# **Bone**·Matrix

A completely vegan and soy-free blend of the most important nutrients for optimal bone health, designed for improved patient compliance at just 3 capsules per day.





- 100% vegan forms of calcium and vitamin D3
- Calcium bisglycinate and dicalcium malate offer one of the most soluble and best absorbed blends of elemental calcium to support bone health
- Vitamin K2 is provided as K2Vital®, a soy-free and microencapsulated form that is significantly more stable than other MK-7 materials, in order to activate osteocalcin and matrix GLA-protein
- Silicon is provided in the most stable and bioavailable form of monomethylsilanetriol (MMST) from LIVING SILICA®. • Just three capsules per day offers foundational skeletal support while encouraging improved patient compliance

Osteoporosis affects at least 1 in 3 Canadian women in their lifetime. When including the 1 out of every 5 males that are also affected by the disease, this translates to over 2 million Canadians at high risk for bone fractures with a reduced quality of life, decreased mobility and lack of independence. Fortunately, diet and lifestyle have been shown to

play a large role in the progress of the disease, allowing for modifiable and proactive risk mitigation.

Calcium is by far the most well-known nutrient required for strong and healthy bones. Of note, calcium can be delivered in many different forms such as citrate, carbonate, bisglycinate, malate or even in a hydroxyapatite complex. Hydroxyapatite complexes offer the advantage of also delivering various growth factors that support bone structures, yet they provide possibly unnecessary and excess phosphorus, poor calcium bioavailability and a calcium supplement that is unsuitable for vegan populations. On the other hand, calcium bisglycinate and calcium malate have demonstrated superior absorption and bioavailability while offering a vegan-friendly option to address osteopenia and osteoporosis.

One of the more unique nutrients for bone health is silicon, a mineral with the ability to regulate fibroblast activity and hydroxylation enzymes. Epidemiological evidence supports the role of silicon in preventing osteoporosis while supplemental silicon has been shown to increase the collagen content of bone and improve bone mineral density. The problem is that most forms of silicon are



insoluble, unstable and poorly bioavailable. The exception to this grouping of organosilicon molecules is monomethylsilanetriol (MMST) from LIVING SILICA®, a fully stable and well-absorbed form. Comparative studies have shown that MMST is 3.5-times better absorbed than choline-stabilized orthosilicic acid (Ch-OSA), and 21-times better absorbed than horsetail, bamboo and colloidal silicon sources, making it an excellent choice for optimal bone health.

This formula is rounded out with the nutrients needed to support the bone building process. Vitamin D3 is essential for calcium absorption from the digestive tract, while about 50-60% of all magnesium is actually stored in the bones and it is needed to activate enzymes related to vitamin D3 metabolism. Vitamin K2 has emerged as a key player in the bone health category, with its ability to activate two proteins, osteocalcin and matrix-GLA protein, in order to shunt calcium in the direction of the skeletal system and away from the cardiovascular system. Trace minerals such as zinc, manganese and boron also play crucial roles. Zinc and manganese are cofactors for several enzymes involved in bone formation, while boron prevents calcium excretion through the kidneys. Various combinations of all of these nutrients have been shown to positively affect bone mineral density markers.

Cyto·Matrix's Bone·Matrix provides the most essential nutrients for bone health in highly stable and absorbable forms, all in a completely vegan, soy-free product. Bone·Matrix offers calcium and magnesium in a well-balanced 2:1 ratio and in their highly bioavailable amino acid chelate forms. In addition, a soy-free vitamin K2, a vegan-sourced D3, MMST silicon from LIVING SILICA®, zinc, boron and manganese complete the formula for comprehensive support. At only three capsules per

day, Bone Matrix is designed to include the foundational nutrients for the skeletal system while encouraging patient compliance.

#### Each capsule contains

Calcium	100mg
(TRAACS™ calcium bis-glycinate chelate, DimaCal™ malate)	di-calcium
Magnesium	50mg
(Albion™ di-magnesium malate, TRAACS™ magnesi glycinate chelate)	um bis-
Zinc	3.33mg
(TRAACS™ zinc bis-glycinate chelate)	
Silicon	1.33mg
(LIVING SILICA® methylsilanetriol)	
Vitamin D3	8.3mcg
(cholecalciferol)	
Manganese	833mcg
(TRAACS™ manganese bis-glycinate chelate)	
Boron 2	33.33mcg
(Albion™ Bororganic glycine)	
Vitamin K2	40mcg
(menaquinone-7, K2VITAL®)	



\*Mineral chelates supplied by Albion Laboratories, Inc. Albion™, DimaCal™, TRAACS™ and the Albion Gold Medallion design are trademarks of Albion Laboratories, Inc. U.S.Patents 6,706,904, 7,838,042.

K2VITAL

\*\*K2VITAL® is the registered trademark of Kappa Bioscience AS.

LIVINGSLICA

\*\*\*Living Silica® is a registered trademark of Silicium Laboratories LLC.



### **Non-Medicinal Ingredients**

Vegetable-grade magnesium stearate, acacia gum, dextrin, sucrose, corn starch, tricalcium phosphate, medium chain triglycerides, citric acid, silica, glycine, water. Capsule: hypromellose.

### **Recommended Use Claim**

Helps in the development and maintenance of bones, teeth, hair, skin and nails. Helps to maintain proper muscle function, support immune function and tissue formation. Adequate calcium and vitamin D as part of a healthy diet may help prevent bone loss and osteoporosis.

#### **Directions of Use**

Adults - Take 3 capsules, once per day with food or as directed by a healthcare professional. Take a few hours before or after other medications or natural health products.

## **Cautions and Warnings**

Do not use if safety seal is broken. Consult a healthcare professional prior to use, especially if you are pregnant or breastfeeding or if you are taking blood thinners.

## **Storage Conditions**

Do not use if safety seal is broken.

