# **Calcium Citrate**

## **DESCRIPTION**

Calcium Citrate tablets, provided by Douglas Laboratories, supplies 250 mg of elemental calcium from calcium citrate. Calcium is a primary mineral for building the strong structure of bones and teeth.

## **FUNCTIONS**

The adult human body contains approximately 1,200 g of calcium, of which about 99% is present in the skeleton. Bone is constantly turning over, through 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 found 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, and testosterone) which control calcium absorption and excretion, as well as bone metabolism. Levels of soft tissue calcium are maintained at the expense of bone calcium in the face of inadequate calcium intake or absorption.

Intestinal calcium absorption is generally higher in children than in adults and ranges from 15 to 75% of ingested calcium. Adequate vitamin D status is necessary for normal calcium absorption.

Osteoporosis afflicts 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. Calcium citrate is a highly available and well tolerated form of calcium.

### INDICATIONS

Calcium Citrate tablets may be a useful dietary supplement for those who wish to increase their intake of calcium for maintaining the function and structure of their bones.

# **FORMULA** (#7409)

#### 1 Tablet Contains:

Calcium (as Calcium Citrate) ......250 mg

#### SUGGESTED USE

Adults take 1 tablet daily or as directed by physician.

## SIDE EFFECTS

No adverse side effects reported.

#### **STORAGE**

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

#### 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. Calcium and osteoporosis. Am J Clin Nutr 1994;60:831-6.

Bronner F, Pansu D. Nutritional aspects of calcium absorption. J Nutr 1999;129:9-12.

Castelo-Branco C. Management of osteoporosis. An overview. Drugs Aging 1998;12:25-32.

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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