



— VEGETARIAN —

# CALCIUM MAGNESIUM

— GLUTEN FREE —

**CITRATE, MALATE & KREBS CYCLE COMPLEX**  
Vitamin D • Trace Minerals

Available in TABLETS & VEGETARIAN CAPSULES

*Vegetarian Calcium Magnesium offers superior mineral absorption in a 100% vegetarian formula with plant-based vitamin D2 and natural trace minerals from horsetail and seaweed.*

Bone is a dynamic, living tissue. To be healthy, bone tissue relies on more than just calcium! Additional minerals, trace minerals, hormones, proteins, vitamins and other nutrients also play important roles. These substances influence the health of our bones by participating in complex biochemical interrelationships between organs, glands and tissues.

Bone constituents are constantly being recycled for use throughout the body while new bone is being made. In fact, *each bone cell in our body is replaced once every three months.* The formation of healthy bone requires the presence of at least eighteen different essential nutrients,<sup>1,2</sup> and likely many more.

PIONEER® *Vegetarian Calcium Magnesium* goes far beyond the ordinary, providing extremely well-utilized, clinically-researched ingredients. When combined with a high quality multivitamin/mineral supplement, such as PIONEER® *1+ Vitamin Mineral*, plus regular weight-bearing exercise and a natural, whole food-based diet rich in dark leafy greens, this formula can help provide a solid foundation for healthy bones.

## CONSIDER THESE PIONEER® ADVANTAGES:

### 1. Highly Bioavailable Calcium Forms.

Calcium chelates to *citrate, malate* and other *Krebs Cycle intermediates* (compounds that participate in energy production within cells) are noted for superior absorption. Unlike carbonate, these chelated forms of calcium do not require high levels of stomach acid for absorption. This may explain why they are often better absorbed than calcium from carbonate alone.<sup>3</sup> Calcium citrate has been well-researched for its purported ability to help provide nutritive support for healthy bone density.

**2. Multiple Source Magnesium.** Magnesium plays a role in regulating calcium transport and utilization, and has been studied for its ability to support healthy bone density in people of all ages, including those who are magnesium deficient.<sup>4,5</sup> The magnesium in this formula comes from fully-reacted chelates of *malate*

and *rice protein amino acids*, plus naturally-occurring *oxide*. PIONEER's use of multiple sources of magnesium is intended to increase the body's potential for absorption and utilization by offering more than one biochemical pathway of uptake.

**3. Boron.** This important micronutrient is required for the efficient metabolism and utilization of calcium, magnesium, vitamin D and phosphorus. While its exact biochemical mechanisms are unknown, evidence suggests boron may play an important role in helping to support bone health.<sup>6</sup>

**4. Silica from Horsetail Herb.** Collagen provides the connective tissue matrix upon which minerals gather in bone. By promoting collagen formation, silica helps provide nutritive support for healthy bone health and may be critical in the process of new bone formation.<sup>7</sup> Mineral-rich horsetail, a natural plant source of bioavailable silica, is valued by herbalists for its nourishing properties.

**5. Trace Mineral Complex.** Research suggests that trace minerals including copper, zinc, manganese and others are essential to good bone health.<sup>1,2</sup> PIONEER's natural trace mineral complex is derived from sea vegetation.

Serving size 4 tablets or 6 capsules		
Bottles of 60 or 120 tablets; 90 or 180 capsules	AMOUNT PER SERVING	%DV
Total Carbohydrate	<1 g	<1%†
Dietary Fiber	<1 g	<1%†
Vitamin D2 (ergocalciferol)	400 IU	100%
Calcium	1000 mg	100%
TABLETS: (3:3:2:2 citrate:malate: Krebs Cycle intermediates [citrate, fumarate, malate, succinate, alpha-ketoglutarate]:carbonate)		
CAPSULES: (2:1:1 citrate:malate:Krebs Cycle intermediates [as in tablets])		
Magnesium	500 mg	125%
TABLETS: (1:1:1 malate:rice protein amino acid chelate:oxide)		
CAPSULES: (1:1:1 oxide:malate)		
Trace Mineral Complex (as sea vegetation: <i>Lithothamnion</i> spp.)		
	250 mg	*
Horsetail <i>Equisetum arvense</i> Herb Extract (standardized to 4 mg [10%] silica)		
	40 mg	*
Boron (1:1 glycinate complex:citrate complex)		
	2 mg	*

† Percent Daily Value based on a 2,000 calorie diet \*Daily Value (DV) not established.

Other ingredients: TABLETS: cellulose, silica, vegetable magnesium stearate, vegetable stearic acid; CAPSULES: cellulose, silica, vegetable magnesium stearate. <sup>100</sup>

NOTE: Some ingredient details may be abbreviated on actual product labels.

REFERENCES

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- Strause L, Saltman P et al. Spinal bone loss in postmenopausal women supplemented with calcium and trace minerals. *J Nutrition*; 1994 July; 124(7);
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