

TOTAL MINERAL

- Provides Broad Spectrum Mineral Support for a Variety of Protocols
- Supports Any Bone Building Protocol
- Increases Skeletal Strength and Promotes Healthy Bone Density



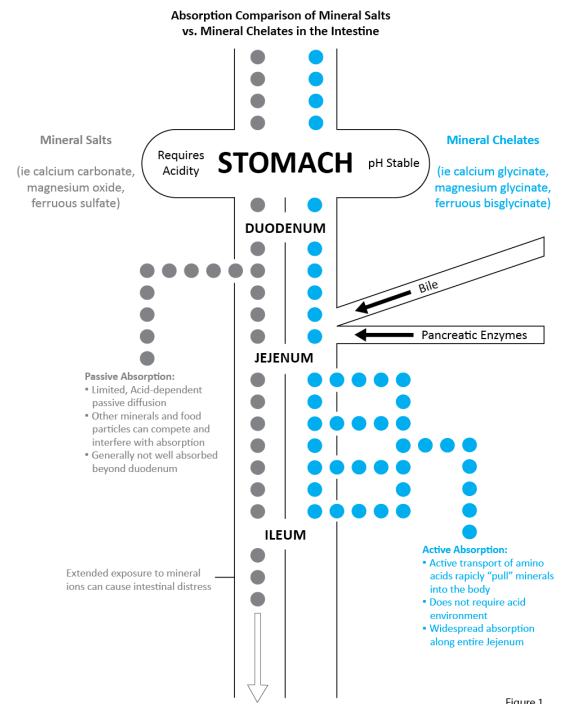
Total Mineral provides an ideal balance of highly absorbed minerals combined with the benefits of betaine HCl to prime digestion and improve the absorption of vitamins and minerals. Total Mineral provides mineral amino acid chelates in optimal ratios to help the body maintain mineral balance and avoid competition between minerals for absorption.

Overview

Numerous studies have reported that adequate mineral levels play an essential role in maintaining optimal health by supporting bone, muscle and cardiovascular health. It is a challenge for most individuals to consume the perfect variety of minerals through their daily diets and maintain mineral balance. Supplementation of a high quality daily multimineral may provide benefit for those wishing to meet their recommended daily requirements of important macrominerals and trace minerals.

Bioavailability - The Mineral Chelate Difference[†]

The importance of bioavailability is obvious. If consuming a calcium supplement has little effect on improving the body's calcium balance, there is no reason to ingest it. Signs of inferior mineral supplements include the use of cheap, poorly absorbed, rock-salt minerals like calcium carbonate and magnesium oxide (See Figure 1). These mineral forms slow and limit absorption, relying on adequate stomach acid to release calcium ions which then enter the body via passive diffusion. And, because they tend to remain in the intestines longer, these



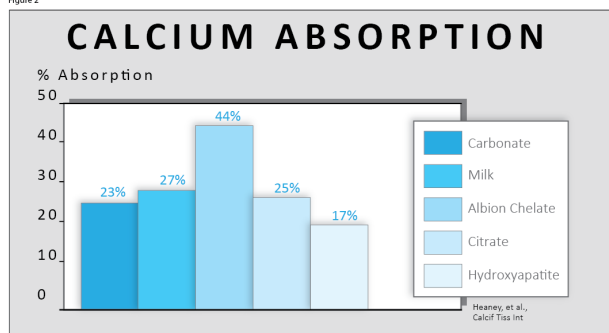
forms of mineral supplements can cause intestinal distress such as constipation (calcium carbonate) or diarrhea (magnesium oxide).

[†]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.

Toal Mineral provides the benefit of highly absorbed, Albion® mineral chelates. Albion® is the world leader in manufacturing highly bioavailable mineral chelates, a specialized form of minerals bound to amino acids. This patented process creates organic mineral compounds which use active absorption mechanisms in the gastrointestinal tract to greatly enhance mineral absorption. Comparison studies have shown significantly superior absorption of mineral chelates compared to other mineral forms. In a clinical study specifically comparing calcium absorption in humans, Albion®'s patented calcium chelate delivered the greatest absorption of all calcium sources tested (See Figure 2).¹

- Calcium from calcium carbonate is often absorbed at very low levels (less than 10%)¹
- In a human clinical study, Albion®'s patented calcium chelate formulation averaged 44% absorption of the dose without the benefit of meal enhancement.¹ No other calcium form has an equivalent or higher rate of absorption

Figure 2



In addition, mineral chelates are gentle, “gut-friendly” minerals that do not cause constipation that often accompanies calcium carbonate and other rock-salt forms. Albion®'s mineral chelates have extensive clinical research proving their superior bioavailability, biologic activity, stability, and improved tolerance.

Calcium†

Calcium is required for heart health, muscle function, nerve transmission, intracellular signaling and hormonal secretion. It is less than 1% of total body calcium that supports these critical metabolic functions². Serum calcium is very tightly regulated and does not fluctuate with changes in dietary intakes. The body uses bone tissue as a reservoir for calcium, as well as a source of calcium, to maintain constant concentrations of calcium in blood, muscle and intercellular fluids.² The remaining 99% of the calcium supply in the body is stored in the bones

and teeth, serving as support for their structure and function.²

Magnesium†

More than 57% of the population does not meet the United States Department of Agriculture requirements for magnesium in their diet. Magnesium is a cofactor in over 300 enzyme systems and is integral to many processes in the body, including protein synthesis, muscle and nerve function, and maintaining blood glucose control and blood pressure regulation.³⁻⁵ It contributes to the structural development of bone and is required for the synthesis of DNA, RNA and the antioxidant, glutathione. Magnesium also plays a role in the active transport of calcium and potassium ions across cell membranes, a process that is important to nerve impulse conduction, muscle contraction and normal heart rhythm.⁶

Zinc†

Zinc is fundamental to the activity of over 100 enzymes and supports immune function, protein synthesis, tissue regeneration and healing, DNA synthesis and cell division.^[7-10] During pregnancy, infancy and childhood, the body needs zinc for proper growth and development.¹¹⁻¹⁵ Zinc also helps boost tissue repair and is important to adequate functioning of the senses of taste and smell. Daily intake of zinc is necessary to maintain adequate levels within the body because the body has no specialized zinc storage system.¹⁶

Selenium†

Selenium has structural roles, as well as enzymatic functions. It is best-known as an antioxidant and catalyst in the production of active thyroid hormone. Selenium is essential in the balance and support of immune system function. Selenium promotes sperm motility, supports positive mood, antioxidant status, inflammation balance and heart health.

Potassium†

Potassium is an electrolyte mineral that carries an electric charge. It is critical to maintaining electrolyte balance in the body. Potassium can contribute to heart and bone health and is an integral part of muscle contraction and muscle building.¹⁷

Directions

4 capsules in divided doses per day or as recommended by your health care professional.

Does Not Contain

Gluten, yeast, artificial colors and flavors.

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Cautions

If you are pregnant or nursing, consult your physician before taking this product.

Supplement Facts ^{v4}		
Serving Size 4 Capsules Servings Per Container 30		
4 capsules contain	Amount Per Serving	% Daily Value
Calcium (as TRAACS™ Calcium Bisglycinate Chelate)	300 mg	23%
Magnesium (as DiMagnesium Malate, 150 mg TRAACS™ Magnesium Lysinate Glycinate Chelate)		36%
Zinc (as TRAACS™ Zinc Bisglycinate Chelate)	25 mg	227%
Selenium (as Selenium Glycinate Complex)	190 mcg	345%
Manganese (as TRAACS™ Manganese Bisglycinate Chelate)	5 mg	217%
Chromium (as O-polynicotinate)*	190 mcg	543%
Molybdenum (as TRAACS™ Molybdenum Glycinate Chelate)	45 mcg	100%
Potassium (as Potassium Glycinate Complex)	90 mg	2%
Betaine Hydrochloride USP	45 mg	*
Vanadyl Sulfate Hydrate	3 mg	*
Boron (as Bororganic Glycine)	45 mcg	*

* Daily Value not established

Other Ingredients: Natural Vegetable Capsules, Microcrystalline Cellulose, Magnesium Stearate, Stearic Acid, and Silicon Dioxide. †ChromeMate® brand niacin-bound chromium. ChromeMate® is a registered trademark of InterHealth N.I. TRAACS™ and Albion™ are trademarks of Albion Laboratories, Inc.

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