MINERALS FOR

LIFE

MINERALS™

Why Are Minerals So Important?

The value of adequate mineral intake for overall health cannot be overstated. Their effects are vast and broad; their deficiencies devastating. Minerals are components of body tissues and fluids that work in combination with enzymes, hormones, vitamins and transport substances. Minerals participate in nerve transmission, muscle contraction, cell permeability, tissue structure, blood formation, acid-base balance, fluid regulation, blood pressure control, protein metabolism and energy production.

The human body requires large amounts of some minerals, and trace amounts of others, while some minerals – such as Lead, Mercury and Aluminum – are toxic to the body. Those minerals that are essential to health in relatively high amounts – Calcium, Phosphorus, Potassium, Sulphur, Sodium, Chlorine, and Magnesium – are called macrominerals. Trace minerals – Zinc, Manganese, Copper, Iron, Chromium, Selenium, Iodine and Molybdenum, to name a few – are those which are present in the body in minute amounts, but are just as essential to health as the major minerals.

One of the main functions of minerals in the body is to activate enzymes. Magnesium, for example, activates over 300 different enzymes, while Zinc "turns on" over 100. Enzymes are catalysts, functioning in the cells to accelerate chemical reactions. All of these chemical reactions collectively are referred to as "metabolism", which is the very basis of life.

Why Do We Need Minerals Now More Than Ever?

I. The Decreasing Levels of Minerals in Today's Foods

Unlike the compost fertilizers of the past, today's "high-tech" fertilizers do not replace many of the nutrients essential to both the ***natural*** growth of crop plants and to human beings, who depend on them for adequate nutrition. As a result, even a "good" diet may provide less nutrition than is generally required.

In addition, many modern food additives bind minerals so tightly in food that they can no longer be absorbed or utilized by the body. A moderate intake of one such additive, EDTA (estimated American daily intake is 50-100 mg), was found in a scientific study to reduce iron absorption by 50%!

Dietary studies have shown that mineral deficiencies are so prevalent, it's rare that anyone gets even the minimum RDA levels of them all. The following are examples of the unfortunate findings:

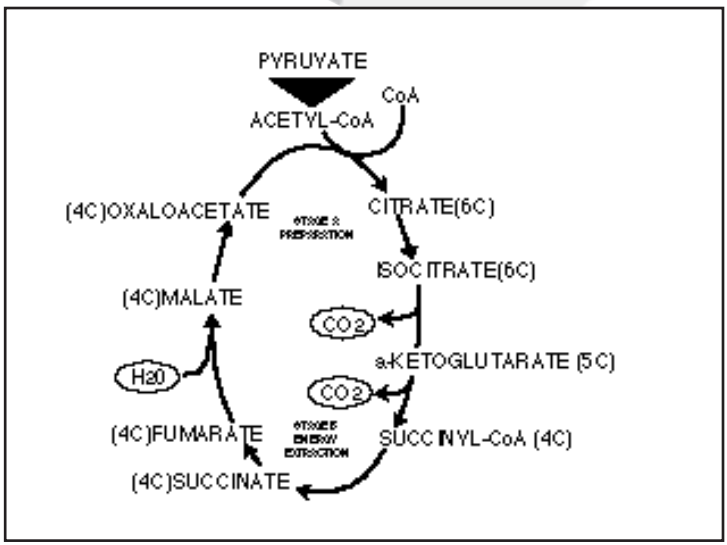
• A study by the USDA in the mid-1980s on **Chromium** status in adults found that NONE of the people tested consumed even the lower level of the Chromium "Safe & Adequate Intake" range of 50 to 200 mcg.

• It is estimated that up to 90% of all Americans may be **Magnesium**-deficient, even by RDA standards (considered by many Magnesium experts to be already too low).

• A study published in the prestigious American Journal of Clinical Nutrition in the late 1970s found 70% of Americans getting less than the 15 mg RDA for **Zinc**, with most getting only 8-11 mg per day.

• Among Americans who do not eat a high-dairy diet or take **Calcium** supplements/antacids regularly, virtually no one will achieve the current 1000 mg per day RDA for Calcium.

• According to nutritionists, women not taking **Iron** supplements would need to consume a 3000 calorie diet daily(!) to regularly



achieve the U.S.RDA for Iron of 18 mg. Yet most women, especially those who are weight-conscious, consume less than 2000 calories a day, many as little as 1200-1500 calories!

II. The Increasing Need for Minerals in Today's Environment and Lifestyle

Various aspects of the modern environment and lifestyle — some of which are discussed here — severely affect mineral nutrition in the body.

- The results of studies conducted in Michigan and Maryland medical facilities show that physical and psychological **stress** in healthy adults produces acute deficiencies of trace minerals despite otherwise adequate dietary intake. Given the fact that many adults in America are not healthy by medical standards, the loss of minerals with stress is possibly even greater than has been measured.
- In addition, many of the **prescription drugs** that Americans commonly take chelate, or bind, with one or more minerals, making those minerals unavailable to the body. For example, diuretics flush Potassium out of the body and deplete Magnesium, and sedatives can lower blood levels of Calcium and Magnesium.
- **Heavy metal toxicity** is also a major problem in modern America. Cadmium, Mercury and Lead, for example, are cumulative poisons, toxic even in low doses, and are increasingly prevalent in our environment because of their industrial uses. In the 1960s alone, over 200 million pounds of lead per year were released into the environment from the use of leaded gasoline. Data, published in 1987, indicates that people who have a good supply of the minerals Calcium, Zinc, Iron, Selenium, Copper, Chromium, and Manganese in their diets are largely protected against heavy metal poisoning. Conversely, if these minerals are deficient in the diet, there is a much greater danger of heavy metal toxicity.
- **Poor diet**, **cigarettes**, **alcohol**, **drugs**, and the **heating and spoiling of polyunsaturated fats** all deplete mineral levels and produce damaging free radicals in the body. Minerals such as Selenium, Iron, Copper and Manganese, and Vitamins, such as C, work in the body to neutralize free radicals and thus diminish their harmful effects.

What Is The Krebs' Cycle? And What Are "Krebs' Cycle Minerals"?

The Krebs' Cycle is the energetic root of life, taking place in every cell of the body. It produces 90% of the body's total energy in the form of ATP. Krebs' Cycle Minerals are those which are bound to the organic acids used in the Krebs' Cycle. Such mineral complexes are increasingly becoming the standard in mineral-inclusive supplements because they're so good at what they do: Transport. They are especially effective at penetrating various cell membranes and organelle membranes, thus carrying their mineral partners inside the cell. Many of these organelles have membranes to keep out biochemical invaders; therefore, not just any substance can penetrate cells and their organelles.

Source Naturals' Life Minerals™: Optimal Mineral Supplementation

All this technical and scientific information has been brought together by the experts at **Source Naturals** into one comprehensive multi-mineral formula: **Life Minerals™**.

Many of the minerals in Life Minerals™ — Calcium, Magnesium, Potassium, Manganese and Iron — are bound to some of the best known transport agents in the body, the Krebs' Cycle organic compounds. In addition, there are minerals not usually found in other mineral supplements, such as Silicon, Boron, Copper, and Molybdenum. Plus there are the Vitamins B6, C and D3, which have been shown to significantly enhance mineral absorption and utilization.

In addition to the Krebs' Cycle minerals, Life Minerals™ also uses superior forms of other minerals. The Zinc is OptiZinc™ Zinc Monomethionine, shown in scientific studies to be highly bioavailable, offering increased absorption. The Chromium is ChromeMate®, the non-yeast Glucose Tolerance Factor Chromium, believed by many to be the most superior form of Chromium. Copper Sebacate, a more bioavailable form of Copper, is also included.

Minerals are crucial to both the structure and function of the body in hundreds of ways. But what good are mineral supplements if your body cannot utilize them to their fullest advantage? Supplementing your diet with Life Minerals™ is an important aid against deficiencies that may be more significant than suspected. By providing minerals with the highest bioavailability, and including significant potencies of each, Source Naturals' Life Minerals is your best chance of reaping all the benefits that minerals have to offer.

In quality, comprehensiveness, and potency, there is no equal to Source Naturals' Life Minerals™.

SOURCE NATURALS

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