


Minerals are elements that originate in the soil and cannot be created by living things, such as plants and animals. Yet plants, animals and humans need minerals in order to be healthy. Plants absorb minerals from the soil, and animals get their minerals from the plants or other animals they eat. Most of the minerals in the human diet come directly from plants, such as fruits and vegetables, or indirectly from animal sources. Minerals may also be present in your drinking water, but this depends on where you live, and what kind of water you drink (bottled, tap). Minerals from plant sources may also vary from place to place, because the mineral content of the soil varies according to the location in which the plant was grown.

Note that I have listed only those foods which contain the listed vitamins in significant quantities. For more detailed information, please visit the [United States Department of Agriculture \(USDA\) Food & Nutrition Center](#).

Nutrient - Estimated Amounts Needed	Benefits/Deficiency Symptoms	Fruit Sources	Vegetable Sources	Nut/Seed Sources
 <p>Adults need 1000 mg/day.</p> <p>Children need 800 to 1300 mg/day.</p> <p>Recommended supplement: Calcium</p>	<p>Calcium eases insomnia and helps regulate the passage of nutrients through cell walls. Without calcium, your muscles wouldn't contract correctly, your blood wouldn't clot and your nerves wouldn't carry messages.</p> <p>If you don't get enough calcium from the food you eat, your body automatically takes the calcium needed from your bones. If your body continues to tear down more bone than it replaces over a period of years in order to get sufficient calcium, your bones will become weak and break easily.</p> <p>Deficiency may result in muscle spasms and cramps in the</p>	<p>Most fruits contain some calcium:</p> <p>Orange Blackberries Kiwi Tomatoes</p> <p>Lime Strawberry Lemon Grapes Apples Cantaloupe Bananas Peach</p>	<p>Artichoke Peas Squash - summer Broccoli Kale Lima Beans Squash - winter Spinach Carrots Avocado Asparagus</p>	<p>Almonds Brazil Nuts Pistachios Peanuts Walnuts Chestnuts Macadamias Pecans Sunflower Seeds Filberts/Hazelnuts Pumpkin Seeds Cashews Pine Nuts/Pignolias</p>

	short term and osteoporosis.			
<p>Copper</p> <p>The estimated safe and adequate intake for copper is 1.5 - 3.0 mg/day. Many survey studies show that Americans consume about 1.0 mg or less of copper per day</p>	<p>Copper is involved in the absorption, storage and metabolism of iron and the formation of red blood cells. It also helps supply oxygen to the body. The symptoms of a copper deficiency are similar to iron-deficiency anemia.</p>	<p>Most fruits contain a small amount of copper, but <u>kiwi fruit</u> has a significant amount.</p> <p><u>Apples</u> <u>Bananas</u> <u>Blackberries</u> <u>Cantaloupe</u> <u>Grapes</u> <u>Kiwi Fruit</u> <u>Lemon</u> <u>Lime</u> <u>Orange</u> <u>Peach</u> <u>Strawberry</u> <u>Tomatoes</u></p>	<p>Most vegetables have some copper, but <u>Lima Beans</u> have a significant amount.</p> <p><u>Artichoke</u> <u>Avocado</u> <u>Broccoli</u> <u>Carrots</u> <u>Cauliflower</u> <u>Corn</u> <u>Cucumber</u> <u>Green Pepper</u> <u>Kale</u> <u>Lima Beans</u> <u>Mushrooms</u> <u>Onions</u> <u>Peas</u> <u>Potatoes</u> <u>Spinach</u> <u>Squash - Summer</u> <u>Squash - Winter</u> <u>Sweet Potato</u></p>	<p>Most nuts contain a trace amount of copper.</p>
<p>Iodine</p> <p>Adults should get 150 mcgs per day.</p> <p>The children's recommendation for iodine is 70 to 150 mcg (that is micrograms).</p>	<p>Iodine helps regulate the rate of energy production and body weight and promotes proper growth. It also promotes healthy hair, nails, skin and teeth.</p> <p>In countries where iodine is deficient in the soil, rates of hypothyroidism, goiter and retarded growth from iodine deficiency are very high.</p>	<p>Fruits grown in iodine-rich soils contain iodine.</p>	<p>Vegetables grown in iodine-rich soils contain iodine.</p>	<p>Nuts grown in iodine-rich soils contain iodine.</p>

	In developed countries, however, because iodine is added to table salt, iodine deficiencies are rare.			
<p>Iron</p> <p>Women and teenage girls need at least 15 mg a day, whereas men can get by on 10.</p> <p>It is important that children get about 10 to 12 mg of iron per day, preferably from their diet. Breastfeeding is the best insurance against iron deficiency in babies.</p>	<p>Most at risk of iron deficiency are infants, adolescent girls and pregnant women.</p> <p>Iron deficiency in infants can result in impaired learning ability and behavioral problems. It can also affect the immune system and cause weakness and fatigue.</p> <p>To aid in the absorption of iron, eat foods rich in vitamin C at the same time you eat the food containing iron. The tannin in non-herbal tea can hinder absorption of iron.</p> <p>Take iron supplements and your vitamin E at different times of the day, as the iron supplements will tend to neutralize the vitamin E.</p> <p>Vegetarians need to get twice as much dietary iron as meat eaters.</p>	<p>While most fruits have some iron, probably the best source of iron for children is raisins, which are rich in iron. Other fruits which have a good amount of iron are:</p> <p><u>Blackberries</u> <u>Kiwi</u> <u>Strawberry</u> <u>Tomatoes</u></p> <p><u>Bananas</u> <u>Grapes</u></p>	<p>Vegetables:</p> <p><u>Lima Beans</u> <u>Peas</u> <u>Avocado</u> <u>Kale</u> <u>Spinach</u> <u>Broccoli</u> <u>Squash - summer</u> <u>Potatoes</u> <u>Sweet potato</u> <u>Squash - winter</u> <u>Corn</u> <u>Carrots</u> <u>Mushrooms</u></p>	<p>Most nuts contain a small amount of iron.</p>

<h2>Magnesium</h2> <p>Adults need 310 to 420 mg/ day.</p> <p>Children need 130 to 240 mg/day.</p>	<p>Magnesium is needed for bone, protein, making new cells, activating B vitamins, relaxing nerves and muscles, clotting blood, and in energy production.</p> <p>Insulin secretion and function also requires magnesium. Magnesium also assists in the absorption of calcium, vitamin C and potassium.</p> <p>Deficiency may result in fatigue, nervousness, insomnia, heart problems, high blood pressure, osteoporosis, muscle weakness and cramps.</p>	<p>Fruits:</p> <p>Kiwi Bananas</p> <p>Tomatoes Blackberries Strawberry Orange</p>	<p>Vegetables:</p> <p>Avocado Artichoke Peas Squash - summer Potatoes Corn Spinach Kale Broccoli Squash - winter Sweet potato</p>	<p>Nuts:</p> <p>Brazil Nuts Cashews Almonds Pumpkin Seeds Pine Nuts/Pignolias Peanuts Walnuts Macadamias Sunflower Seeds Pecans Pistachios Chestnuts Filberts/Hazelnuts</p>
<h2>Manganese</h2> <p>2.0-5.0 mg/day for adults 2.0-3.0 mg for children 7 - 10 1.5-2.0 mg for children 4 - 6 1.0-1.5 mg for children 1 - 3 0.6-1.0 mg for children 6 mo - 1yr 0.3-0.6 mg for infants 0-6 months</p>	<p>The functions of this mineral are not specific since other minerals can perform in its place. Manganese does function in enzyme reactions concerning blood sugar, metabolism, and thyroid hormone function. Deficiency is rare in humans.</p>	<p>Most fruits contain manganese, but the following fruits have a significant amount:</p> <p>Blackberries Strawberry</p>	<p>Most vegetables have some manganese, but these have a significant amount:</p> <p>Peas Lima Beans Sweet potato Kale Squash - summer</p>	<p>Most nuts contain manganese, but the following nuts have a significant amount:</p> <p>Pine Nuts/Pignolias Pecans Walnuts Chestnuts</p>
<h2>Phosphorous</h2>	<p>In combination with calcium, phosphorus is necessary for the formation of bones and teeth</p>	<p>Fruits:</p> <p>Kiwi Tomatoes Blackberries Bananas</p>	<p>Vegetables:</p> <p>Lima Beans Peas Artichoke Avocado Corn</p>	<p>Nuts:</p> <p>Sunflower Seeds Brazil Nuts Cashews Pine</p>

<p>Adults need 700 mg/day.</p> <p>Children need 500 to 1250 mg/day.</p>	<p>and of the nerve cells.</p> <p>Phosphorus is second to calcium in abundance in the body.</p> <p>It is very widely distributed in both plant and animal foods so it is unlikely that deficiency would be a problem.</p>	<p>Strawberry</p> <p>Orange Peach Lime Cantaloupe</p>	<p>Potatoes Asparagus Broccoli Kale Mushrooms Sweet potato</p>	<p>Nuts/Pignolias Pistachios Almonds Peanuts Walnuts Chestnuts Pecans Macadamias Filberts/Hazelnuts Pumpkin Seeds</p>
<p>Potassium</p> <p>Estimated Minimum Requirements 2000 mg/day for adults and adolescents.</p>	<p>Potassium is essential for the body's growth and maintenance. It is necessary to keep a normal water balance between the cells and body fluids.</p> <p>Potassium plays an essential role in proper heart function.</p> <p>Deficiency may cause muscular cramps, twitching and weakness, irregular heartbeat, insomnia, kidney and lung failure.</p>	<p>Fruits: Bananas Tomatoes</p> <p>Blackberries Strawberry Orange Cantaloupe Peach Grapes Apples Lemon Lime</p>	<p>Vegetables: Avocado Lima Beans Potatoes Peas Artichoke Squash - summer Kale Sweet potato Broccoli Corn Squash - winter Carrots Spinach Asparagus Green Pepper Mushrooms Onions Cauliflower Cucumber</p>	<p>Nuts: Chestnuts Sunflower Seeds Pistachios Pumpkin Seeds Almonds Brazil Nuts Peanuts Cashews Pine Nuts/Pignolias Walnuts Pecans Macadamias Filberts/Hazelnuts</p>
<p>Selenium</p> <p>Men need 70 mcgs/day.</p> <p>Women need 55 mcgs/day.</p>	<p>Selenium is a part of several enzymes necessary for the body to properly function. Generally, selenium functions as an antioxidant that works in conjunction with</p>	<p>Fruits: Bananas Kiwi Strawberry Blackberries Tomatoes Orange Peach Apples</p> <p>Grapes</p>	<p>Vegetables: Lima Beans Peas Mushrooms Kale Corn Sweet potato Potatoes Squash - winter Onions Squash - summer</p>	<p>Most nuts contain selenium, but the following nuts have a significant amount: Brazil Nuts Sunflower Seeds Cashews Pistachios Peanuts Walnuts</p>

	<p>vitamin E.</p> <p>Selenium deficiency is rare in humans.</p>		<p>Spinach</p>	<p>Almonds Chestnuts Pecans</p>
<p>Sodium</p> <p>500 mg/day for adults</p> <p>120 mg for infants</p> <p>Daily Value recommendation - no more than 2,400 to 3,000 mg/day</p>	<p>Sodium is required by the body to regulate blood pressure and blood volume. It helps regulate the fluid balance in your body. Sodium also helps in the proper functioning of muscles and nerves.</p> <p>Many people get far more sodium than they need, which tends to cause health problems.</p> <p>Different body types need different amounts of sodium.</p>	<p>Sodium occurs naturally in almost all fresh, whole fruits.</p>	<p>Sodium occurs naturally in almost all fresh, whole vegetables</p>	<p>Nuts: Peanuts Pumpkin Seeds Cashews Pistachios Chestnuts Macadamias Almonds</p>
<p>Zinc</p> <p>Men need 15 mgs/day.</p> <p>Women should get 12 mg/day.</p> <p>Children need 10 to 15 mg/day.</p> <p>Vegetarians need about 50 percent more zinc in their diet than meat eaters.</p>	<p>This metal is important in a number of key activities, ranging from protein and carbohydrate metabolism to the immune system, wound healing, growth and vision.</p> <p>Severe deficiency can contribute to stunted growth. Deficiency can sometimes be seen in white spots on the fingernails.</p>	<p>Most fruits contain a small amount of zinc, but the following have a significant amount: Blackberries Kiwi</p>	<p>Most vegetables have some zinc, but these have a significant amount: Peas Lima Beans Squash - summer Potatoes Corn Sweet potato</p>	<p>Most nuts have some zinc, but these have a significant amount: Pumpkin Seeds Pine Nuts/Pignolias Cashews Sunflower Seeds Pecans Brazil Nuts Almonds Walnuts</p>