Interdisciplinary paper –II (IV-Semester)

Health and Immune System

Unit-I: Health -I


Unit-I: Health –II

Balanced diet, Calorific values of foods and their determination by bomb calorimeter.
Specific dynamic action of foods, BMR, RDA for infants, children, adults and expectant / nursing mothers, Malnutrition (PEM, Marasmus, Kwashiorkor). Eating disorders; Anorexia and bulimia; Obesity and starvation.

Unit-III: Immune System-I


Unit-IV: Immune System-II

Humoral & cell-mediated immune response
Activation of T cells & B cells. MHC proteins structure & functions
Antigen processing & presentation, Hypersensitivity, Auto immune diseases; classification Production of monoclonal antibodies
Immunoprecipitation methods - gel diffusion (Ouchterlony; Mancini);
Immune-electrophoresis (Rocket), Agglutination tests, ELISA, RIA, Western Blots.