



## CALCIUM MAGNESIUM WITH ZINC

UPC CODE 0 64642 02381 0

NPN# 80015748

### NATURAL HEALTH PRODUCTS DIRECTORATE (NHPD) CLAIMS:

**Jamieson Calcium Magnesium with Zinc is approved for the following NHPD claims:**

- A mineral supplement for the maintenance of good health
- Helps in the development and maintenance of the bones and teeth
- Helps the body to metabolize carbohydrates, fats and proteins
- Helps in tissue formation
- Helps to maintain proper muscle function
- Helps to maintain healthy skin
- Helps to maintain immune function

### GENERAL INFORMATION

Calcium is a major mineral in the body that is perhaps most well known for its role in the formation and maintenance of strong, healthy bones and tooth enamel. Although the majority of calcium in the body is found stored in the bones and teeth, a small amount is also found in the bloodstream. Calcium in the blood has many important roles to play: it transports nutrients across cell membranes; produces hormones and enzymes involved in digestion and metabolism; is involved in nerve cell communication; promotes blood clotting and wound healing; and assists with muscle contractions. Calcium is an essential nutrient throughout the lifespan, but it is particularly important for growing children and adolescents to help establish adequate bone mass for maintaining strong bones throughout life.

Although only a small amount of calcium is found in the bloodstream, the body keeps blood levels of calcium tightly regulated. If there is inadequate calcium in the bloodstream, bone resorption (breakdown) will occur in order to draw calcium from the bones into the blood. Over many years, this condition can lead to the development of

osteoporosis, a disease characterized by brittle and weak bones, which increases the risk of hip and vertebrae fractures as well as spinal deformities and loss of height. Osteoporosis generally strikes both men and women in later life, though it is a particular concern for post-menopausal women. The risk of osteoporosis increases when the diet does not provide adequate calcium. Regular calcium supplementation along with weight-bearing exercises can help prevent bone resorption and osteoporosis to reduce the risk of fractures later in life.

New scientific evidence shows that calcium plays many other important roles in the body. This mineral has been shown to reduce the irritating effects of bile acids and fatty acids on the lower colon. Calcium is also thought to play a role in helping to reduce high blood pressure. By allowing the muscles to contract and relax, adequate calcium ensures that the heart and blood vessels function normally.

Other research indicates that calcium can help relieve symptoms of pre-menstrual syndrome (PMS), heartburn, and insomnia. Symptoms of PMS include irritability, mood swings, and depression. These symptoms have been attributed to several factors, one of which is hormonal imbalances caused by insufficient calcium. A regular calcium supplement may prevent symptoms of PMS, and reduce the severity of these symptoms when they do occur. Calcium is also thought to help alleviate insomnia in some individuals.

Approximately half of the magnesium in the body is found in the bones and it is an essential nutrient to keep them strong and healthy. Magnesium also plays an important role in maintaining the function of nerves and regulating muscle relaxation. A deficiency in magnesium is associated with the occurrence of muscle spasms, tremors and convulsion. Low magnesium levels have also been associated with psychiatric problems such as depression and schizophrenia.

Zinc is an antioxidant mineral that plays a role in combination with insulin, growth hormone, testosterone, estrogen, and other hormones. Zinc is involved in over 200 enzymatic reactions as well. Zinc is necessary for protein synthesis, wound healing, contractility of muscles, blood stability, and maintaining the body's alkaline balance. It is vital in the development of reproductive organs, prostate

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**For Accidental Overdose** (such as child ingesting formula)

Dial 911, 0 for operator assistance or call you nearest Poison Control Centre.

#### **For Professional Use Only**

The information contained here has been accumulated from many sources.

Indications are not intended as cures, they are simply a guideline to be used at your professional discretion.

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functions and male hormone activity. Zinc also plays an essential role in helping normal tissue function, aiding digestion and eliminating free radicals in the blood stream.

Calcium, magnesium, and zinc work together in the body to enhance each other's absorption and utilization. Calcium and magnesium are essential factors in the formation and maintenance of healthy bones, but they also play an important role in the contraction and relaxation of muscles, including the heart. When calcium flows into the muscle tissue cells they contract. When calcium leaves, magnesium replaces it and the muscle relaxes. They also work together to normalize the muscle tone of blood vessels. Zinc plays an important role in immune functions and has anti-viral powers. Calcium, magnesium and zinc are three of the most important minerals that humans need. Jamieson's combination formula allows one to obtain a high quality supplement that combines all three essential minerals in one convenient caplet.

Jamieson's Mega Cal™ Calcium Magnesium with Zinc is formulated from natural sources and is pharmaceutically tested to guarantee full potency and absolute clinical purity.

What makes Mega Cal™ Calcium Magnesium with Zinc from Jamieson Laboratories different...and why does that difference mean better?

- 1) Magnesium and calcium work together to enhance each other's absorption and utilization. A 2:1 formula of calcium to magnesium ensures maximal calcium absorption and prevents adverse gastrointestinal side effects.
- 2) Contains calcium from a highly absorbable natural complex, including carbonate and calcium bound to Krebs cycle intermediates, including citrate, fumarate, malate, succinate, and glutamate. The Krebs cycle is an energy producing system in the body's cells. The intermediates derived from this process are already ionized, soluble, and non-toxic. This unique proprietary blend of calcium sources is therefore highly bioavailable, and also helps to enhance the absorption of other minerals in the body.
- 3) It is also formulated using a highly absorbable natural complex of five magnesium sources including citrate, fumarate, malate, succinate and glutamate.

- 4) Contains zinc gluconate to help enhance the immune system, fight infections and support prostate health.
- 5) Our premium formulations are manufactured using the 360 Pure process – a minimum of 360 quality tests that guarantee traceability and reliability of raw material, product safety, full potency and absolute clinical purity.

## INGREDIENT INFORMATION

Available as 100 caplets.

Each caplet contains:

Elemental Calcium.....	333 mg
(From a complex of Carbonate, Citrate, Fumarate, Malate, Succinate)	
Magnesium.....	166.66 mg
(From a complex of Oxide, Citrate, Fumarate, Malate, Succinate)	
Zinc (Gluconate).....	16.66 mg

## EXCIPIENTS

Cellulose, Modified Cellulose Gum, Vegetable Stearic Acid, Vegetable Distilled Monoglycerides, Vegetable Magnesium Stearate, Silica, Water-Soluble Cellulose, Titanium Dioxide, Brazilian Palm Tree Wax.

## DIRECTIONS

Adults - Take 1 to 3 caplets daily with a meal. Take a few hours before or after taking other medications. Store between 15°C-25°C, away from children.

## INDICATED BENEFITS

- Maintains strong bones and healthy teeth
- Calcium, when combined with sufficient vitamin D, a healthy diet and regular exercise, may reduce the risk of developing osteoporosis.
- May help reduce high blood pressure
- Plays a role in relieving symptoms of PMS
- Supports colon and prostate health
- Good for adolescents and post-menopausal women
- Aids function of nerves and muscles, including regulation of normal heart rhythm

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- Supports a healthy immune system
- NUTRIENT INTERACTIONS**

**Drug Interactions**

Calcium and magnesium can interfere with tetracycline antibiotics and calcium channel blockers. Thiazide diuretics can cause extremely high (potentially toxic) levels of calcium in the body. Magnesium can increase levels of diuretics in the body.

**Nutrient Depletions**

Excess calcium and zinc can impair the absorption of the mineral iron. Do not take this supplement at the same time as iron.

Calcium and/or magnesium and/or zinc may interact with or be depleted by ACE inhibitors, anti-osteoporotics, anti-arthritics, anti-gout medications, anti-fungals, anti-malarial drugs, anti-tuberculosis drugs, anti-convulsants, anti-hypertensives, anti-pyretics, biguanides, bronchodilators, cholesterol reducing medications, corticosteroids, immunosuppressants, oral contraceptives, salicylates, sulfonyleureas, and sulfonamides.

Foods high in phosphorus (animal protein and soft drinks) promote urinary loss of calcium. High consumption of caffeine, and excess dietary fat and fibre can inhibit calcium absorption.

**Supportive Interactions**

Vitamin D enhances calcium absorption. Ensure that you are getting at least 400 IU of vitamin D each day for optimal calcium absorption. Garlic supplements along with calcium may help reduce high blood pressure.

**WARNINGS AND PRECAUTIONS**

Some people may experience diarrhea. Zinc supplementation can cause a copper deficiency.

**TOXICITY, ADVERSE REACTIONS, AND SIDE EFFECTS**

Calcium carbonate may cause symptoms of gas, bloating, or constipation. If this occurs, switch to calcium citrate. Do not exceed recommended dosage. Excess calcium can contribute to the development of kidney stones, and may cause calcium deposits in the body. Excess zinc can impair the immune system, increasing susceptibility to infection, and inhibit copper absorption, which could lead to anemia.

If you experience abdominal pain, appetite loss, diarrhea, irregular heartbeat, mood or mental changes, nausea, tiredness, weakness, discomfort urinating, or vomiting, discontinue use and contact a physician.

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