

## MEDICAL NUTRITION THERAPY I (PRACTICALS)

(4 Cr)

### Contents:

Module No	Topics and Details	No of Credits
1	<p><b>Collection and storage of biological samples for clinical investigations</b></p> <p><b>Market survey of commercial nutritional supplements and nutritional support substrates</b></p> <p><b>Nutritional (and dietary) Care Process</b></p> <p>A) in health</p> <ul style="list-style-type: none"><li>- Depending on the state of growth &amp; development of the individual</li><li>- at various activity levels and socioeconomic status.</li></ul> <p>The Nutritional care process</p> <p>B) in disease</p> <ul style="list-style-type: none"><li>- Nutritional screening/ assessment and identification of nutritional problem</li><li>- Nutritional Intervention and Diet Modification based on interpretation of</li><li>- Patient data- clinical, biochemical and other relevant data</li><li>- Delivery of Nutritional Support – Meeting nutritional needs and practical aspects</li></ul> <p>a) Enteral tube feeding</p> <p>b) Parenteral Nutrition</p> <ul style="list-style-type: none"><li>- Nutrition Education and Counseling</li><li>-Evaluation of Nutritional care</li></ul> <p><b>Exchange list as a tool in planning diets</b></p>	1
2	<p><b>Nutrition for weight management: Disorders of energy balance</b></p> <p>B. Obesity</p> <p>Assessment of obesity</p> <p>Management of obesity</p> <ul style="list-style-type: none"><li>- Dietary Modification : past and present approach</li><li>- Psychology of weight reduction : psychotherapy and behaviour modification</li><li>- Physical activity and exercise</li></ul>	1

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

## **References:**

1. Mahan, L.K. and Escott-Stump, S. (2000): Krause's Food Nutrition and Diet Therapy, 10<sup>th</sup> Edition, W.B. Saunders Ltd.
2. Shils, M.E., Olson, J.A., Shike, M. and Ross, A.C. (1999): Modern Nutrition in Health and Disease, 9<sup>th</sup> Edition, Williams and Wilkins.
3. Escott-Stump, S. (1998): Nutrition and Diagnosis Related Care, 4<sup>th</sup> Edition, Williams and Wilkins.
4. Garrow, J.S., James, W.P.T. and Ralph, A. (2000): Human Nutrition and Dietetics, 10<sup>th</sup> Edition, Churchill Livingstone.
5. Williams, S.R. (1993): Nutrition and Diet Therapy, 7<sup>th</sup> Edition, Times Mirror/Mosby College Publishing.
6. Davis, J. and Sherer, K. (1994): Applied Nutrition and Diet Therapy for Nurses, 2<sup>nd</sup> Edition, W.B. Saunders Co.
7. Walker, W.A. and Watkins, J.B. (Ed) (1985): Nutrition in Pediatrics, Boston, Little, Brown & Co.
8. Guyton, A.C. and Hall, J.E. (1999): Textbook of Medical Physiology, 9<sup>th</sup> Edition, W.B. Saunders Co.
9. Ritchie, A.C. (1990): Boyd's Textbook of Pathology, 9<sup>th</sup> Edition, Lea and Febiger, Philadelphia.
10. Fauci, S.A. et al (1998): Harrison's Principles of Internal Medicine, 14<sup>th</sup> Edition, McGraw Hill.
11. World Cancer Research Fund (1997). Food, Nutrition and the Prevention of Cancer- A Global perspective, Washington E.D. WCRF.

## ***Journals and Other Reference Series***

1. Nutrition Update Series
2. World Review of Nutrition and Dietetics
3. Journal of the American Dietetic Association
4. American Journal of Clinical Nutrition
5. European Journal of Clinical Nutrition
6. Nutrition Reviews