Calcium Citrate-Malate





Clinical Applications

- Supports Bone Health and Prevents Osteoporosis *
- Supporting Healthy Cardiovascular, Nervous System Function*

Calcium Citrate-Malate has been shown to have superior bioavailability compared to other forms of calcium, such as calcium carbonate. Calcium Citrate-Malate is formulated to provide optimal calcium absorption and is best taken with food. An essential nutrient to support healthy musculoskeletal and connective tissues, calcium also plays a vital role in supporting healthy cardiovascular, nervous, and endocrine/hormonal system function

All Adaptogen Research Formulas Meet or Exceed cGMP Quality

Discussion

Calcium is the most abundant mineral in the body with 99% of it deposited in the bones and teeth. The remaining 1% of calcium is used for numerous functions including muscle contraction, blood clotting, vitamin D metabolism and nerve transmission. Dietary constituents, hormones, drugs, age, and genetic factors influence the amount of calcium required for optimal skeletal health. On the basis of the most current information available, optimal calcium intake is estimated to be:

- 400 mg/day (birth-6 months) to 600 mg/day (6-12 months) in infants;
- 800 mg/day in young children (1-5 years) and 800-1,200 mg/day for older children (6-10 years);
- 1,200-1,500 mg/day for adolescents and young adults (11-24 years);
- 1,000 mg/day for women between 25 and 50 years;
- 1,200-1,500 mg/day for pregnant or lactating women;
- 1,000 mg/day for postmenopausal women on estrogen replacement therapy
- 1,500 mg/day for postmenopausal women not on estrogen therapy.
- Recommended daily intake for men is 1,000 mg/day (25-65 years).
- For all women and men over 65, daily intake is recommended to be 1,500 mg/day.

These guidelines are based on calcium from the diet plus any calcium taken in supplemental form. Calcium intake, up to a total intake of 2,000 mg/day, appears to be safe in most individuals.

Calcium Citrate Malate (CCM) is a water-soluble calcium supplement. It is the calcium salt of citric acid and malic acid. Calcium Citrate Malate's bioavailability stems from its water-solubility and its method of dissolution. When dissolved, it releases calcium ions and a calcium citrate complex. Calcium ions are absorbed directly into intestinal cells, and the citrate complex enters the body through paracellular absorption. There has been considerable investigation into the health benefits of CCM since it was first patented in the late 1980s. CCM has been shown to facilitate calcium retention and bone accrual in children and adolescents. In adults, it effectively promotes the consolidation and maintenance of bone mass. In conjunction with vitamin D, CCM also decreases bone fracture risk in the elderly, slows the rate of bone loss in old age, and is of benefit to the health and well-being of postmenopausal women. CCM is exceptional in that it confers many unique benefits that go beyond bone health. Unlike other calcium sources that necessitate supplementation be in conjunction with a meal to ensure an appreciable benefit is derived, CCM can be consumed with or without food and delivers a significant nutritional benefit to individuals of all ages. The chemistry of CCM makes it a particularly beneficial calcium source for individuals with hypochlorydia or achlorhydia, which generally includes the elderly and those on medications that decrease gastric acid secretion. CCM is also recognized as a calcium source that does not increase the risk of kidney stones, and in fact it protects against stone-forming potential.²



CCM for the prevention of Osteoporosis.

Meta-analyses of calcium and bone mass studies demonstrate supplementation of 500 to 1500 mg calcium daily improves bone mass in adolescents, young adults, older men, and postmenopausal women. Calcium Citrate Malate has high bioavailability and thus has been the subject of calcium studies in these populations. Positive effects have been seen in prepubertal girls, adolescents, and postmenopausal women.³

Other ingredients: Cellulose, stearic acid, croscarmellose sodium, silicon dioxide, magnesium stearate, and cellulose coating.

Suggested Use: As a dietary supplement, take 1 tablet, 1 to 4 times daily with food, or as directed by your health care practitioner.

Calcium citrate-malate complex is a readily-soluble, easy-toabsorb form of calcium.

Do not use if shrinkwrap is broken or missing. Store in a cool, dry place (59°F-85°F) away from direct light. KEEP OUT OF REACH OF CHILDREN.

Produced under a strict quality management system in compliance with Good Manufacturing Practices (GMPs) and third-party quality certifications.

Notice: Color, size or shape may appear different between lots.

References

- 1. [No authors listed] Optimal calcium intake. NIH Consens Statement. 1994 Jun 6-8; 12(4): 1-31
- 2. Reinwald S, Weaver CM, Kester JJ. The health benefits of calcium citrate malate: a review of the supporting science. Adv Food Nutr Res. 2008; 54: 219-346.
- 3. Patrick L. Comparative absorption of calcium sources and calcium citrate malate for the prevention of osteoporosis. Altern Med Rev. 1999 Apr; 4(2): 74-85

*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.

Distributed by: Adaptogen Research 625 Barksdale Road, Suit 113 Newark , DE 19711