# Calcigard® One-to-One with Vitamin D

#### DESCRIPTION

Calcigard® One-to-One provides equal amounts of calcium as calcium citrate, and magnesium as amino acid chelate, both with excellent bioavailability. This formula, manufactured by Douglas Laboratories, is available with and without added vitamin D.

#### **FUNCTIONS**

The adult human body contains approximately 1,200g of calcium, of which about 99% is present in the skeleton, and 20-30 g of magnesium with about 60%located in bone. The remaining 1% of total body calcium and 40% of total body magnesium are found in the soft tissues and play important roles in such vital functions as nerve conduction, muscle contraction, energy metabolism, 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. The intracellular levels of magnesium are also very tightly regulated, since their alterations can have profound effects on cardiac and skeletal muscle physiology. Intestinal calcium absorption ranges from 15 to 75% of ingested calcium. Adequate vitamin D status is necessary for normal calcium absorption. Magnesium absorption is independent of vitamin D status and ranges from 30 to 60% of ingested magnesium. 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. Osteoporosis afflicts a large proportion of the elderly in developed countries. Caucasian and Asian women typically have low peak bone densities, and are therefore 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 and magnesium. Calcigard One-to-One provides highly beneficial sources of both calcium and magnesium. They are well absorbed and well tolerated. Vitamin D is a key regulatory hormone for calcium and bone metabolism. Adequate vitamin D intake is important for ensuring normal calcium absorption and maintaining proper calcium plasma levels. People living in southern regions of the U.S. can derive significant amounts of vitamin D from sunlight dependent synthesis in the skin during the summer, whereas people in the northern states have to rely more on foods and supplements for adequate vitamin D status. This is why Calcigard formulas are available both with and without vitamin D.

#### **INDICATIONS**

Calcigard One-to-One may be useful dietary supplement for those at risk for osteoporosis, or anyone who wishes to increase their intake of calcium and magnesium for maintaining good bone health.

# FORMULA (#CA4) Calcigard One-To-One

Each Tablet Contains:

Calcium (citrate) ......125 mg\*\* Magnesium (amino acid chelate)......125 mg\*\* Vitamin D3 (fish liver oil)\*\*\*.....25 IU

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#### SUGGESTED USE

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

#### SIDE EFFECTS

No adverse side 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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† 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.