The Health Benefits of Nutrients

Nutrients are vitamins, minerals, and antioxidants that provide specific health benefits. In many instances, some nutrients meet several needs within the body, thus providing several health benefits.

Nutrients that support typical neurodevelopment, cognition, and mood stabilization

Choline chloride–important for structural integrity of cell membranes, neurotransmission, transmembrane signaling, and lipid/cholesterol metabolism.

Folic acid–serves as a coenzyme for the metabolism of nucleic and amino acids. Deficiency can lead to anemia and neurological changes.

Inositol–serves as a messenger for the nervous system.

Iodine–a component of thyroid hormones that regulates many biological pathways. Deficiency can cause goiters and developmental problems.

Lithium–active in the central nervous system and used in treatment for mood disorders.

Niacin–important in many biological pathways including oxidation-reduction reactions, energy formation, and fatty acid synthesis. Deficiency can lead to dermatitis, diarrhea, and neurological changes.

Thiamin–plays an important role in carbohydrate and amino acid metabolism. Deficiency can lead to anorexia and cardiovascular and mental changes.

Vitamin A–important for vision, growth, development, and immune function. Deficiency can lead to night blindness and immune deficiencies.

Vitamin B6–serves as a coenzyme for the metabolism of amino acids and glycogen. Deficiency can lead to dermatitis, anemia, depression, and seizures.

Vitamin B12–functions as a coenzyme for the conversion of homocysteine to methionine and the metabolism of fatty acids. It is important for blood cell formation and neurological health. Deficiency can lead to anemia and neurological and gastrointestinal issues.

Zinc–serves as a catalyst for more than 100 enzymes. Important for normal growth and development and immune system function. Deficiency can lead to growth retardation, rashes, and diarrhea.

Nutrients that support energy production

Chromium–helps stimulate normal sugar and fat metabolism.

Coenzyme Q10–fat-soluble antioxidant that is critical to mitochondrial energy production.

Niacin–important in many biological pathways including oxidation-reduction reactions, energy formation, and fatty acid synthesis. Deficiency can lead to dermatitis, diarrhea, and neurological changes.

Riboflavin–important in oxidation-reduction reactions and energy formation. Deficiency can lead to glossitis, stomatitis, and anemia.

Thiamin–plays an important role in carbohydrate and amino acid metabolism. Deficiency can lead to anorexia and cardiovascular and mental changes.

Vitamin B5–involved in the synthesis of coenzyme A, which is involved in the synthesis of fatty acids, amino acids, vitamins A and D, and neurotransmitters. Deficiency can lead to psychological and neurological changes.

Nutrients that support general wellness

Calcium–supports the structure of bones and teeth. Necessary for muscle contraction, blood vessel contraction and expansion, and hormone and enzyme secretion. Deficiency can lead to weak bones.

Iodine–a component of thyroid hormones that regulates many biological pathways. Deficiency can cause goiters and developmental problems.

Manganese–plays a role in metabolism of carbohydrates, amino acids, and cholesterol. Deficiency can lead to dermatitis and hypocholesterolemia.

Thiamin–plays an important role in carbohydrate and amino acid metabolism. Deficiency can lead to anorexia and cardiovascular and mental changes.

Vitamin C–an important antioxidant for protection from free radicals. Plays a role in biosynthesis of collagen, neurotransmitters, and connective tissue and is a cofactor in enzymatic processes. Deficiency can lead to scurvy.

Vitamin D–important for bone health, the absorption of calcium and phosphorus, and cell proliferation/differentiation that is important in immune and other physiological functions. Deficiency can lead to inadequate bone mineralization and possible increase in risk of certain cancers.

Vitamin E–important fat-soluble antioxidant for protection from free radicals. Deficiency can lead to anemia and neurological symptoms.

Nutrients that support immune system health

Selenium–important for proper functioning of the specific antioxidant systems and thyroid hormone actions of the immune system.

Vitamin A–important for vision, growth, development, and immune function. Deficiency can lead to night blindness and immune deficiencies.

Zinc–serves as a catylyst for more than 100 enzymes. Important for normal growth and development and immune system function. Deficiency can lead to growth retardation, rashes, and diarrhea.

Nutrients that support normal sensory perception

Magnesium–involved in multiple enzymatic processes, bone health, and regulation of potassium and calcium. Deficiency can lead to neuromuscular hyperexcitability, hypercalcemia, and hypocalcemia.

Vitamin A–important for vision, growth, development, and immune function. Deficiency can lead to night blindness and immune deficiencies.

Nutrients that support normal biomedical pathways

Biotin–important in bicarbonate-dependent carboxylation reactions. Deficiency can lead to dermatitis, alopecia, and central nervous system abnormalities.

Methylsulfonylmethane (MSM)–supports normal sulfation pathways.

Mixed tocopherols–fat-soluble antioxidants that neutralize free radicals.

Molybdenum–cofactor for enzymes involved in the carbon, nitrogen, and sulfur cycles.

N-acetyl-cysteine–precursor of the antioxidant glutathione.

Vitamin B6–serves as a coenzyme for the metabolism of amino acids and glycogen. Deficiency can lead to dermatitis, anemia, depression, and seizures.