

## **Cal Mag Liquid 2**

CALCIUM-MAGNESIUM SUPPLEMENT

### **Delicious fruit punch-flavoured liquid** calcium/magnesium supplement

- Provides 600 mg of calcium and 300 mg of magnesium per tablespoon
- Aids in the development and maintenance of bones and teeth
- Helps to maintain proper muscle function and nutrient metabolism
- Adequate calcium as part of a healthy diet, along with physical activity, may reduce the risk of developing osteoporosis
- Improved formula
  - Increased bottle size now 450 mL per bottle (30 x 15 mL servings)
  - New Health Canada-approved claims:
    - Antacid
    - o For the relief of heartburn, indigestion and upset stomach associated with excess stomach acid
    - · Neutralizes excess stomach acid

Cal Mag Liquid 2 is a great-tasting calcium-magnesium supplement that supports bone health, maintains normal muscle function and neutralizes excess stomach acid. Calcium's role in bone health is well-documented. and adequate calcium as part of a healthy diet, along with physical activity, may reduce the risk of developing osteoporosis. Magnesium also supports several key components of bone maintenance, improving bone mineralization by enhancing osteoblast and reducing osteoclast activity. In individuals with low magnesium status, magnesium intake improves bone mineralization during skeletal development, which could help maintain bone health later in life. Magnesium also helps to maintain proper muscle function, including the heart muscle, as well as normal electrolyte balance and the body's ability to metabolize nutrients. Cal Mag Liquid 2 provides calcium and magnesium in the form of calcium carbonate and magnesium hydroxide, which neutralize stomach pH as antacids.<sup>2</sup> Specifically, they are used for the relief of heartburn, indigestion and upset stomach associated with excess stomach acid.3



### **EACH TABLESPOON (15 ml) CONTAINS:**

Calcium (calcium carbonate)	600	mg
Magnesium (magnesium hydroxide)	300	mg

Non-Medicinal Ingredients: Purified water, glycerin, natural fruit punch flavour, xanthan gum, stevia leaf extract (rebaudioside A)

Recommended Dose: Adults and Adolescents (9 years and older): Take one tablespoon daily with a meal, a few hours before or after taking other medication or natural health products, or as recommended by your healthcare practitioner. Shake well before each use. Do not drink directly from the bottle.

Product Size: 450 ml Liquid **Product Code:** 05221-450

NPN 80075475









Castiglioni S, Cazzaniga A, Albisetti W, Maier JAM. Nutrients. 2013; 5: 3022–3033. Maton, PN, Burton, ME. Drugs. 1999; 57(6): 855–70.

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# Cal Mag Liquid 2 CALCIUM-MAGNESIUM SUPPLEMENT

### **Scientific Rationale:**

Calcium's role in bone health is well-documented. It is the most abundant mineral in the skeleton, where it acts as an important structural component of bones and teeth.<sup>1,2</sup> Adequate calcium intake is an important factor in developing optimal peak bone mass, which has a major impact on bone health in later life.<sup>1,2</sup> Calcium is particularly critical for bone growth through its role in bone mineralization.<sup>2</sup> Its requirements are greatest during adolescence than any other stage of life due to the rapid growth of the skeleton, when higher levels of calcium are deposited in the bone.<sup>2</sup> Research suggests that calcium supplementation in adolescents positively impacts the development of bone mass, especially when calcium intake is low.<sup>1</sup>

As peak bone mass is achieved between the ages of 18 and 35, adults also require calcium to maintain bone health.<sup>2</sup> Bone formation is greater than bone resorption in children compared to a balanced bone turnover in healthy adults. However, bone resorption is greater than bone formation in aging adults.3 Similarly, decreased production of estrogen during menopause is associated with reduced calcium absorption and greater bone turnover, resulting in bone loss.3 Therefore, due to decreased bone formation in both menopausal women and aging adults, calcium requirements are increased for women over the age of 51 and in men over 70.4 As many Canadian adolescents and adults do not consume adequate levels of calcium from the diet, Cal Mag Liquid 2 can help contribute to the recommended dietary allowance.<sup>5,6</sup> Individuals with lactose intolerance may avoid calcium-rich milk products and may be at particular risk for decreased calcium intake.3

As the second most abundant cation inside cells, magnesium participates in nearly all key intracellular metabolic processes.<sup>7</sup> It helps in the development and maintenance of bones and teeth by promoting the differentiation of bone-forming osteoblast cells.<sup>7</sup> In addition, magnesium plays a critical role in maintaining muscle function by helping to regulate oxygen uptake, energy production and electrolyte balance.<sup>8</sup> Research suggests that magnesium also regulates calcium transport and binding to further influence muscle contractions.<sup>7</sup> It is estimated that many Canadian adolescents and adults do not consume adequate levels of magnesium each day.<sup>5,6</sup> This may result from magnesium losses during food processing or the use of mineral-deficient soil in agriculture.<sup>7</sup> As magnesium excretion increases with age and after strenuous exercise, elderly individuals and athletes may also benefit from magnesium supplementation.<sup>3,8</sup>

Cal Mag Liquid 2 provides a combination of calcium and magnesium as calcium carbonate and magnesium hydroxide. These two mineral substances are also antacids, relatively insoluble salts that help neutralize gastric acid when dissolved in the stomach.9 By neutralizing stomach acid, they raise the gastric pH and help relieve gastrointestinal complaints.9 Specifically, these antacids are used for the relief of heartburn, indigestion and upset stomach associated with excess stomach acid. Research has shown that calcium carbonate has one of the highest acid-neutralizing capacities among currently available antacids. Similarly, magnesium hydroxide has been found to have a higher neutralizing capacity than other magnesium salts, such as carbonate, oxide and trisilicate.9 As many adults consume inadequate calcium levels, supplementation with calcium carbonate can meet the needs of individuals wanting to increase the calcium content in their diet as well as those who require antacid support.9

#### REFERENCES

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