

MINERALS MATTER

Is Your Body Getting Enough? by Dr. Richard Drucker

While it's safe to say most people have heard the word minerals before and know that they are beneficial when consumed, it's also safe to say their exact meaning and purpose remain a mystery to many.

Typically we tend to think of minerals as small particles of matter in soil or rock. In essence, that description is correct; however, it does not really represent the benefits minerals provide to the human body. Let's take a closer look at minerals and why specific minerals are key components to good health.

Webster's Dictionary defines minerals as "inorganic substances occurring naturally in the earth and having a consistent and distinctive set of physical properties and a composition that can be expressed by a chemical formula: sometimes applied to substances in the earth of organic origin, such as coal." Even the official definition leaves questions regarding the vital role of minerals in the body. Here are a few answers.

Minerals: Necessary for Good Health

Minerals are essential for all the chemical processes required for the human body to function properly. All nutrients, such as vitamins, proteins, enzymes, amino acids, carbohydrates, fats, sugars, oils, etc., require minerals for proper cell utility.

In fact, minerals play a more important role in our health than do vitamins. While vitamins are required for every bodily biochemical process, they are useless without the presence of minerals.

Minerals are also essential for healing. Tissue rebuilding occurs more easily when the body has access to necessary minerals. Certain minerals are critically necessary to the body. These are known as "trace" minerals and include zinc, iron, magnesium, calcium, selenium, and copper, to name a few.



Maximizing Mineral Absorption

Minerals are often difficult to absorb into the body. Calcium, for instance, must be taken with vitamins D and C, and essential fatty acids in the proper ratio to magnesium in order to be digested. One of the reasons that women tend to be anemic is because of improper digestion of iron, which is necessary for blood to carry oxygen. Iron is present in every food we eat, according to the late nutritionist Adelle Davis, but because the mineral is difficult to digest, most iron ingested passes through the body unassimilated.

When it comes to mineral supplements, most are not easily incorporated into the body, either. It's important for mineral supplements to be water-soluble (liquid form is best) and not in rock form, and that the elements be absorbed readily and fully, bringing more oxygen to the blood cells and thereby releasing toxins from the body.

Misconceptions About Toxicity

In addition to general limited knowledge regarding the necessity and function of minerals, there also exists a few mineral misconceptions. One such misconception has to do with the fear of mineral or metal buildup in the body, which has been documented to cause various health problems. With all the toxicity-related disorders and talk about heavy-metal accumulation, there's an overlying anxiety that metals (minerals) are harmful. This is both true and false.

There's no doubt that the absorption and storage of too many heavy metals such as mercury, cadmium, lead and others is unsafe. Other metals or minerals such as beryllium, copper, fluorine, nickel, silver and aluminum also raise red flags. Unfortunately, the result of all this negative hype can be an obsession about avoiding metals in any form.

Getting Minerals in Their Ideal Form

What many do not realize is that it's not necessarily the metal itself that is the problem. Rather, it is the form that determines whether a mineral is harmful or beneficial. What is important to know is that the previously mentioned minerals, along with other trace minerals, are actually absolutely essential for proper health. In fact, we cannot survive without them.

This is a good time to discuss the distinction between organic trace minerals and metallic minerals, as well as the importance of quantities. Essential trace elements are "essential" only when used in trace amounts. When used in excess, they can become toxic. However, it is also important to understand that consumption of plant-derived mineral fulvic complexes, which will be discussed shortly, will not build up in the body tissues as do metallic minerals.

A good example of the difference between organic trace minerals and metallic minerals is the metal aluminum. Aluminum makes up 12 percent of the Earth's crust and is the most abundant metallic element. Even though there are arguments that a large amount of aluminum in the body may be responsible for cognitive disorders such as dementia and Alzheimer's disease, it's rare that these same arguments mention the form or benefits of aluminum.

Aluminum is a major component in all soils and enters the food chain at every level, be it plant or animal, and is beneficial for health. If natural compounds of organic aluminum were toxic or hazardous to humans, life as we know it would cease.

The known biological function, and thus benefit, of aluminum is to activate an enzyme called succinic dehydrogenase. This enzyme increases survival rates of newborn infants and, according to Dr. Gerhard Schrauzer, professor emeritus (department of chemistry) at the University of California San Diego, is an essential mineral for human nutrition. Even arsenic, in trace levels, is an essential element for optimal health and longevity, suggests research.

Fulvic Acid: Key for Mineral Utilization

No discussion of minerals would be complete without including a vital aspect of mineral utilization: fulvic acid. Fulvic acid is one of two classes of a natural acidic organic polymer that can be extracted from humus (the healthy result of decaying organic matter), soil, sediment or aquatic environments. Fulvic acid is believed to originate as a product of microbial metabolism.

Because minerals are absorbed through the soil into plant material that both man and animals consume, fulvic acid is

absolutely essential for the assimilation of minerals into a small enough form to be completely dissolved and used by the body. Fulvic acid is so powerful that a single molecule is capable of carrying 60 or more minerals and trace elements into the cells. Unfortunately, the humus deposits rich with fulvic acid have been missing from our diets for decades. They are quite rare in this generation and can only be found in very limited areas of the world.

Since fulvic acid allows such an increase in mineral absorption, it has the ability to make a profound impact on a wide variety of health issues and diseases that have arisen in the past several decades due to mineral depletion in both foods and humans.

In order to ensure that you are getting all the minerals, vitamins and nutrients your body needs, it is crucial that you supplement with the right kinds of vitamins and minerals. The best absorption rate for mineral products comes in a liquid form from live food sources.

Obviously we should be seeking a supplement that is not processed with heat (which destroys the viability of minerals and enzymes), contains fulvic acid and does not contain synthetic chemicals or preservatives of any kind. Only in this manner can we be certain we are getting the life-giving minerals our bodies need.



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Good Food Sources of Minerals

So, how do you ensure adequate daily amounts of trace and other minerals? Check out these good food sources courtesy of WebMd.com, and remember that supplementation is also an option (talk to your doctor for more information):

Mineral	Food Sources	Recommended Daily Amount or Adequate
Calcium	Milk, yogurt, hard cheeses, fortified cereals and other products (orange juice), spinach	Adults 19-50: 1,000 mg Adults 51 and older: 1,200 mg
Chromium	Meats, poultry, fish, some cereals	Men 19-50: 35 micrograms; men 51 and older: 30 mcg; women 19-50: 25 mcg; women 51 and older: 20 mcg; pregnant women: 30 mcg; breast-feeding women: 45 mcg
Copper	Seafood, nuts, seeds, wheat-bran cereals, whole grains	Adults: 900 mcg; pregnant women: 1,000 mcg; breast-feeding women: 1,300 mcg
Iron	Beans, lentils, beef, eggs, fortified cereals	Men: 8 mg; women 19-50: 18 mg; women 51 and older: 8 mg; pregnant women: 27 mg; breast-feeding women: 9 mg
Magnesium	Green leafy vegetables, Brazil nuts, almonds, soybeans, halibut, quinoa	Men 19-30: 400 mg; men 31 and older: 420 mg; women 19-30: 310 mg; women 31 and older: 320 mg; pregnant women: 35-360 mg; breast-feeding women: 310-320 mg
Phosphorus	Dairy products, peas, meat, eggs, some cereals and breads	Adults: 700 mg
Potassium	Sweet potatoes, banana, yogurt, yellowfin tuna, soybeans	Adults: 4,700 mg; breast-feeding women: 5,100 mg
Selenium	Organ meats, seafood, some plants (if grown in soil with selenium), Brazil nuts	Adults: 55 mcg; pregnant women: 60 mcg; breast-feeding women: 70 mcg
Zinc	Red meats, some seafood, fortified cereals	Men: 11 mg; women: 8 mg; pregnant women: 11 mg; breast-feeding women: 12 mg