

Fundamentals of Human Nutrition and Dietetics

Course Code	Title of Course	Credit Hours
HND-103	Fundamentals of Human Nutrition and Dietetics	3(3-0)

Learning Outcomes:

Students will be able to:

- Familiarize with the role of macro- and micro-nutrients in human nutrition.
- Understand the absorption, digestion and metabolism of nutrients in the human.
- Inculcate knowledge about the health disorders due to consumption of non-optimal quantities of nutrients

Course Contents:

Introduction: food, nutrients, nutrition, malnutrition - global and local scenario, diet, balanced diet, food groups; Difference between nutrition and dietetics; Role of nutritionists and dietitians in disease prevention and management; Code of ethics for the profession of dietetics; Food groups; Introduction to concept of energy: Energy measurement (BMR, TEE, TEF,) Energy balance and imbalance, Weight control, Body Mass Index (BMI); Energy and calorie requirements; Energy value of different foods: carbohydrates, fats, proteins; Dietary Reference Intakes: Estimated Average Requirement (EAR), Recommended Dietary Allowance (RDA), Adequate Intake (AI), and Tolerable Upper Intake Level (UL); Food Guide Pyramid, Healthy Eating Plate, My Plate, and allied approaches, Pakistan Dietary Guidelines for Better Nutrition (PDGN); Factors effecting dietary choices.

Suggested Readings Textbook:

1. Awan, J.A. 2023. Elements of Food and Nutrition, 7th ed. Unitech Communications, Faisalabad, Pakistan.

Reference Books:

1. Bamji, M.S., K. Krishnaswamy and G.N.V. Brahmam. 2025. Textbook of Human Nutrition, 5th ed. Oxford and IBH Publishing Co. Pvt. Ltd., New Delhi, India.
2. Eastwood, M. 2003. Principles of Human Nutrition, 2nded. John Wiley & Sons, Inc., New York, USA.
3. Geissler, C. and H. Powers. 2023. Human Nutrition, 14th ed. Churchill Livingstone, London, UK.