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Why Minerals Mean Much to Us

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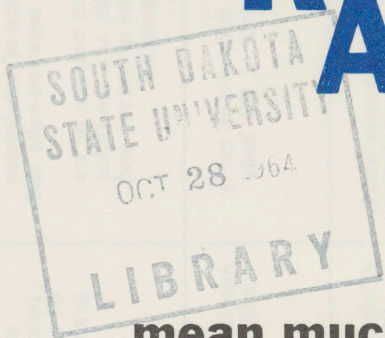
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Why MINERALS mean much to us



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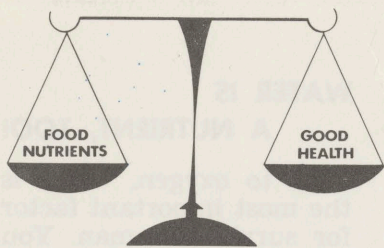
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Why Minerals Mean Much to Us

Did you ever stop to think that every person strives to be perfect in some way? Do you strive to be the best mother or cook or flower gardener in your neighborhood? You must strive for perfection, too, if your aim is the **best health**.

LIFE is a delicate balance of many, many different, competing chemical and physical processes. Poor health or even death may result if one or more breaks down or gets too far off balance.

HEALTH is the ideal when the perfect balance of life processes is achieved. It is much more than just absence of disease.



In order to work perfectly your body must have certain materials in exact amounts. These are called **NU-TRIENTS** and are found in food.

MINERALS HELP YOU BUILD GOOD HEALTH

Lumber, nails, bricks, paint, etc., are materials used to build a house. You can build a more perfect house if you have the right materials

and tools when you need them. You can maintain more perfect health if you eat the right amounts of essential nutrients each day.

Along with proteins, carbohydrates, fats, water and vitamins you must have **MINERALS** to build a strong body and carry on all the delicate life processes inside that body.

Minerals are inorganic (dead) elements sometimes called ash or inorganic salts. When wood is burned, ashes are left. These ashes are the mineral content of wood which does not burn. Food contains ash, too. If you burned the toast this morning, the charred remains were the bread minerals. Minerals play an important part in building the bony framework of your body. They are also necessary to carry on many vital processes as blood clotting, muscular contractions and various kinds of chemical reactions. Some minerals have to be present before certain other nutrients can perform their important functions.

WHAT? ... WHY? ...

HOW MUCH? ... AND WHERE? ...

are typical questions people ask about food nutrients. Look at the chart below to find answers to your questions about minerals found to be essential in human nutrition in largest amounts. Others, known as trace minerals, may be needed in very minute quantities. These are discussed on the next page.

Name of Nutrient	Some Reasons Why You Need It	How Much You Need Daily	Foods That Supply Important Amounts
Calcium and Phosphorus	To help build bones and teeth To help blood to clot (cal.) To help release energy from proteins, fats and carbohydrates (phos.) To help blood neutralize acids and alkalies (phos.) To help muscles contract and relax For normal response of nerves to stimulation	Adults: .8 gm. calcium .8 gm. phosphorus Children: 1 to 1.4 gm. cal. 1 to 1.4 gm. phos.	Milk, cheese, ice cream, kale, turnip and mustard greens, collards, dried fruits
Sodium and Potassium	For osmosis (passage of substances back and forth between cells and body fluids) To help keep normal balance of water between cells and the fluids For normal response of nerves and contraction of muscles	unknown (Intake is estimated to be 3 to 7 grams per day)	Table salt, milk, meat, fish, poultry, cheese, seafood, beets, celery, carrots
Iron	To build red blood cells which carry oxygen to all parts of the body	Adults: 10 to 12 milligrams	Liver, egg yolk, red meat, green leafy vegetables, dried fruits, enriched bread and cereals
Iodine	To help make thyroid hormones which regulates rate of body metabolism	Adults: .1 to .2 milligrams	Seafood, iodized salt, some in all plants

Magnesium	To help build bones and teeth To help chemical reactions take place To have healthy nerves	Adults: .3 gram	Nuts, legumes, cereals, meats, milk, dried fruit
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Measurements 30 grams in 1 ounce 1000 milligrams in 1 gram 1000 micrograms in 1 milligram

Abbreviations cal. = calcium phos. = phosphorus gm. = gram mg = milligram

A WORD ABOUT MILK AND MINERALS

It is almost impossible to get enough calcium and phosphorous without drinking milk, eating other dairy foods or dishes made with milk or cheese. This is why one of four Basic Food Groups recommended for health is composed of milk and milk products. Do you get enough milk in your diet?

TRACE MINERALS ARE STILL A MYSTERY

Work of the trace minerals, so-called because of their body presence in very small amounts, is not yet clearly defined. Scientists are studying them to find if they are essential to health, why you may need them and how much you must eat in food. This research takes quite a long time because they must work with such small quantities.

At present, research shows that trace minerals are involved in many chemical reactions taking place within your body. They also seem to help keep your digestive system healthy. Seven trace minerals which we know or suspect may be needed by man are listed. Possible requirements are given for some. These figures may change as continued study reveals real functions and needs.

Copper—2 milligrams daily

Manganese—about 15 to 20 milligrams daily

Zinc—about 15 to 20 milligrams daily

Molybdenum—about 15 to 20 milligrams or less

Fluorine—1 part per million parts of drinking water (Helps prevent tooth decay)

Cobalt—unknown (Needed to make vitamin B₁₂)

Selenium—unknown

Trace minerals appear in many different foods and in water. It is easy to get needed small amounts.

Danger: Minerals can be stored in bones of your body. Too much accumulated can be toxic. Do not take supplements unless doctor prescribes them.

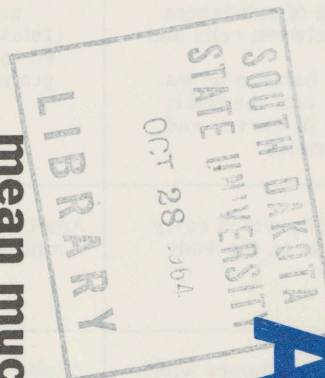


WATER IS A NUTRIENT, TOO!

Next to oxygen, water is the most important factor for survival of man. You can do without food for 5 weeks or more, but only a few days without water. **From 55 to 65 percent of your body is water.** Water is lost through breathing, perspiration and urine. More must be taken in to prevent dehydration of body tissues. Sweating cools the skin and helps keep a constant body temperature. In hot weather or during hard work more heat is generated. You require more sweating to keep cool. You must drink more water when the loss is greater. Salt (sodium chloride) helps hold water in the body and keep the correct water balance.

Thirst governs amount of water to drink. Food contains water. You get some from eating. The suggested amount to drink daily is 6 to 8 glasses.

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