

Essential Needs of Vitamins & Minerals

Water-Soluble Vitamins

B Vitamins

- Biotin (Vitamin B7) Hair, skin, and nails; energy production
- Folic Acid (Folate, Vitamin B9) Blood glucose levels; cell growth
- Niacin (Vitamin B3) Cholesterol; cardiovascular health
- Pantothenic Acid (Vitamin B5) Blood cell production; energy production
- Riboflavin (Vitamin B2) Growth, protein, carb, and fat metabolism
- Thiamin (Vitamin B1) Glucose metabolism; nerve, muscle and heart function
- Vitamin B6 Red Blood cells; neurotransmitters; carb and fat metabolism
- Vitamin B12 Red blood cell formation; nervous system; DNA production

C Vitamin – cell repair, immune system; wound healing

Fat-Soluble Vitamins

- Vitamin A *Immune System; vision*
- Vitamin D Bones; immune system
- Vitamin E Free radical neutralization; immune system, skin
- Vitamin K Blood clotting; calcium balance; bone metabolism

Minerals

- Calcium Bones; blood clotting; muscle contraction
- Chloride Electrolyte balance; keeps fluid inside cells
- Magnesium Muscle and nerve function; blood glucose levels
- Phosphorus Found in bones; helps to filter waste in kidneys
- Potassium *Blood pressure, fluid storage*
- Sodium Electrolyte balance; keep water inside and outside cells
- Sulfur Makes protein; regulates gene expression; builds and repairs DNA

Trace Minerals

- Chromium helps move blood sugar from the bloodstream in cells; turns fats, carbohydrates and protein into energy
- Copper Blood cells; immune system; cardiovascular health
- Iodine *Thyroid hormones*
- Iron growth and development; makes hemoglobin
- Manganese Muscle and nerve function; blood glucose, blood pressure
- Molybdenum Enzyme activation; toxin clearing
- Selenium Thyroid; cognition; asthma
- Zinc *Immune system*; *enzymes*