

Nutrition 514 Objectives

- I. Assessment of the Diet
 - A. To understand and be able to discuss the definition and use of:
 - 1. DRI (Daily Reference Intake)
 - 2. RDA (Recommended Dietary Allowance)
 - 3. EAR (Estimated Average Requirement)
 - 4. AI (Adequate Intake)
 - 5. UL (Tolerable Upper Intake Level)
 - 6. DV (Daily Value)
 - 7. USDA Food Guide Pyramid
 - 8. Dietary Guidelines
 - B. To be able to interpret a nutrition label on a product.
 - C. To understand and be able to discuss the dietary recommendations for:
 - 1. the macro nutrients (carbohydrates, proteins and fat)
 - 2. the micronutrients (vitamins and minerals)
- II. Assessment of Nutritional Status
 - A. To be able to assess a person's nutritional status by integrating nutrition into the medical history, review of systems, physical examination and laboratory evaluation.
 - B. To be able to collect and interpret data from
 - 1. Anthropometric assessment
 - 2. Biochemical (Laboratory) assessment
 - 3. Clinical assessment
 - 4. Diet History
- III. Macronutrients
 - A. Carbohydrates
 - 1. To understand and be able to discuss:
 - a. The forms and functions of simple and complex carbohydrates.
 - b. Types and functions of dietary fiber
 - c. Dietary recommendations for carbohydrates and fiber.
 - d. To become familiar with food sources of carbohydrates and fiber.
 - e. The digestion and absorption of carbohydrates including:
 - i. Sites in the gastrointestinal tract
 - ii. Enzymes of digestion
 - iii. Types of absorptive processes
 - B. Fats
 - 1. To understand and be able to discuss:
 - a. The structures and forms of lipids.
 - b. The functions of lipids.
 - c. To become familiar with food sources of lipids.
 - d. The digestion and absorption of fats including:
 - i. Sites in the gastrointestinal tract
 - ii. Enzymes of digestion
 - iii. Types of absorptive processes
 - C. Proteins

1. To understand and be able to discuss:
 - a. The functions of proteins
 - b. The evaluation of protein quality
 - c. Food sources of proteins
 - d. Protein deficiency symptoms
 - e. The digestion and absorption of proteins including:
 - i. Sites in the gastrointestinal tract
 - ii. Enzymes of digestion
 - iii. Types of absorptive processes

IV. Micronutrients

A. Minerals

1. To understand and be able to discuss for the major minerals (Sodium, Potassium, Chloride, Calcium, Phosphorus, Magnesium, Sulfur) and for the trace minerals (Iron, Zinc, Selenium, Iodide, Copper, Fluoride, Chromium, Manganese, Molybdenum)
 - a. The major functions
 - b. The deficiency symptoms
 - c. People most at risk for deficiencies
 - d. The dietary sources
 - e. The toxicity symptoms

B. Vitamins

1. To understand and be able to discuss for the fat soluble vitamins (A, D, E, K) and the water soluble vitamins (Thiamin, Riboflavin, Niacin, Pantothenic acid, Biotin, B6 (pyridoxine), Folate, B12, C):
 - a. The major functions
 - b. The deficiency symptoms
 - c. People most at risk for deficiencies
 - d. The dietary sources
 - e. The toxicity symptoms

V. Nutrition Throughout the Life Cycle

A. Infants and Children

1. To recognize the unique nutritional needs of infants and children
2. To be able to make appropriate recommendations for breast or bottle feeding
3. To identify the most prevalent nutritional problems of these age groups

B. Adolescents and Young Adults

1. To recognize the unique nutritional needs of adolescents and young adults
2. To identify the most prevalent nutritional problems of this age group

C. Elders

1. To recognize the unique nutritional needs of older adults
2. To identify the most prevalent nutritional problems of this age group
3. To identify some common drug nutrient interactions and their effect on nutritional status

VI. Weight Control

- A. To understand and be able to discuss the contributions of basal metabolism, activity and the thermic effect of food to total energy needs

- B. To be able to define obesity and understand the risks associated with obesity.
- C. To understand methods for assessing obesity.
- D. To be able to discuss the strategies for the treatment of obesity.
 - 1. Behavior Modification
 - a. Diet
 - b. Exercise
 - 2. Pharmacology
 - 3. Surgery
- E. To develop an awareness of other types of disordered eating behavior.