

# Dyna-Cal

## Osteo-Support

### DESCRIPTION

Dyna-Cal tablets from Douglas Laboratories® provide 1,500 mg of elemental calcium from calcium carbonate, citrate, and caseinate, together with significant amounts of vitamin D and magnesium oxide and citrate. Other nutrients are also included to assist the body in maintaining healthy bone structure.

### FUNCTIONS

The adult human body contains approximately 1,200 g of calcium, about 99% of which is present in the skeleton, and 20-30 g of magnesium with about 60% located in bone. 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.

Intestinal calcium absorption ranges from 15 to 75% of ingested calcium. Vitamin D is a key regulatory hormone for calcium and bone metabolism. Adequate vitamin D status is essential for ensuring normal calcium absorption and maintenance of healthy calcium plasma levels. Magnesium absorption is independent of vitamin D status and ranges from 30 to 60% of ingested magnesium.

Osteoporosis, a condition of reduced bone mineral density that can increase risk of fractures, 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 can benefit significantly from supplementation with dietary calcium.

Dyna-Cal provides a highly beneficial source of dietary calcium together with other nutrients that assist in the maintenance of healthy bone structure and function. For example, boron affects the composition, structure, and strength of bone. It appears to be necessary for calcium and magnesium absorption, their adequate renal reabsorption, and their incorporation into the bone matrix. Boron is absorbed at about 90% efficiency and is rapidly distributed among the tissues.

### INDICATIONS

Dyna-Cal tablets may be a useful dietary supplement for those at risk for osteoporosis, or anyone who wishes to increase their intake of calcium and other nutritional factors for maintaining good bone health.

### FORMULA (#80261)

#### Four Tablets Contain:

Calcium (Carbonate/Citrate/Caseinate) ...	1,500 mg
Magnesium (Oxide/Citrate) .....	420 mg
Manganese (Sulfate) .....	10 mg
Vitamin C (Ascorbic Acid and Rose Hips) ...	80 mg
Vitamin D (Fish Liver Oil) .....	1,000 I.U.
Vitamin E (d-alpha Tocopheryl Acetate) .....	20 I.U.

Plus Betaine HCl, Glutamic Acid HCl and Boron Citrate in a base containing Hydrolyzed Soy Protein with associated Amino Acids, Lecithin and Alfalfa Leaf Powder

### SUGGESTED USE

Adults take 4 tablets daily with meals or as directed by physician.

### SIDE EFFECTS

No adverse effects have been reported.

### STORAGE

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

### REFERENCES

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prevention of hip fracture: potential health-economic benefits. Clin Ther 1999;21:1058-72.

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**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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