself is a mitochondrial substrate and provides an alkaline load. It chelates dietary oxalates, reducing renal stone formation risk.

**Unique Features**

- Magnesium citrate has been shown to have superior bioavailability to other forms of magnesium, increasing its clinical effectiveness
- Citrate-malate complexes increase mineral absorption, particularly among individuals with reduced gastric acid secretion
- Malic acid supplies an important substrate in the citric acid cycle, contributing to improved energy metabolism
- Conveniently dosed at 150 mg per capsule, allowing for easy therapeutic dosing
Supplement Facts

Serving Size: 1 capsule  
Servings per Container: 90

Each Capsule Contains:  
Magnesium (Citrate, Malate) ........................................ 150 mg  
Sourced from 750 mg of magnesium complex yielding 150 mg elemental magnesium.

Non-medicinal Ingredients: Malic acid, vegetarian capsule (carbohydrate gum [cellulose], purified water, titanium dioxide), microcrystalline cellulose, vegetable grade magnesium stearate (lubricant).

Contains no artificial preservatives, colours or sweeteners and no corn, dairy, soy, starch, wheat or yeast. Sealed for your protection. Do not use if seal is broken. For freshness, store in a cool, dry place.

Recommended Adult Dose: 3 capsules per day or as directed by a health care professional.

Recommended Use: Citrate and malate are important Krebs cycle intermediates, indicating that they are important molecules in the production of cellular energy derived from carbohydrates. Citrate and malate are soluble and among the best forms of magnesium. Magnesium is an essential mineral in over 300 enzymatic reactions in metabolism. These reactions include those involved in the Krebs cycle, energy storage, the breakdown of fatty acids, protein synthesis, DNA metabolism, neurotransmitter activity and hormone regulation. Magnesium is a factor in the maintenance of good health.

Contraindications: Magnesium supplementation is contraindicated in individuals with impaired kidney function, as well as those with heart blocks, such as atrioventricular or bifascicular blocks.

Drug Interactions: Magnesium may influence the absorption and/or actions of a number of medications, including calcium channel blockers, bisphosphonates, diuretics, digoxin, warfarin and various antibiotics, though spacing their administration apart often minimizes any interaction. It has favourable effects on some medications that may require lower dosing including albuterol, insulin and other diabetes medications. Additionally, some medications significantly deplete magnesium levels, such as proton pump inhibitors and estrogens, suggesting benefit of combined use.

References:


