



NUTRILITE®

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Vitamin and Mineral Reference Chart

Fat Soluble Vitamins				
Nutrient	Daily Value	Functions	Dietary Sources	Comments
Vitamin A (retinol and/or beta carotene)	5,000 IU	Required for vision, growth and bone development; helps maintain healthy mucous membranes and immune system. Beta carotene functions as an antioxidant.	Preferred: Fortified skim or low-fat milk, dark-green, yellow or orange fruits and vegetables. Use Sparingly: Fortified whole milk, liver, egg yolks, butter, margarine	Large intakes (10 times the RDI) can be toxic. During pregnancy, avoid intakes greater than the RDI and seek the advice of a physician. Beta carotene is nontoxic; however, large amounts of beta carotene may not be beneficial for smokers and ex-smokers.
Vitamin D	400 IU	Promotes normal bone growth and tooth function; stimulates calcium and phosphorus absorption.	Preferred: Fortified skim milk or low-fat milk, fortified cereals. Use Sparingly: Fortified whole milk, liver, egg yolks, butter, margarine.	May be toxic with intakes greater than five times the DV (2,000 IU).
Vitamin E	30 IU	As an antioxidant, protects body cells, vitamin A and unsaturated fatty acids; maintains normal red blood cells.	Preferred: Whole grains, wheat germ, nuts. Use Sparingly: vegetable oils.	Vitamin E needs increase as intake of polyunsaturated fats increases. If using anticoagulant medication, seek advice of a physician.

Water Soluble Vitamins				
Nutrient	Daily Value	Functions	Dietary Sources	Comments
Thiamine (B1)	1.5 mg	Assists in carbohydrate metabolism and energy production; required for normal nerve function.	Preferred: whole grains, enriched breads and cereals, legumes, lean meats, poultry, fish. Use Sparingly: fatty meats, liver.	Water soluble; excess is excreted by the body.
Riboflavin	1.7 mg	Assists in production	Preferred: low-fat or	Water soluble; excess is

Water Soluble Vitamins				
Nutrient	Daily Value	Functions	Dietary Sources	Comments
(B2)		of energy from foods and the formation of red blood cells; involved in many metabolic events.	nonfat dairy products, whole grains and cereals, green, leafy vegetables. Use Sparingly: liver, egg yolks.	excreted by the body.
Niacin	20 mg	Assists in release of energy from carbohydrates, fats and proteins; helps maintain healthy skin.	Preferred: whole grains, enriched breads and cereals, lean meats. Use Sparingly: liver, fatty meats, eggs.	One form of niacin, nicotinic acid, can cause flushing of the skin and gastrointestinal upset with very high intakes (1,000 to 3,000 mg/day).
Pantothenic acid (vitamin B5)	10 mg	Helps release energy from foods; needed for synthesis of many substances.	Preferred: lean meats, fish, whole-grain cereals, legumes. Use Sparingly: fatty meats, eggs.	Water soluble; excess is excreted by the body.
Vitamin B6	2 mg	Essential for protein metabolism and nervous system function; involved in synthesis of hormones and red blood cells.	Preferred: bananas, whole-grain breads and cereals, chicken, fish. Use Sparingly: avocados, nuts.	Very large intakes (more than 2,000 mg/day) over a period of months can result in a loss of motor coordination.
Vitamin B12	6 mcg	Essential for normal growth and for production of red blood cells; helps maintain a healthy nervous system.	(Animal foods only) Preferred: lean meats, chicken, fish, skim or low-fat dairy products. Use Sparingly: eggs, liver, fatty meats.	Water soluble; excess is excreted by the body.
Folic acid	0.4 mg	Essential for red blood cell formation and synthesis of DNA and protein.	Preferred: green leafy vegetables, oranges and other fruits, wheat germ. Use Sparingly: liver.	Adequate folic acid intake during reproductive years reduces risk of neural-tube birth defects.
Biotin	0.3 mg	Involved in metabolism of carbohydrates and synthesis of fats and proteins.	Preferred: legumes, nuts. Use Sparingly: eggs, liver.	Water soluble; excess is excreted by the body.
Vitamin C	60 mg	Essential for formation of connective tissue, bones and teeth; assists in utilization of other nutrients; acts as an antioxidant.	Preferred: citrus fruits, melons, strawberries, potatoes, broccoli, green leafy vegetables	Some people experience adverse effects with very large intakes.

Minerals				
Nutrient	Daily Value	Functions	Dietary Sources	Comments
Calcium	1,000 mg	Forms strong bones and teeth; stimulates blood clotting after injury; required for normal muscle and nerve activity	Preferred: Skim or low-fat dairy products, fish with edible bones, green leafy vegetables. Use Sparingly: whole-fat dairy products	Intakes of two grams or more per day can decrease absorption of iron, zinc or other minerals.
Phosphorus	1,000 mg	Forms bones and teeth with calcium; regulates energy release from foods.	Preferred: lean meats, skim or low-fat dairy products, fish, poultry. Use Sparingly: eggs.	Abundant in the average diet
Magnesium	400 mg	Required for normal muscle and nerve activity; involved in metabolism of energy and the genetic material DNA.	Preferred: Green leafy vegetables, legumes, whole-grain cereals, seafood. Use Sparingly: nuts, seeds.	Large doses may cause laxative effect.
Iron	18 mg	Essential part of hemoglobin, which carries oxygen in the blood; involved in energy metabolism.	Preferred: Lean meat, poultry, fish, whole grains or enriched cereals, legumes.	Considered safe for healthy adults in amounts up to 75 mg/day.
Zinc	15 mg	Essential for proper growth and development; involved in protein synthesis and digestion, wound healing, and synthesis of DNA.	Preferred: lean meats, poultry, seafood, whole-grain cereals, legumes. Use Sparingly: egg yolks.	Large chronic intakes (more than 150 mg/day) can impair copper status and immune function.
Iodine	150 mcg	As part of the thyroid hormone, helps regulate growth, development and energy metabolism.	Preferred: Seafood, skim or low-fat dairy products. Use Sparingly: iodized salt.	
Copper	2 mg	Involved in iron metabolism, protein synthesis, maintenance of the cardiovascular and nervous systems.	Preferred: Legumes, whole-grain cereals, seafood. Use Sparingly: liver, nuts.	

Minerals				
Nutrient	Daily Value	Functions	Dietary Sources	Comments
Manganese	2 mg	Necessary for the normal development of skeletal and connective tissues; part of the enzymes involved in fatty acid synthesis; involved in carbohydrate metabolism.	Preferred: whole-grain products, green vegetables, legumes. Use Sparingly: tea (while tea is in exceptionally rich source, large amounts may impair iron status.)	
Selenium	70 mcg	As a component of an enzyme system; acts as an antioxidant.	Preferred: grain and cereal products, fish, lean meat, poultry, skim or low-fat dairy products.	
Chromium	120 mcg	Essential for normal metabolism of glucose.	Preferred: vegetables, whole-grain cereals, fruits, brewer's yeast. Use Sparingly: liver, cheese.	
Molybdenum	75 mcg	Essential part of several enzymes in the body.	Preferred: legumes, whole-grain products, lean meats.	

References

1. *Modern Nutrition in Health and Disease*, 8th Edition.
2. *RDA*, 10th Edition.
3. *The Essential Guide to Vitamins and Minerals*. Elizabeth Somer.
4. Vitamins and minerals: efficacy and safety. *American Journal of Clinical Nutrition* article.
5. *Optimal Nutrient Intake*. Rehnborg Center Nutrition Services.
6. *Nutrition News and Views*, Spring 1995, Nutrition Services.