

Al-Balqa' Applied University
Faculty of Agricultural Technology
Dept. of Nutrition and Food Processing

Diet therapy

Course No : 304011431	Prerequisite : 304011332
Credit hours : 3	First Semester 2005 / 2006

Instructor :	Time :
Office No.:	Tel. No.:
Office Hours :	E – mail :

Course Description:

Diseases that respond to diet therapy including: diseases of infants, gastrointestinal tract, cardiac vascular system, kidney and diabetes mellitus and application of nutritional and dietetic principles.

Objective course:

The course provide necessary basic information about nutritional therapy for various diseases & health conditions to enable the students to practice clinical nutrition in hospitals & other health centers. By the end of this course the student is expected to :

- Understand anthropometric measurements used in nutritional assessment.
- Recognize the advantages & limitations of the various approaches to evaluate dietary intake.
- Know the nutritional assessment methods in hospitals.

- Know diet therapy principles in various diseases and health conditions.
- Know preparation of special diet programs for hospitalized and out patients.
- Know general needs of the hospitalized child & pediatric conditions that require special nutritional care.
- Know the nutritional care for persons with IDDM & NIDDM.
- Describe the role of the nutritionist in the prevention & management of CVD and renal diseases.
- Explain the nutritional needs of general surgery patients & formulation of tube feeding formulas.
- Describe the nutritional interventions for persons with AIDS & cancer.
- Describe the nutritional support in rehabilitation care.

Learning Outcomes:

- Apply basic principles of nutrition to the wise selection of daily foods.
- Use exchange list in meal planning.
- Define the following terms: Therapeutic Diet, Prudent Diet, ABCD Approach For Nutritional Assessment, Clear Liquid Diet, Full Liquid Diet, Soft Diet, Regular Diet, Nutrition Care Plan.
- Identify the following terms: Cystic Fibrosis, Celiac Disease, Phenylketonurea, Maple Syrup Urine Disease, Galactocemia, Tyrosinosis, Low Birth Weight, Food Allergy.
- Explain why food & drug interactions are considered in the nutritional care planning process.
- Identify the following terms: Achalasia, Ascites, Chlolithiasis,
- Explain the nutritional therapy for :
 1. The upper GI tract disorders(disease of the esophagus).
 2. Diseases of the stomach (Dyspepsia, Gastritis, Peptic Ulcer).
 3. The lower GI tract disorders(Irritable Bowel Syndrome, Constipation, Steatorrhea, Diarrhea, Diverticulosis).
 4. Inflammatory bowel disease(Ulcerative Colitis & Crohn's Disease).
 5. The problems of the GI accessory organs:
 - Disease of the Liver (Hepatitis, Hepatic encephalopathy)
 - Disease of the Gallbladder (Cholecystitis, cholelithiasis).
 - Disease of the Pancreas (Pancreatitis).
- Describe the behavioral strategies for changing an individual's dietary habits & what role does personal attitude play.
- Compare & contrast the two major classification of DM; include symptoms, metabolism changes, nutrition therapy & drug use.

- Describe how self blood glucose monitoring allows for greater flexibility in diabetes management.
- list foods low in sodium.
- Describe the role of the nutritionist in the prevention & management of CVD.
- Describe the principles of nutritionist management, including the control of disease & promotion of good nutritional status.

- Explain the nutritional needs of general surgery patients.
- Understand the following terms: enteral feedings, parenteral feedings, tube feeding, PPN & TPN
- Explain the basic role of nutrition in the HIV disease process.
- **Describe cancer prevention strategies.**

Teaching methods:

- Lectures
- Case studies
- Demonstrations
- Presentations and open discussions

Test & Evaluation:

Theory	<u>Date</u>	Points
First hour exam	<i>Week 6</i>	20
Second hour exam	Week 12	20
Final exam	According to schedule	30
Practical		
Quizzes & Reports	-----	10
Final exam	Week 15	10
Total		100

Course contents and schedule:

Theory lectures

week	Topic
1	--Introduction to the course a-Course contents b-The dietitian as a member in the health care team -- Planning a healthy diet a-Factors affecting dietary intake and food consumption. b-Use of food groups and exchange lists in meal planning. -- Role of nutrition education and counseling: food costs and needs (a review)
2&3	--The nutrition cares process a- Assessing historical and physical data b-Assessing anthropometric and biochemical data c-Developing a nutrition care plan --Therapeutic diets and hospital diets
4 &5	-- Diet therapy in diseases of infancy and childhood a-Care of hospitalized infants and children b-Gastrointestinal diseases and malabsorption problems: - Diarrhea - Vomiting - Constipation - Cystic fibrosis - Celiac disease Genetic diseases: * Phenylketonuria(PKU) * Tyrosinosis * Galactocemia * Maple syrup urine disease(MUSD) * Other genetic diseases
6	Drug-nutrient interactions
7&8	-- Gastrointestinal diseases: * Peptic ulcer * Ulcerative colitis (and Introduction to TPN) * Other intestinal diseases (lactose intolerance, diverticulosis, Hemorrhoids, etc.) * irritable bowel syndrome -- Diseases of liver and gall bladder, hepatitis, cirrhosis, cholecystitis cholelithiasis.
9	Obesity and weight control
10	Diabetes mellitus

Practical

Laboratory Number	Topic
١	-Introduction to the course. A- Health-care teamwork in medical care. B- Hospital diets. C- Dietetics and dieticians in patient care.
٢	-Planning and evaluation of diets using dietary guides and exchange lists.
٣	-Assessment of nutritional status of patients using: A-Dietary data. B-Anthropometric data. C- Biochemical data. D- Clinical data.
٤	-Therapeutic diets; calculation of estimated total energy expenditure.
٥	-Baby with gluten Enteropathy (celiac disease). -Child with PhenylKetonuria
٦	-Woman with duodenal ulcer; peptic ulcer disease.
٧	-An obese patient with hypertension.
٨	-A patient with non insulin-dependent diabetes mellitus. -A patient with insulin-dependent diabetes mellitus.
٩	-Hypertension -Patient with Severe (COPD)
١٠	-Dietary Management of Atherosclerosis
١١	-Renal Disease
١٢	-Patient with Gastrectomy and Dumping Syndrome
١٣	-Burns
١٤	-Tube Feeding Formula. -Patient with Total Parental Nutrition (TPN).
١٥	- HIV Infection in a young mother - Patient with Cancer

Text book

1. Mahan L.K. and Stump S.E. (2004), Krause's Food, Nutrition and Diet Therapy, 11th edition, W.B., Saunders Co., Philadelphia.
2. Williams, SR (2001), Basic Nutrition and Diet Therapy, 11th edition, t Mosby co., St., Louis.
3. Williams, SR (1997), Nutrition and Diet Therapy, 7th edition, the C.V. Mosby co., St., Louis.

References:

1. Robinson, C.H. *et al*, (1986) Normal and Therapeutic Nutrition, 8th ed. Macmillan publ, Co., New York.
2. Shils, M.E. *et al*, (1999) Modern Nutrition in Health and Diseases, 9th ed. Lea and Fiber, Philadelphia.
3. Pass more, R, and Eastwood, M.A.R., (1987) Davidson and Pass more Human Nutrition and Dietetics, 8th ed. E. and S. Livingstone LTD Edinburgh.
4. Pellett, and shadrevian, S. (1970). Food composition Tables for Use in the Middle East, AUB.
5. American Dietetic Association (ADA) and American Diabetic Association, (1995) Exchange lists for meal planning ADA Chicago.
6. Whitney, E.N. *et al* (2000). Understanding Normal and clinical Nutrition, 6th ed. West Wadsworth Intern. Publ. Co., New York.
7. Smolin, L. and Grosvenor, M. (2000) Nutrition: Science and Applications. 3rd ed. Harcourt, Orlando, F1.
8. أسس التغذية العلاجية ، (٢٠٠١) ، تحرير عبد الرحمن مصيقر ، الطبعة الأولى . دار القلم ، دبي .