

BSHND 312: NUTRITION THROUGH THE LIFE CYCLE

Course Learning Outcomes:

- To analyze the nutritional needs during conception, infancy, childhood, adolescence, male and female adults, pregnancy, lactation and during aging
- To suggest dietary recommendations in special clinical conditions

Theory Content:

1. Introduction

- Preconception nutrition: overview,
- Reproductive physiology,
- Nutrition related disruption in fertility,
- Nutrition and contraceptives and other nutrition concerns,
- Premenstrual and polycystic ovary syndrome,
- Obesity and fertility,
- Diabetes prior to pregnancy,
- Disorders of metabolism.

2. Nutrition during Pregnancy:

- Status of pregnancy outcomes,
- Embryonic and fetal growth & development,
- Pregnancy weight gain,
- Nutrition and outcome of the pregnancy,
- Health problems during pregnancy,
- Nutrient needs and dietary guidelines during pregnancy.

3. Nutrition and lactation:

- Human milk composition,
- Benefits of breast feeding, breast milk supply and demand,
- maternal diet during lactation,
- Factors influencing breastfeeding initiation and duration,
- Common breast feeding conditions,
- Medical contradictions in breast feeding.

4. Infant Nutrition:

- Assessing new born health, and energy and nutrient needs,
- Development of infant feeding skills,
- Common nutritional problems and concerns,
- Infants at risk.

5. Toddlers and preschooler Nutrition:

- Normal growth and development,
- Energy and nutrient needs,
- Common nutritional problems,
- Nutrition related conditions, food allergies and intolerances.

6. Child and pre-adolescent nutrition:

- Normal growth and development,
- Energy and nutrient needs,
- Common nutritional problems,
- Prevention of nutrition related disorders,

Dietary recommendations

- Adolescent nutrition: normal physical growth and development, health and eating related behavior, energy and nutrient requirements, overweight and obesity, eating disorders.
- Adult nutrition: physiological changes of adulthood, maintaining a healthy body, dietary recommendations, nutrient recommendations, nutrition intervention for risk reduction.
- Geriatric nutrition: physiological changes, nutritional risk factors, dietary recommendations and food safety, nutrient recommendations, nutrition in special clinical conditions.

Teaching-Learning Strategies:

Teaching will be a combination of class lectures, class discussions, and group work. Short videos/films will be shown on occasion.

Assignments:

The sessional work will be a combination of written assignments, class quizzes, presentation, and class participation/attendance.

Assessments and Examination:

Sessional Work: 25 marks

Midterm Exam: 35 marks

Final Exam: 40 marks

Recommended Readings

1. Brown, J.E. (2014) Nutrition through the Life Cycle, (5th ed). Cengage Learning, Belmont, CA, USA.
2. Rolfes, S.R. Pinna, K. & Whitney, E. (2015). Understanding Normal and Clinical Nutrition, (10th ed). Thomson and Wadsworth Publishers, USA.
3. Shetty, P. (2002). Nutrition Through the Life Cycle. Leatherhead International Ltd. And Royal Society of Chemistry, Cambridge, U.K.

Worthington-Roberts, B.S. & Williams, S.R. (2000). Nutrition Throughout the Life Cycle.
The McGraw-Hill Education, Maidenhead