# MBP® Osteo with Calcium Advanced Bone Density Support

A nother calcium formula? Not a chance! MBP<sup>®</sup> Osteo with Calcium is truly the next generation in bone health support. Its key ingredient, MBP<sup>®</sup>, is a natural protein complex recently discovered in trace amounts in milk, and is a scientific breakthrough for health-conscious women. This powerful ingredient is backed by four well-controlled human clinical studies

showing healthy net bone formation results for women of all ages after six months of use. Another clinical study also demonstrated positive effects of MBP<sup>®</sup> on measures of bone metabolism in healthy adult men. MBP<sup>®</sup> appears to help the body utilize dietary calcium efficiently for bone formation, and increases the activity of bone-building cells. MBP<sup>®</sup> is highly purified, concentrated, and with only trace amounts of lactose, is suitable for most lactose intolerant people.\*



## Strategies for Wellness<sup>sm</sup>

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.



MBP<sup>®</sup> Osteo with Calcium also contains the ingredients you trust to support healthy bone formation, such as vitamin D-3, calcium, and two forms of vitamin K. This combination makes MBP<sup>®</sup> Osteo with Calcium an impressive formula that not only covers all the bases, but knows what your bones need to form a strong bone scaffold.\*

**Getting Calcium to Where It's Needed** Our bones contain a matrix of living cells that are in a constant state of flux, with cells continuously forming new bone and breaking down old bone. As with any living system, bones must be fed with the nutrients they need to thrive. Calcium is the main building material of bone and is the most prevalent mineral in the human body. Calcium levels in the blood and extracellular fluid must be maintained within a very narrow concentration range for normal physiological functioning. The physiological functions of calcium are so vital to survival that the body will demineralize bone to maintain normal blood calcium levels when calcium intake is inadequate. Thus, adequate dietary calcium is a critical factor in maintaining a healthy skeletal system, but it must be incorporated to be effective.\*

MBP<sup>®</sup> provides the missing link in calcium incorporation by making bones more receptive to calcium. MBP<sup>®</sup> knows that sometimes less is more, allowing you to better utilize the calcium you're eating. Emerging science also suggests that 500 mg, instead of 1000 mg, is a good amount of supplemental calcium to complement many typical diets. That's why MBP<sup>®</sup> Osteo with Calcium contains less calcium than a typical standalone supplement, because with MBP<sup>®</sup>, you know where your calcium is going.\*

#### **Better Calcium Utilization**

MBP<sup>\*</sup> Osteo with Calcium also contains vitamin D-3, which is necessary for the intestinal absorption of calcium from foods and supplements.\* Vitamin D-3 is the form the body creates when exposed to sunlight. Adequate calcium and vitamin D throughout life, as part of a well-balanced diet, may reduce the risk of osteoporosis.

Vitamin K is necessary for the production of three bone proteins and supports maintenance of healthy bone. Vitamin K is used by an enzyme that converts an amino acid in these bone proteins, glutamic acid, to gamma-carboxyglutamate, allowing them to function properly to bind calcium. Research suggests an important role of vitamin K in supporting healthy bones and preliminary human clinical studies have suggested support of healthy bone density. MBP® Osteo with Calcium contains two forms of vitamin K. Vitamin K-1 (phytonadione or phylloquinone) is the natural form of vitamin K that is found in plants and provides the primary source of vitamin K to humans through dietary consumption. Also provided is K-2 (menaquinone), which is derived from fermented soybean and is also found in aged cheeses. Preliminary research suggests a higher bioactivity of vitamin K-2 compared to K-1 in supporting bone health. The vitamin K in MBP<sup>®</sup> Osteo with Calcium helps to keep calcium where it's needed, in the bones.\*

MBP<sup>®</sup> helps bone utilize calcium effectively by increasing the activity of bone-building cells relative to bone-dissolving cells. Additionally, our bones need magnesium, copper, boron and manganese, all of which are provided in MBP<sup>®</sup> Osteo with Calcium. Vitamins C and K are also needed for the body to generate collagen and other bone proteins. These proteins form the scaffold of bone structure.\*

### The Basics of Healthy Bones

With the scaffold and mortar in place, bone health centers on the intricate cycle of two types of cells. Osteoblasts are responsible for making bone. Other cells, called osteoclasts, remove bone as its minerals are needed for use elsewhere in the body or as bone needs to be replaced. Bone health is a balance of the two. As we enter middle age, it is



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normal for osteoblasts to be less active than in youth. With normal aging, lower estrogen levels in women can result in increased bone turnover, and lower bone mass. One important role of osteoblasts in bone health is producing collagen, a protein that forms a remarkably strong scaffold upon which the bones form. As we age normally, the links in the collagen chains become altered and bone becomes more brittle. The secret to bone health is to feed these important cells the nutrition they need to support their work.\*

MBP<sup>\*</sup> supports healthy bone density by promoting a beneficial balance of bone building and bone breakdown.



MBP<sup>®</sup> is a mixture of proteins including cystatin C, kininogen fragment 1.2, angiogenin, lactoferrin and lactoperoxidase. To achieve optimal results, MBP<sup>®</sup> Osteo with Calcium should be taken daily. Support for



healthy bones has been demonstrated after six months of MBP\*

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supplementation, and support for healthy bone metabolism has been demonstrated after three months of MBP<sup>®</sup> supplementation.\*

Strong, healthy bones give us the mobility and the means to enjoy life. Our bodies reach peak bone mass at around age 30, so it's never too early to start caring for them with a healthy diet, weight-bearing exercise and the right supplements. Source Naturals MBP<sup>®</sup> Osteo with Calcium can help you make your bone-building regimen stronger.\*

#### **Educational References**

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