

WEEK FOUR

VITAMINS

They are required in small amounts for metabolism and health and can be classified as fat soluble and water soluble.

Fat soluble - vitamins A,D,E and K

Water soluble - B1, B2, B6, B12, niacin, C. etc.

The following are lipid soluble vitamins with their major functions:

A Carotene or Retinol - skin and vision

D Calciferol - works with parathormone; bone calcium

E Tocopherol - RBC membranes

K Naphthoquinone -liver coenzyme; some plasma protein synthesis

The following are water soluble vitamins with their related functions:

B1 - Thiamine - coenzyme in decarboxylation; handling one C units

B2 Riboflavine - coenzyme FAD; H₂ transport in Kreb's cycle

Niacin- coenzymes NAD, NADP; H₂ transport in Kreb's cycle

B₆ Pyridoxine - coenzyme in fat and amino acid metabolism. Deficiency causes nervous disorders and dermatitis

B₁₂ - Cyanocobalamin - coenzyme in nucleoprotein synthesis; Anemia nerve regeneration

Folic acid - coenzyme in nucleoprotein synthesis; anemia

Pantothenic acid - coenzyme A; 2C units as in acetate

Biotin - protein synthesis

C - Ascorbic acid - coenzyme in protein synthesis; collagen synthesis