

Vitamins and minerals assignment



Vitamins and minerals : are often called micronutrients because body needs only small amount of them. Vitamins are the organic compounds which enhance the metabolism of proteins, carbohydrates and fats. Without vitamins the breakdown of food could not occur. Vitamins participate in the formation of blood cells hormones nervous system and genetic material

Classification of vitamins: Fat soluble vitamins, *Water soluble vitamins

Fat soluble vitamins All the fat soluble vitamins are available in fat containing food materials and some vegetables.

Iron Part of the protein hemoglobin (carries oxygen throughout body's cells) spinach, broccoli green beans, tomato Juice, tofu, clams, Skin pallor; weakness; fatigue; *A part of many enzymes, involved in production of genetic material and proteins, transports vitamin A, taste perception, wound healing, sperm production and the normal development of Oysters, Shrimp, Crab, Beef, Turkey, whole Grains, Peanuts, Beans. Slow healing of wounds; loss of taste; retarded growth and delayed sexual maturation in children.

Selenium Antioxidant. Works with vitamin E to protect body from oxidation seafood, meats and grains

Iodine Component of thyroid hormones that help regulate growth, development and metabolic rate salt, seafood, bread, milk, cheese

Copper Necessary for the absorption and utilization of iron, supports formation of hemoglobin and several enzymes

Manganese Facilitates many cell processes Tea, whole Grains and Cereal products are the richest dietary sources.

Adequate amounts are found in Fruits and Vegetables Impaired growth, reproduction, skeletal system, glucose tolerance, altered carbohydrate and

lipid metabolism Fluoride *Involved in the formation of bones and teeth, helps to make teeth resistant to decay Mouthwash, toothpaste, fluorinated h₂o, fluoride supplement Tooth decay 0 Chromium Associated with insulin and is required for the release of energy from glucose. Vegetable oil, liver, brewer's yeast, whole grains, cheese, nuts Glucose intolerance or insulin resistance hyperglycemia 0 Molybdenum Facilitates many cell processes. Organ meats and legumes gout