

B.Sc. Clinical Nutrition and Dietetics Syllabus 2018

SEMESTER II

P3: BASIC NUTRITION AND MEAL MANAGEMENT

BASIC NUTRITION (THEORY)

UNIT 1

1. **Introduction to nutrition** - food as a source of nutrients, function of foods, definition of nutrition, nutrients, adequate, optimum and good nutrition, mal-nutrition.
2. Inter-relationship between nutrition and health visible symptoms of good health.
3. **Food guide** - Basic five food groups - how to use food guide.
4. Use of food in body-digestion, absorption, transport, utilization of nutrients in the body.
5. **Water** - as a nutrient, function, sources, requirement, water balance - effect of deficiency.
6. **Carbohydrates** - composition, classification, food sources, functions, storage in body.
7. **Fat and Oils** - Composition, saturated unsaturated fatty acids, classification food sources, functions of fats.
8. **Proteins** - Composition, sources, essential, non--essential amino acids, source of proteins, functions, protein deficiency (very brief).
9. **Energy** - unit of energy, food as a source of energy, energy value of food. The body's need for energy B.M.R. activities, for utilization of food to fat energy requirement.

UNIT 2

10. **Acid** - base balance,
11. **Minerals** - Functions, sources, Bioavailability, and deficiency of following minerals - calcium, iron, iodine fluorine, sodium, potassium (in very brief).
12. **Vitamins** - classification, units of measurement, sources, functions and deficiency (very brief) about following vitamins:
 - a. Fat soluble vitamins D - vitamin A
 - b. Vitamin D
 - c. Vitamin E
 - d. Vitamin KWater soluble vitamins:
 - a) Ascorbic acid.
 - b) Thiamin
 - c) Riboflavin
 - d). Niacin
 - e) Other member of B-complex such as B6, Folic acid and B-12.

UNIT3

B.Sc. Clinical Nutrition and Dietetics Syllabus 2018

1. **Introduction to meal management** - Balanced diet Food guide - Basic 5 food groups.
2. **Basic principles of meal planning** - objectives-steps in meal planning - Food cost.
3. **Nutrition in Pregnancy** - Physiological stages of pregnancy - Nutritional requirements - Food selection - Complications of pregnancy.
4. **Nutrition during Lactation** - Physiology of lactation - nutritional requirements.
5. **Nutrition during Infancy** - Growth & development nutritional requirements - Breast feeding Infant formula - Introduction of supplementary foods.

UNIT 4

6. **Nutrition during Early Childhood** (Toddler/preschool) Growth & nutrient needs - Nutrition related problems - Feeding pattern.
7. **Nutrition of school children** - Nutritional requirement - importance of snacks - school lunch.
8. **Nutrition during Adolescence, Growth & nutrient needs** - Food choices - Eating habits - factors influencing.
9. **Geriatric Nutrition** - Factors affecting food intake & nutrient use - nutrient needs nutrition related problems.

B.Sc. Clinical Nutrition and Dietetics Syllabus 2018

SEMESTER II

Family Meal Management (Practical)

1. Basic principles of meal & menu planning.
2. Daily food guide - Basic five food groups use of food groups. Food costing.
3. Planning for adult man & woman during different physical activities - sedentary, moderate, heavy worker. Preparation of above diet.
4. Planning & preparation of a balanced diet for a pregnant woman - Nutritional requirements modification of dietary pattern - Complications during various stages of pregnancy.
5. Planning & preparation of a balanced diet for a nursing mother - modification of normal meal pattern - special foods given during lactation nutritional requirements.
6. Nutrition during infancy - nutritional requirements during infancy-advantages of breast feeding - disadvantages of bottle feeding.
7. Supplementary feeding - preparation of weaning foods.
8. Planning & preparation of diet for a toddler pre-school child - nutritional requirements -food pattern - acceptance.
9. Nutrition during school age - nutritional considerations - planning & preparation of meals/packed lunch.
10. Nutrition during adolescence - growth and development - nutritional requirements. Factors influencing food habits - preparation of meal.
11. Planning a diet for senior citizen - factors affecting food intake & nutrient use special needs - nutritional requirements. Preparation of meals.
12. Planning of meals for middle income family important considerations in planning meals.