

MEDICAL NUTRITION THERAPY I

4 Cr (Th)

Objectives

This course will enable the students to:

1. Understand the promotive and therapeutic role of diet and nutritional care
With reference to weight management, fevers& infections and diseases of the gastro-intestinal tract and hepatobiliary system
2. Understand the etiology, physiologic and metabolic anomalies of acute and chronic diseases and patient needs
3. Know the effect of the various diseases on nutritional status and nutritional and dietary requirements.
4. Able to recommend and provide appropriate nutritional care based on pathophysiology, prevention/ and treatment of the various diet-related disorders/ diseases.
5. Be able to use different nutritional support systems to nourish the patient

Contents

Module No	Topics and Details	No of Credits
1	<p>Nutritional (and dietary) Care Process</p> <p>A) in health</p> <ul style="list-style-type: none">- Depending on the state of growth & development of the individual- at various activity levels and socioeconomic status. <p>B) in disease</p> <ul style="list-style-type: none">- Nutritional screening/ assessment and identification of nutritional problem- Nutritional Intervention and Diet Modification based on interpretation of- Patient data- clinical, biochemical and other relevant data- Nutrition Education and Counseling-Evaluation of Nutritional care	1

	<p>Delivery of Nutritional Support – Meeting nutritional needs</p> <p>A. Enteral tube feeding Different Enteral feeding access routes Practical Aspects</p> <p>B. Parenteral nutrition</p> <p>Exchange lists as a tool in planning diets</p>	
2	<p>Nutrition for weight management: Disorders of energy balance</p> <p>A. Obesity Components of body weight Adipose tissue- structure, regional distribution and storage Regulation of body weight Types of obesity Assessment of obesity Health risks Causes of obesity: neural, hormonal, and psychological Management of obesity</p> <ul style="list-style-type: none"> - Dietary Modification : past and present approach - Psychology of weight reduction : psychotherapy and behaviour modification Physical activity and exercise - Pharmacological treatment - Surgical treatment effect on satiety and other factors - Maintenance of Reduced weight <p>B. Underweight/Excessive Leanness/ Undernutrition</p> <ul style="list-style-type: none"> - Pathophysiology, Causes and assessment including fever and infectious diseases (Tuberculosis, AIDS) - Health risks and effect on nutritional status - Dietary Management - Psychotherapy <p>C. Eating disorders: Anorexia Nervosa and Bulimia Nervosa</p>	1

3	<p>Medical Nutrition therapy for Upper Gastrointestinal tract Diseases /Disorders</p> <p>a) Diagnostic Tests for the G.I. diseases</p> <p>b) Pathophysiology and Nutritional care and diet therapy in</p> <p> i) Diseases of oesophagus; oesophagitis, Hiatus hernia</p> <p> ii) Disorders of stomach: Indigestion, Gastritis, Gastric and duodenal ulcers</p> <p>Management: associated with H. pylori infection, NSAIDS</p> <p>Dietary management: traditional approach and liberal approach</p> <p>c) Gastric Surgery: Nutritional care, dumping syndrome</p> <p>Medical Nutrition therapy for Lower gastrointestinal tract Diseases/Disorders</p> <p>Common Symptoms of Intestinal dysfunction</p> <ul style="list-style-type: none"> - Flatulence, constipation, haemorrhoids, diarrhoea, steatorrhoea, typhoid <p>b) Diseases of the large intestine:</p> <ul style="list-style-type: none"> - Diverticular disease, Irritable bowel syndrome, inflammatory bowel disease <p>c) Malabsorption Syndrome/Diseases of Small intestine</p> <ul style="list-style-type: none"> - Celiac (Gluten –induced) sprue, tropical sprue, intestinal brush border enzyme deficiencies, Lactose intolerance, protein- losing enteropathy <p>d) Principles of dietary Care: Fibre, residue</p> <p>Modified fibre diets</p> <p>e) Intestinal surgery: Short bowel syndrome, Ileostomy, Colostomy, Rectal surgery</p> <p>Medical Nutrition therapy for Diseases of the Hepato - Biliary Tract</p> <ul style="list-style-type: none"> a. Nutritional care in liver disease in context with results of specific liver function tests - Dietary care and management in viral hepatitis(different types) , cirrhosis of liver, hepatic encephalopathy, Wilson’s disease b. Dietary care and management in diseases of the gall bladder and pancreas i.e. biliary dyskinesia, cholelithiasis, cholecystitis, cholecystectomy, pancreatitis, Zollinger-Ellison syndrome 	2
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