Ultra-Cal 1000™

Comprehensive Bone Health

The long-term health and vitality of our skeletal structure is in great part a matter of luck—our inherent genetic makeup. But age, diet and nutrition are also crucial factors in determining the health of our bones. Now, advanced nutrients can actively increase and regulate bone density for a strong, healthy skeletal system.

The first step to bone health is realizing that our bones aren't dried, crackling, dead structures, they're a matrix of living tissues that are in a constant state of absorption, formation, and interaction with other body functions. As with any living system, the bones must be fed with the nutrients they need to thrive.

Source Naturals Ultra-Cal 1000 includes a wide array of vitamins, minerals, and trace minerals specifically designed to support bone mass density and bone nourishment. Ultra-Cal 1000 has 1000 mg of bioavailable calcium.

Source Naturals formulas go deep—they're beyond "down to the bone." These nutrients go down to the cells—building and nourishing the skeletal system with the vitamins and minerals needed for optimum strength.

SOURCE NATURALS®

Strategies for Wellness℠

It's All About Osteoblasts

Bone health centers around the intricate workings of three types of cellular functions. **Osteoblasts** are responsible for making bone. Other cells, called **osteoclasts**, are needed to remove old bone as its minerals are absorbed for use elsewhere in the body. If the osteoclasts break down the bone more quickly than it is replaced, then bone tends to be porous and fragile. As we enter middle age, osteoblasts are less active than in youth. The third factor in bone health is **collagen**, a protein that forms the matrix webbing material upon which the bones form. The collagen forms into chains that interlock into a web of remarkable strength. As we age, the links in the chains become less elastic and more brittle. The secret to bone health is to feed these important cells with the nutrition they need to support their work.

Although our bones naturally thin as we age, and many people are born with more dense bone structures than others, we do not have to be at the mercy of time and genetics.

Superior Calcium

Ultra-Cal 1000 supplies you with all the calcium needed for optimum bone health. Calcium is the mineral that forms the basic structure of our bones and teeth. But not all calcium is created equal. The Ultra-Cal formula uses MCHA calcium (microcrystalline hydroxyapatite), a naturally derived calcium extract from cattle bones. MCHA contains phosphate, amino acids and other minerals in proportion to human needs. This form of calcium is highly bioavailable; it is easily absorbed and used by the body.

Vitamin and Mineral Support

The calcium in these formulas is supported by a complex array of additional nutrients. Vitamins, including **ascorbic acid** (vitamin C), **vitamins D**, **K** and **B-12, folic** and **folinic acid**, as well as minerals like **magnesium** , **zinc**, **glucosamine sulfate**, **boron**, **copper** and **manganese** are all important for bone health.

Vitamin C helps enzymes synthesize the nutrients for bone building, **vitamin D** helps the body absorb calcium, and **vitamin K** promotes bone mineralization. **Folic** and **folinic acid** support bone tissue growth. **Vitamin B-12** manages overall bone health. Boron, a trace mineral, increases the body's retention of calcium and utilization of vitamin D, omega-3 fatty acids, and other nutrients. The parathyroid gland and the thyroid gland regulate the calcium in the body by regulating two hormones, parathyroid hormone (PTH) and calcitonin. These hormones balance the levels of calcium in our bones and soft tissues. PTH activates osteoclasts, stimulates calcium uptake in the kidneys, and promotes the conversion of vitamin D to its active hormonal form, which all raise the serum levels of calcium. On the other hand, calcitonin activates the osteoblasts to deposit calcium in our bones and reduces calcium uptake by the kidneys and its presence in non-bone soft tissue. Sufficient amounts of **magnesium** can help decrease the activity of osteoclasts and therefore reduce the resorption of calcium from the bones and into the blood. This keeps more calcium in the bones.

Zinc is a cofactor in many biological processes and is necessary for normal collagen synthesis and mineralization of bone. **Copper** ensures osteoblast activity. **Glucosamine** synthesizes proteins for joints and cartilage. All of these and more are included in these balanced formulas.

Defying Age and Genetics

We do not have to be at the mercy of time and genetics. Weight-bearing exercise such as walking or running encourages bone strength, and a diet rich in calcium and vitamin D (green vegetables, beans, nuts, seeds, dairy products), and minerals such as boron (raisins, nuts, prunes, legumes) all help you obtain the nutrients you need.

Go Deep

Source Naturals is pleased to bring you products that are excellent tools for managing your health and well-being from the very deepest levels possible, the cellular, biochemical levels. By caring for these primary processes, the health of the entire body is upheld . In the 12-system SystemiCare™ health care model, the Ultra-Cal formulas are mainly important for two: Structure/Mobility and Inflammation. As our movement, mobility and healthy immune response are supported, the health of the entire body is enhanced.

References

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