Chelated Magnesium

DESCRIPTION

Chelated Magneisum, provided by Douglas Laboratories, supplies 100 mg of elemental magnesium in the form magnesium amino acid chelate.

FUNCTIONS

Magnesium plays an essential role in a wide range of funda-mental cellular reactions. More than 300 enzymes require magnesium as a cofactor. Complexed with ATP, the main carrier of metabolic energy in the body, magnesium is essential for all biosynthetic processes, glycolysis, formation of c-AMP, energy-dependent membrane transport, trans-mission of genetic code for protein synthesis, and muscle function.

Of the 20-30 grams of total body magnesium, about 40% is located in muscle and other soft tissues, and the remainder in bone. The concentration of intracellular magnesium is carefully regulated, and its alterations can have profound effects on cardiac and skeletal muscle physiology.

Healthy people require about 4.5 mg of dietary magnesium per kg body weight, or 280 mg for a 62 kg female and 350 mg for a 76 kg male. The U.S. RDA is 400 mg/day.

The efficiency of magnesium absorption is a function of dietary intake. At very low intakes (less than 40 mg) 65-70% of dietary magnesium is absorbed, whereas at high intakes (1,000 mg) less than 15% is absorbed. Most people are expected to absorb about 30-60% at common levels of dietary magnesium. Contrary to common belief, recent studies suggest that magnesium absorption is not affected by calcium or vitamin D, and vice-versa. The kidney plays a critical role in magnesium homeostasis. At average magnesium intakes, the kidneys reabsorb about 95% of the filtered magnesium.

INDICATIONS

Chelated magnesium may be a useful dietary supplement for individuals who wish to increase their dietary intake of magnesium.

FORMULA (#7033)

1 Tablet contains:

Magnesium	100 mg
(from 500 mg Magnesium amino acid chelate)	

SUGGESTED USE

Adults take 1 tablet daily with meals 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

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Al-Ghamdi SMG, Cameron EC, Sutton RAL. Magnesium deficiency: Pathophysiologic and clinical overview. Am J Kidney Dis 1994;24:737-752.

Dahle LO, Berg G, Hammar M, Hurtig M, Larsson L. The effect of oral magnesium substitution on pregnancy-induced leg cramps. Am J Obstet Gynecol 1995;173:175-180.

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