

# Vitamins and Minerals

Mineral	What it does	Good food sources	Effects of deficiency
<b>Calcium</b>	Builds and protects bones and teeth. Helps with muscle contractions and relaxation, blood clotting, and nerve impulse transmission. Plays a role in hormone secretion and enzyme activation. Helps maintain healthy blood pressure	Yogurt, cheese, milk, tofu, sardines, salmon, fortified juices, leafy green vegetables, such as broccoli and kale (but not spinach or Swiss chard, which have binders that lessen absorption)	Muscle cramps, brain function, rickets in children; (soft bones) and osteoporosis in adults.
<b>Chromium</b>	Enhances the activity of insulin, helps maintain normal blood glucose levels, and is needed to free energy from glucose	Meat, poultry, fish, some cereals, nuts, cheese	Can affect the potency of insulin in regulating sugar balance.
<b>Copper</b>	Plays an important role in iron metabolism. Helps make red blood cells	Liver, shellfish, nuts, seeds, whole-grain products, beans, prunes	Anemia, hair problems, dry skin, vitamin C deficiency
<b>Fluoride (Fluorine)</b>	Encourages strong bone formation. Keeps dental cavities from starting or worsening	Water that is fluoridated, toothpaste with fluoride, marine fish, teas	Weak teeth and bones.
<b>Iodine</b>	Part of thyroid hormone, which helps set body temperature and influences nerve and muscle function, reproduction, and growth. Prevents goiter and a congenital thyroid disorder	Seafood, seaweed, dairy, products, iodized, salt	Enlargement of the thyroid gland.
<b>Iron</b>	Helps the blood and muscles carry oxygen to the body.	Liver, red meat, egg yolk, legumes, whole / enriched grains, dark green vegetables	Tiredness and lethargy, feelings of weakness, insomnia, palpitations, headaches, shortness of breath, difficulty concentrating, brittle nails, cracked lips
<b>Magnesium</b>	Helps muscles work, aids metabolism and aids bone growth.	Green vegetables such as spinach and broccoli, legumes, cashews, sunflower seeds and other seeds, halibut, whole-wheat bread, milk	Fatigue, numbness, poor memory, muscle twitching and irritability, tingling, rapid heartbeat.
<b>Manganese</b>	Helps bone growth and cell production. Helps metabolize amino acids, cholesterol, and carbohydrates	Nuts, legumes, whole grains, tea	Deficiency is rare but could include dermatitis, problems metabolizing carbohydrates, poor memory, nervous irritability, fatigue, blood sugar problems, heavy menstrual periods, fragile bones
<b>Phosphorus</b>	With calcium builds bones and teeth. Needed for metabolism, body chemistry, nerve and muscle function	Chicken Breast, Milk, Lentils, Egg Yolks, Nuts, Cheese	Deficiency is rare but could include weakness; bone pain; anorexia
<b>Potassium</b>	Balances fluids in the body. Helps maintain steady heartbeat and send nerve impulses. Needed for muscle contractions. A diet rich in potassium seems to lower blood pressure. Getting enough potassium from your diet may benefit bones	Peanuts, Bananas, Orange Juice, Green Beans, Mushrooms, Oranges, Broccoli, Sunflower Seeds.	Nausea, anorexia, muscle weakness, irritability, depression, fatigue, hypertension, decreased heart rate.
<b>Sodium</b>	Balances fluids in the body. Helps send nerve impulses. Needed for muscle contractions. Impacts blood pressure; even modest reductions in salt consumption can lower blood pressure	Salt, soy sauce, processed foods,	Fatigue, apathy, and nausea as well as cramps in the muscles of the extremities
<b>Zinc</b>	Helps wounds to heal and aids taste and smell sensory.	Red meat, poultry, oysters and some other seafood, fortified cereals, beans, nuts	Slow healing of wounds; loss of taste; retarded growth and delayed sexual development in children.