

Benefits of Trace Minerals

Written by Lindsay Boyers; Updated December 02, 2018



Trace minerals are inorganic substances that your body needs in small amounts to function properly. In general, you need less than 20 milligrams of each trace mineral daily, although specific amounts depend on your age and sex. Although you only need to consume a small amount of trace minerals, they are vital to your health because each mineral provides a unique benefit.

Iron

Approximately, two-thirds of the iron in your body is found in hemoglobin – the protein in your red blood cells. The iron in hemoglobin binds to oxygen from your lungs and delivers it to the rest of the tissues in your body. Iron also transports oxygen to your muscles and aids in the synthesis of neurotransmitters – the chemical messengers in your brain.

Zinc

Zinc is necessary for DNA and RNA synthesis. Zinc also allows your body to produce white blood cells, which keep your immune system strong, and plays a role in wound healing. Infants need adequate amounts of zinc to grow and develop properly.

Selenium

Selenium helps regulate the thyroid hormones in your body and also functions as an antioxidant, protecting your body from free radicals – unstable substances that may contribute to the development of chronic diseases.

Fluoride

Fluoride is best known for its role in keeping your teeth strong and healthy. Fluoride helps repair enamel that has begun to erode and provides a protective barrier between your teeth and acid in your mouth.

Chromium

Chromium increases the effectiveness of insulin in your cells. Because of this, researchers believe that chromium may help diabetics improve their blood sugar control, although this has not been proven, according to “Nutrition and You” by Joan Salge Blake.

Copper

Copper allows your body to absorb iron and helps your body make the hemoglobin in your red blood cells. Copper also helps protect your body from free radicals, allows blood to clot properly and keeps your immune system strong. Many of the enzymes in your body – the substances that allow chemical reactions to take place – rely on the presence of copper to function properly.

Iodine

Iodine allows your thyroid to make the hormones that help regulate metabolic rate and keep your heart, lungs and intestines healthy. Consuming adequate amounts of iodine helps prevent goiter, a condition characterized by an enlarged thyroid gland.

Manganese

Manganese helps your body metabolize carbohydrates, protein and fat. The trace mineral also aids in bone formation.

Molybdenum

Molybdenum functions as a cofactor, which means it aids enzymes in triggering chemical reactions. Specifically, molybdenum helps your body break down amino acids.