Summary

Vitamins are organic substances present in small amounts in food. They are required for carrying out vital functions of the body. They must be supplied in the diet if the body is unable to synthesize them. Vitamins are considered essential, the word vita means 'life' in Latin. Their discovery often came about because of their absence in the diet. They are involved in the utilization of the major nutrients like proteins, fats and carbohydrates. Though needed in small amounts, they are essential for health and well-being of the body. Vitamins were discovered based on their function and chemical nature and were designated as A, B, C, D. Vitamins are classified based on their solubility as fat-soluble and water-soluble vitamins. Watersoluble vitamins are not accumulated in the body, but are readily excreted. Watersoluble vitamins are members of the B-complex and vitamin C (ascorbic acid). In the case of a deficiency, the clinician should be able to recognize the syndrome caused by a lack of the particular vitamin. In this country of abundant and varied food supply, the individual should instead think in terms of what a specific vitamin does rather than what disease it prevents. Deficiency of vitamin-C produces a disease condition called as 'scurvy'. The four Hs—hemorrhagic signs, hyperkeratosis of hair follicles, hypochondriasis, hematologic abnormalities are often used as a mnemonic device for remembering scurvy signs. Deficiency of thiamine leads to beriberi. A deficiency of riboflavin is known as ariboflavinosis and of niacin is known as pellagra. Pantothenic acid deficiency leads to Burning feet syndrome and is characterized by numbness of the toes and a sensation of burning in the feet. Vitamin B6 deficiency leads to abnormalities in protein metabolism and microcytic hypochromic anaemia. Biotin deficiency in humans is characterized by lethargy, depression, hallucinations, muscle pain, paresthesia in extremities, anorexia, nausea, alopecia, and scaly, red dermatitis. Folate deficiency causes Megaloblastic anaemia while, Pernicious anaemia is caused due to vitamin B12 deficiency.