

Microcrystalline Calcium

Osteo Support

DESCRIPTION

Microcrystalline Calcium provided by Douglas Laboratories® is a dietary supplement prepared from whole bone's microcrystalline hydroxyapatite that is rich in calcium, phosphorus, boron, bone matrix proteins, amino acids, and glycosaminoglycans in their natural forms and physiological ratios.

FUNCTIONS

The adult human body contains approximately 1,200 g of calcium, about 99% of which is present in the skeleton. Bone is constantly turning over, a continuous process of formation and resorption. In children and adolescents, the rate of formation of bone mineral predominates over the rate of resorption. In later life, resorption predominates over formation. Therefore, in normal aging, there is a gradual loss of bone.

The remaining 1% of total body calcium is present in the soft tissues, and plays important roles in such vital functions as nerve conduction, muscle contraction, blood clotting, membrane permeability, and hormonal signaling. Blood calcium levels are carefully maintained within very narrow limits by the interplay of several hormones (1,25-dihydroxy-cholecalciferol, parathyroid hormone, calcitonin, estrogen, testosterone), which control calcium absorption and excretion, as well as bone metabolism. Levels of soft tissue calcium are maintained at the expense of bone in the face of inadequate calcium intake or absorption.

Osteoporosis affects a large proportion of the elderly in developed countries. Caucasian and Asian women typically have low peak bone densities, and therefore, are at the greatest risk of developing osteoporosis. It is generally accepted that obtaining enough dietary calcium throughout life can significantly decrease the risk of developing osteoporosis. Among other factors, such as regular exercise, gender, and race, calcium supplementation during childhood and adolescence appears to be a prerequisite for maintaining adequate bone density later in life. But even elderly osteoporotic patients may benefit significantly from supplementation with dietary calcium.

Boron positively affects the structure and strength of bone, and appears to be necessary for calcium and magnesium absorption, their adequate renal reabsorption, and their incorporation into the bone matrix

INDICATIONS

Microcrystalline Calcium may be a useful dietary supplement for anyone who wishes to increase their intake of calcium and other nutritional factors for maintaining good bone health.

FORMULA (#7399)

Each Capsule Contains:

Calcium (from Microcrystalline Hydroxyapatite).....	125 mg
Phosphorus (from Microcrystalline Hydroxyapatite)	64 mg
Boron (from boron citrate).....	1 mg

SUGGESTED USE

Adults take 1-4 capsules daily or as directed by a healthcare professional

SIDE EFFECTS

No adverse side effects reported.

STORAGE

Store in a cool, dry place, away from direct light. Keep out of reach of children.

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REFERENCES

- Bendich A, Leader S, Muhuri P. Supplemental calcium for the prevention of hip fracture: potential health-economic benefits. Clin Ther 1999;21:1058-72.
- Bronner F, Pansu D. Nutritional aspects of calcium absorption. J Nutr 1999;129:9-12.
- Bryant RJ, Cadogan J, Weaver CM. The new dietary reference intakes for calcium: implications for osteoporosis. J Am Coll Nutr 1999;18:406S-412S.
- Castelo-Branco C. Management of osteoporosis. An overview. Drugs Aging 1998;12:25-32.
- Chapin RE, Ku WW, Kenney MA, et al. The effects of dietary boron on bone strength in rats. Fundam Appl Toxicol 1997;35:205-15.
- Heaney RP. Calcium, dairy products and osteoporosis. J Am Coll Nutr 2000;19:83S-99S.
- Meacham SL, Taper LJ, Volpe SL. Effect of boron supplementation on blood and urinary calcium, magnesium, and phosphorus, and urinary boron in athletic and sedentary women. Am J Clin Nutr 1995;61:341-5.
- Nielsen FH. The justification for providing dietary guidance for the nutritional intake of boron. Biol Trace Elem Res 1998;66:319-30.
- Reid IR. The roles of calcium and vitamin D in the prevention of osteoporosis. Endocrinol Metab Clin North Am 1998;27:389-98.
- Storm D, Eslin R, Porter ES, et al. Calcium supplementation prevents seasonal bone loss and changes in biochemical markers of bone turnover in elderly New England women: a randomized placebo-controlled trial. J Clin Endocrinol Metab 1998;83:3817-25.

For more information on Microcrystalline Calcium visit douglaslabs.com

† 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.

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**You trust Douglas Laboratories.
Your patients trust you.**