

# The Dust of the Earth Can Restore Your Health



When it comes to nutrition, adequate mineral intake is one of the cornerstones of good health. Minerals not only play a vital role in the formation of bones, teeth, muscles and connective tissues, they are also critical to body functions. This is because minerals play an essential role in activating the thousands of enzymes that run every process of the body.

Unfortunately, the use of chemical fertilizers has greatly depleted the mineral content of modern soils. Adding the traditional NPK (nitrogen, phosphorus and potassium) fertilizers does not replace macro minerals like calcium and magnesium or trace minerals like copper, zinc, iron, manganese and chromium that plants absorb from the soil.

Furthermore, it is friendly microbes in the soil that help make minerals available to plants. The use of toxic chemicals like pesticides and herbicides on the land has diminished the healthy microflora in the soil. This means that even when minerals are available in the soil, plants may not be able to utilize them. It is a similar problem to what happens in human beings when antibiotics destroy the friendly flora in the intestinal tract.

## Food is No Longer Enough

At one time, people could obtain all the nutrients their body needed, including minerals, from food. That is no longer the case, which is why all commercial animal feeds contain vitamin and mineral supplements. This depletion of the soil didn't happen overnight. It has been going on for over 100 years and has been confirmed by numerous studies.

In 1936, Senate document 264 warned that the depletion of trace minerals in our soil would eventually lead to a national crisis and a dramatic increase in mineral deficiency diseases. The study concluded that, "Countless human ills stem from the fact that impoverished soil of America no longer provides plant foods with the mineral elements essential to human nourishment and health."

In 1997, the U. S. Department of Agriculture confirmed this prediction. Donald Davis, a senior researcher at the University of Texas, compared Dept. of Agriculture figures on nutrient content for 43 common fruits and vegetables. Davis says historical data spanning 50 to 70 years show apparent declines of 5 percent to 40 percent or more in minerals, vitamins and protein in vegetables.

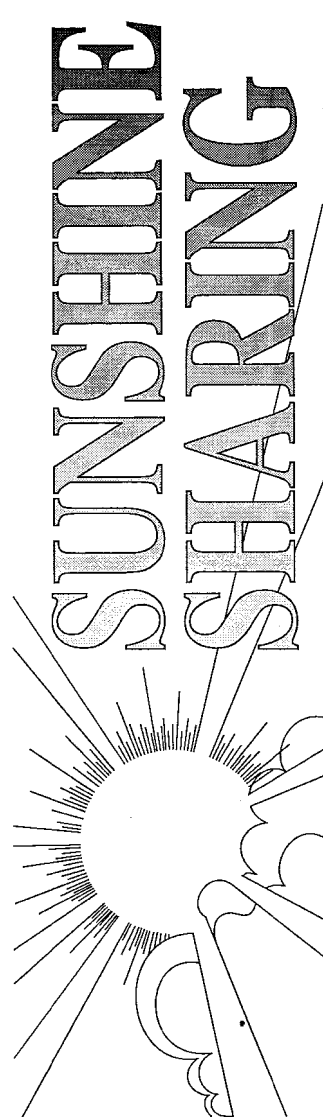
Washington State University researchers Stephen Jones and Kevin Murphy found that today's wheat has less nutritional value, stating that modern grains have been developed for baking qualities related to protein rather than essential minerals. "You would have to eat twice as many slices of modern bread as you would of the older variety to get the same nutritional value," they added.

In 2001, the *Journal of Complimentary Medicine* pointed out that U.S. and U.K. government statistics show a decline in trace minerals of up to 76% in fruit and vegetables over the period 1940 to 1991. In 2003, *New Canada* reported that today's fruit and vegetables contain far fewer nutrients than they did 50 years ago. Over the entire 20th century, the average mineral content in cabbage, lettuce, spinach and tomatoes declined from 400 mg. to less than 50 mg.

In 2004, the *Journal of the American College of Nutrition* examined food composition changes from 1950 to 1999 recorded in the USDA food composition tables. Forty-three crops were examined showing the statistically reliable decline of six nutrients. The declines were observed in protein, calcium, phosphorous, iron, riboflavin and ascorbic acid.

These studies make it clear that the problem of mineral deficiency is a serious one. That's why just about everyone needs to consider some form of mineral supplementation if they want to be healthy.

**Learn more about the healing power of minerals, inside...**



## Important Notice

The information in *Sunshine Sharing* is for educational purposes only and should not be used to diagnose and treat diseases. If you have a health problem, we recommend you consult a competent health practitioner before embarking on any course of treatment.

*Sunshine Sharing* is an independent educational publication and receives no financial support from any herb or health product manufacturer. Your comments, questions and personal experiences are welcome. Send them to *Sunshine Sharing*, P.O. Box 911239, St. George, UT 84791-1239 or [comments@treelite.com](mailto:comments@treelite.com).

Copyright © 2011 by Tree of Light Publishing (a division of Kether-One, Inc.). Photocopying this publication for distribution is strictly forbidden. If you receive a photocopy of this publication, the distributor of said photocopies is in violation of copyright law.

Managing Editor/Writer: Steven Horne  
Editor: David Horne  
Associate Editors:  
Carolyn & Hugh Hughes, Leslie Lechner, Sharon Grimes

# Meet the Minerals

The bulk of the body is composed of the basic elements carbon, hydrogen, nitrogen and oxygen, which make up water, fats, sugars, vitamins and proteins. If you burn all this away, what is left is a small amount of ash, the minerals in the body. Although they are present in small amounts, these minerals are absolutely critical to body function. There are two basic categories of minerals in the body, macro minerals and trace minerals.

Macro minerals are needed in fairly large quantities both for structure and function. They make up the bulk of minerals found in bones, teeth, muscles and connective tissues and include calcium, phosphorus, magnesium, sodium and potassium.

If less than 100 milligrams of a mineral is required per day, it is considered a trace mineral. Although trace minerals are only needed in very small amounts, deficiencies of trace minerals are much more widespread than deficiencies of macro-minerals. This is largely due to the depletion of these elements in the soil as described on page one.

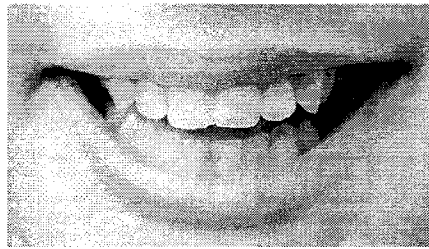
## Calcium: Building Healthy Bones and Teeth

There is more calcium in the body than any other mineral because it is the major mineral in bones and teeth. Besides being a key component of body structures, calcium plays important roles in muscle contraction, heart action, nerve impulses and blood clotting. Calcium is the most widely taken mineral supplement, but calcium, by itself, is not sufficient to ensure healthy bones and teeth.

Calcium requires many nutritional cofactors for proper utilization, including vitamin D, vitamin C and the minerals zinc, silica, boron, magnesium and vanadium. Hydrochloric acid, produced in the stomach, is also essential for calcium absorption, which is why calcium carbonate supplements (which neutralize stomach acid) don't do much for calcium utilization.

Problems with assimilation and utilization of calcium and/or calcium deficiencies lead to osteoporosis, rickets, osteomalacia, tooth decay or periodontal disease, brittle or misshaped nails, rheumatoid arthritis, heart palpitations or abnormal heart rhythms, hypertension, insomnia and fatigue. However, calcium supplements alone will probably not correct calcium deficiencies in tissues, which is why a supplement like **Skeletal Strength**, which contains most of the nutritional cofactors needed for assimilation and utilization of calcium, is better than a straight calcium supplement. Another good natural source for calcium is **Calcium Plus Vitamin D**. It contains bone meal, which has all the nutrients needed to build bones, plus vitamin D and magnesium to assist assimilation.

Many people believe that dairy products are the best way to get calcium, but the calcium in dairy foods (especially after they have been pasteurized) is hard for the body to absorb. One of the most easily absorbed sources of calcium is dark, green leafy vegetables, which also contain lots of magnesium. Where do you think cows get their calcium?



## Phosphorus: The Other Bone Builder

Bones and teeth are composed primarily of calcium phosphate, making phosphorus another major mineral needed for body structure. It is also used in energy production in the cells. Although phosphorus deficiencies are rare, it is found in both **Skeletal Strength** and **Calcium Plus Vitamin D**.

## Magnesium: The Number One Mineral Deficiency

In contrast to phosphorus, magnesium deficiencies are extremely common. In fact, as high as 70% of the population may be low in magnesium. Magnesium is one of the critical elements needed to utilize calcium and the ideal ratio of these minerals is 2:1 (two parts calcium to one part magnesium). This is the ratio found in mother's milk. However, since people tend to get more calcium than magnesium in their diets many people need a ratio as high as 1:1 calcium and magnesium, and many people benefit from supplementing with extra magnesium without any calcium at all.

Magnesium helps muscles relax, so deficiencies can cause cramping and tension. Magnesium is also needed for energy production in the cells. It is a critical mineral for the heart and circulatory system and can help to lower blood pressure and prevent heart attacks. Magnesium also plays critical roles in liver detoxification.

Deficiencies of magnesium can lead to feelings of hyper sensitivity, nervousness and insomnia. Studies show that migraine sufferers tend to have lower levels. Magnesium can also help to overcome chronic constipation when taken with lots of water and vitamin C.

Magnesium forms the center of the chlorophyll molecule, which makes dark, green leafy vegetables a great source of this mineral. Since many people do not eat enough of these magnesium-rich foods, a supplement like **Magnesium Complex** is often helpful. Most people need anywhere from 400-1,000 mg. (2-5 capsules) per day. If you get loose stool taking magnesium, simply reduce the dose or add some calcium to counterbalance it.

## The Fluid Regulators: Sodium and Potassium

Sodium is an important macro-mineral needed for electrolyte balance, hydration and nerve function. The best way to get sodium is from green leafy vegetables and an all natural **Sea Salt** that has all its trace minerals still intact.

Potassium works with sodium to maintain electrolyte balance. It is also involved in energy production, nerve function and heart function. Potassium is abundant in fruits and vegetables, and may become deficient in people who eat a lot of salt, but don't eat fruits and vegetables. Potassium is depleted by diuretic drugs. Deficiencies can lead to water retention, confusion, fatigue and muscle twitching, cramps and spasms. **Combination Potassium** is an herbal formula that supplies large amounts of natural potassium and sodium.

## Iron: The Blood-Builder

Iron is one of the most important trace minerals because it is used in the formation of hemoglobin, the substance that transports oxygen in red blood cells. A lack of iron causes anemia, but iron supplements alone may not be sufficient to correct iron deficiencies, because iron, like calcium, needs cofactors like vitamin C for utilization. Iron also needs hydrochloric acid in the stomach for assimilation.

Iron deficiency is more common in women than men because of the monthly loss of blood women experience through the menstrual cycle. This is why Traditional Chinese Medicine recommends the use of blood nourishing tonics, like **Chinese Blood Build**, for women throughout their child-bearing years. Chinese Blood Build helps overcome anemia in women by aiding the absorption and utilization of iron to build the blood.

Another way to overcome anemia is to take 12 capsules of **alfalfa** or **I-X** along with 4 capsules of **yellow dock** daily. This often works better than taking an iron supplement.

Besides anemia, deficiencies of iron can cause food cravings for inedible items such as ice, paint, starch, clay, or dirt, depression or apathy, insomnia or disturbed sleep, decrease in ability to concentrate, impaired mental skills that can affect memory and job performance, learning disabilities and short attention spans in children, irregular menstrual periods, brittle hair, hair loss, spoon-shaped or ridged nails and the increased risk of lead poisoning in children.

## Zinc: The "Male" Mineral

If iron is the most important trace mineral for women, zinc is for men. Men lose zinc with every ejaculation and zinc is vital for healthy reproductive and prostate function in men. Zinc is also used in regulating blood sugar, healing wounds and fighting infections. Zinc deficiencies can result in hair loss and greying of the hair, as well as dry skin, loss of the sense of smell and taste and vision and hearing loss. **Zinc** is available as a single mineral supplement or in the form of **Zinc Cold and Flu Fastmelt Lozenges**, which can be helpful for boosting the immune system to fight colds, flu and sore throats.

## Copper: Keeping the Body Flexible

Copper is used to keep body tissues elastic and flexible. It is also used in hemoglobin formation, the production of RNA and in the parotid glands to help "tag" nutrients for delivery to where they are needed. Copper and zinc are antagonists, so high levels of copper tend to suppress zinc and vice-versa.

Deficiencies can result in joint problems, osteoporosis, hardening of the arteries and a loss of elasticity in blood vessels, loss of hair color and reduced immune function. **Liquid Chlorophyll** contains sodium-copper chlorophyllin and is a great source of copper.

## Chromium: Blood Sugar Regulator

Chromium deficiencies are quite wide-spread and contribute to hypoglycemia and diabetes. Chromium is also important in maintaining a healthy cardiovascular system. **GTF chromium** is a



good supplement for balancing blood sugar levels and is also found in **Target P-14** and **SugarReg**.

## Selenium: The Immune Mineral

This important mineral is a free radical scavenger. Research suggests that adequate levels help to protect the body against cancer. Possible signs of deficiency include rheumatoid arthritis, elevated blood pressure, impaired thyroid function, loss of hair color and whitened fingernail beds. Selenium works as a cofactor with vitamin E, which is why it is found in **Vitamin E with Selenium**.

## Silicon: Keeping Tissues Strong and Flexible

Silica or silicon is used in the formation of bones, collagen, cartilage, elastic tissue, the myelin sheath in the nervous system, hair, skin and fingernails. This mineral gives tissues flexible strength. Without it, fingernails are brittle, hair frays more easily, skin lacks luster and bones and joints are more easily damaged. Silica helps the body lay calcium into the bones and can be very helpful in preventing and reversing osteoporosis. **HSN-W** is an herbal combination that is rich in silica and helps the body form healthier hair, skin, fingernails, bones, joints and nerves.

## Manganese: Enhancing Metabolism

Manganese plays roles in carbohydrate metabolism, protein metabolism, connective tissue health and joint fluid production. It is also important in vitamin B1 utilization. Deficiency symptoms may include nausea, dizziness, vomiting, skin rash, hearing loss, iron-deficiency anemia, high blood sugar levels, low blood cholesterol levels, impaired bone growth or skeletal abnormalities, excessive bone loss, weak hair and nails, loss of hair color, defective functioning of the reproductive system and hernias. **Red raspberry** is the richest herbal source of this important mineral, which is also found in **Cellular Energy**, **Target TS II** and **Skeletal Strength**.

## Vanadium: The Other Sugar Regulator

Vanadium is one of the trace minerals needed for healthy bones and teeth. It also lowers blood fats and inhibits cholesterol synthesis. Vanadium also plays a role in blood sugar regulation and can be helpful in diabetes. It is found in **SugarReg** and **Nature's Cortisol**.

*Continued on Page Four*

## Additional Help and Information

For more information about the importance of minerals in health and various mineral supplements, contact the person who gave this newsletter to you. Their contact information should be found at the top of page four. They have additional handouts and resource materials to help you. You can also consult some of the following sources:

*Empty Harvest* by Bernard Jensen

*PDR for Nutritional Supplements* by Sheldon Saul Hendler and David Rorvik

*The Comprehensive Guide to Nature's Sunshine Products* by Tree of Light Publishing



## Mineral Deficiencies May Be Undermining Your Health

Over the past 100 years, the mineral content of our foods has steadily declined, leaving many people mineral deficient. Learn why minerals are so important for building and maintaining good health inside...

*Continued from Page Three*

### Trace Minerals Supplements

There are many other minerals the body uses in minute amounts. For instance, molybdenum is an important enzyme activator. It is used for detoxification in the liver. Tin is needed for growth and protein synthesis. Nickel activates some liver enzymes. These minerals, and many others, can be found in **Ionic Minerals with Açai** and **Chinese Mineral Chi Tonic**. Both of these supplements contain varying amounts of 70 minerals, which is why many people see major improvements in their health when taking these supplements.

Ionic Minerals with Açai supplies these trace minerals in a highly bioavailable ionic form. The smaller particle size of the ionic minerals increases the body's ability to assimilate them. The

same minerals are also found in Mineral Chi Tonic in colloidal form, which has a larger particle size. The advantage of Mineral Chi Tonic is that it blends these minerals with herbs that support energy production, reduce stress and help to strengthen and balance the entire body.

Two other trace mineral supplements to consider are **Trace Mineral Maintenance** and **Nature's Sea Calcium**. Trace Mineral Maintenance also contains 70 trace minerals, but is in a tablet form. It is an excellent mineral supplement for pets. Nature's Sea Calcium is derived from Lithothamnium, a hard, brittle red algae that grows off the southwestern coast of Ireland. It contains high concentrations of naturally-occurring plant-source calcium and 70 other minerals. For more ideas about mineral supplements, talk to the person who gave you this newsletter.