

**Optimal health is all about a healthy diet.  
You truly are what you eat!**

Vitamins are essential for a healthy body. The human body requires 13 different vitamins: vitamin A, vitamin C, Vitamin D, Vitamin E, Vitamin K and the various B vitamins (biotin, folate, niacin, pantothenic acid, riboflavin, vitamin B-6 and vitamin B-12).

Minerals are vital nutrients the body uses in small amounts to work properly. Minerals are necessary to control body fluids inside and outside the cell wall and aid the process of converting food into energy. There are seven essential minerals: calcium, iron, magnesium, phosphorus, potassium, sodium, and sulfur. These seven minerals can not be created by the body; they must be ingested either through food or supplementation.

Here are some of the known vitamins and minerals available to us. The best way to enjoy the benefits from these is through a diet rich in nutrients, which can be challenging today. Supplementation may be advisable for you but you should determine this by discussing your options with your healthcare practitioner first.

### **Vitamin/Mineral and the Health Benefits**

#### **Vitamin A**

Promotes growth and repair of body tissues, bone formation and healthy skin and hair.  
Essential for night vision.

#### **Beta Carotene**

Serves as an antioxidant and may help protect against certain cancers, cataracts and heart disease. Converted to vitamin A in the body.

#### **Vitamin C**

Promotes healthy cell development, wound healing and resistance to infections. Serve as an antioxidant and may help protect against certain cancers, cataracts and heart disease.

#### **Vitamin D**

Aids in the absorption of calcium and helps to build bone mass and prevent bone loss. Helps maintain blood levels of calcium and phosphorous.

### **Vitamin E**

Helps protect cells from free radical injury and is key for normal growth and development. Serves as antioxidant and may help protect against cancers, cataracts and heart disease.

### **Vitamin K**

Needed for normal blood clotting, may help protect against osteoporosis, may inhibit some cancer tumors, also aids in reducing excessive menstrual flow.

### **Vitamin B-1 (Thiamin)**

May promote growth, aids in digestion of carbohydrates, improve mental attitude. Utilized for converting carbohydrates to energy. Needed for normal functioning of the nervous system and muscles, including the heart muscle.

### **Vitamin B-2 (Riboflavin)**

Is needed to process amino acids and fats, activate vitamin B6 and folic acid, and help convert carbohydrates into ATP, the fuel the body runs on. Aids in growth and reproduction, promotes healthy hair, skin, nails, alleviates eye fatigue, eliminate soreness of mouth and lips, help burn carbohydrates, fat and proteins.

### **Niacin (B-3)** □

Niacin is very effective in lowering LDL (or called bad cholesterol) and raising HDL (also called good cholesterol). It also promotes a healthy digestive system, increases circulation, may reduce high blood pressure, a

Pantothenic acid, sometimes called vitamin B5, is essential in producing, transporting, and releasing the energy from fats. Aids in the synthesis of cholesterol (needed for vitamin D and hormone synthesis). Also activates the adrenal glands and has been known to help lower blood levels of cholesterol and triglycerides. Aids in normal growth and development.

### **Vitamin B-6**

Vitamin B6 is the master vitamin in the processing of amino acids—the building blocks of all proteins and some hormones. Vitamin B6 helps to make and take apart many amino acids and

is also needed to make serotonin, melatonin, and dopamine. Vitamin B6 also aids in the formation of several neurotransmitters and is therefore an essential nutrient in the regulation of mental processes and possibly mood.

### **Vitamin B-12**

Vitamin B12 is needed for normal nerve cell activity, DNA replication, and production of the mood-affecting substance called SAM (S-adenosyl methionine). Vitamin B12 works closely with folic acid. Vital for blood formation and healthy nervous system.

### **Biotin**

A water-soluble B vitamin, acts as a coenzyme during the metabolism of protein, fats, and carbohydrates.

### **Choline**

Helps lower cholesterol, transferring nerve impulse to the brain, helps against memory loss and senile dementia, aids the liver in removing poisons and drugs from the bloodstream.

### **Folic Acid (folate)**

Folic acid is needed for proper DNA synthesis; for normal growth and development and red blood cell formation. Helps reduce risk of neural tube birth defects.

### **Inositol**

Helps lower cholesterol, important for healthy hair, prevent premature falling out of hair, prevent eczema, helps redistribute body fat, may relieve diabetic peripheral neuropathy.

### **Calcium**

Essential for developing and maintaining healthy bones and teeth. Assists in blood clotting, muscle contraction and nerve transmission. Helps reduce risk of osteoporosis.

### **Boron**

Boron is essential to vitamin D for the metabolism of calcium, phosphorus and magnesium in building strong bones. It is also involved in the absorption of estrogen in preventing

postmenopausal osteoporosis and building muscle.

### **Chromium**

Chromium is an essential trace mineral that helps the body maintain normal blood sugar levels. It may also play a role in maintaining healthy levels of HDL (the “good” cholesterol).

### **Copper**

Aids in the development of red blood cells as well as the maintenance of healthy bones, nerves and the immune system

### **Iron**

Iron is part of the hemoglobin, the oxygen carrying component of the blood. Iron is necessary for red blood cell formation and function.

### **Magnesium**

Magnesium is needed for bone, protein, and fatty acid formation, making new cells, activating B vitamins, relaxing muscles, clotting blood, and forming ATP—the energy the body runs on. Insulin secretion and function also require magnesium. Activates nearly 100 enzymes and helps nerves and muscles function.

### **Phosphorus**

Works with calcium to develop and maintain strong bones and teeth. Enhances use of other nutrients.

### **Potassium**

Is needed to regulate water balance, levels of acidity, blood pressure, and neuromuscular function. It's also required for carbohydrate and protein metabolism.

### **Selenium**

Essential component of a key antioxidant enzyme. Necessary for normal growth and development. Helps activate thyroid hormones.

### **Silicon (silica)**

Necessary for bone and connective tissue formation, for healthy hair, skin and nails; and calcium absorption. Needed to maintain flexible arteries and to help prevent cardiovascular disease.

### **Sodium**

Is an absolute necessary mineral for the human body. Needed for proper nerve and muscle function; aids in the absorption of major nutrients and the helps the body maintain adequate water and mineral balance.

### **Sulphur**

Is an acid-forming mineral. Sulfur cleanses the blood, helps the body to fight bacteria, and protects cells. It is also known to enhance beautiful skin, hair, and nails.

### **Zinc**

Essential part of more than 100 enzymes involved in digestion, metabolism, reproduction and wound healing.