

Vitamin and Mineral Reference Chart

Vitamins	USRDA	Functions
Vitamin A	5000 IU	Maintenance of healthy skin, eyes, bones, hair and teeth (1 RE = 3.3 IU)
Beta Carotene	**	Beta Carotene is an antioxidant and can be converted by the body to vitamin A as needed
Vitamin D	400 IU	Assists in the absorption and metabolism of calcium and phosphorus for strong bones and teeth
Vitamin E	30 IU	As an antioxidant, helps protect cell membranes, lipoproteins, fats and vitamin A from destructive oxidation. Helps protect red blood cells
Vitamin K	65-80 mcg	Needed for proper blood clotting
Vitamin C	60 mg (500-1000mg recommended)	As an antioxidant, inhibits the formation of nitrosamines (a suspected carcinogen) Important for maintenance of bones, teeth, collagen and blood vessels (capillaries) Enhances iron absorption, red blood cell formation
Vitamin B-1 (Thiamine)	1.5 mg (.5mg/1000 cal)	Releases energy from foods Needed for normal appetite and for functioning of nervous system
Vitamin B-2 (Riboflavin)	1.7 mg (.6mg/1000cal)	Releases energy from foods Necessary for healthy skin and eyes
Vitamin B-3 (Niacin)	20 mg (6.6mg/1000 cal)	Releases energy from foods Aids in maintenance of skin, nervous system and proper mental functioning
Vitamin B-6 (Pyridoxine)	2 mg (1.5mg/100gms protein intake)	Releases energy from foods Plays a role in protein and fat metabolism Essential for function of red blood cells and hemoglobin synthesis
Vitamin B-12 (cyanocobalamin)	6 mcg	Prevents pernicious anemia Necessary for healthy nervous system Involved in synthesis of genetic material (DNA) (can be stored in body unlike other water soluble vitamins)
Biotin (Vitamin H)	300 mcg	Releases energy from foods Plays a role in metabolism of amino acids Needed for normal hair production and growth
Vitamin B-5 (Pantothenic Acid)	10 mg	Releases energy from foods Involved in synthesis of acetylcholine, an excitatory neurotransmitter Needed for normal functioning of the adrenal glands
Folic Acid	400 mcg	Necessary for proper red blood cell formation Plays a role in the metabolism of fats, amino acids, DNA and RNA Needed for proper cell division and protein synthesis

Choline ***	**	As a lipotropic nutrient, prevents fat accumulation in the liver Precursor to acetylcholine, a major neurotransmitter in the brain
Inositol ***	**	Involved in calcium mobilization

Vitamins A,D,E and K are FAT SOLUBLE

Minerals	US RDA	Functions
Boron ***	**	Possibly plays a role in maintaining strong bones Affects calcium and magnesium metabolism May be needed for proper membrane function
Calcium	1000 mg	Builds strong bones and teeth Involved in nerve transmission and muscle contraction
Chromium	**	As part of Glucose Tolerance Factor (GTF), it works with insulin to regulate blood sugar levels
Copper	2 mg	Essential for red blood cell formation, hemoglobin synthesis Involved in many enzyme systems including, superoxide dismutase (SOD), a major antioxidant enzyme system
Iodine	150 mcg	Needed for proper functioning of the thyroid gland and production of thyroid hormones
Iron	18 mg	Prevents anemia; as a constituent of hemoglobin, transports oxygen throughout the body
Magnesium	400 mg	Needed in many enzyme systems, especially those involved with energy production Essential for proper heartbeat and nerve transmission Constituent of bones and teeth
Manganese	**	Cofactor in many enzyme systems including those involved in bone formation, energy production and protein metabolism
Molybdenum	**	Required for proper growth and development Plays a role in fat and nucleic acid metabolism Needed for proper sulfur metabolism
Phosphorus	1000 mg	Maintains strong bones and teeth Necessary for muscle and nerve function
Potassium	**	An electrolyte needed to maintain fluid balance, proper heartbeat and nerve transmission
Selenium	**	As an antioxidant, it is a constituent of glutathione peroxidase Protects vitamin E
Silicon ***	**	Needed for proper bone structure and growth
Zinc	15 mg	Component of insulin; required for blood sugar control Needed for proper taste and hearing Important in wound healing and enzyme activation

- U.S. RDA = United States Recommended Daily Allowance as established by the Federal Food and Drug Administration (FDA)
- *** Nutrients essential for some higher animals but not proven to be necessary for humans