

## SARDAR PATEL UNIVERSITY VallabhVidyanagar, Gujarat (Reaccredited with 'A' Grade by NAAC (CGPA 3.25) Syllabus with effect from the Academic Year 2021-2022

## **P.G.Diploma in Dietetics**

## Semester-I

Course	PH1CPGDD54	Title of the	Madical Nutrition Thorany I	
Code		Course	Medical Nutrition Therapy-I	
Total	04	Hours per	04	
Credits of		Week		
the Course				

Course Objectives	<ul> <li>Understand the etiology, physiologic and metabolic anomalies of acute and chronic diseases and patient needs.</li> <li>Know the effect of the various diseases on nutritional status and nutritional and dietary requirements.</li> <li>Be able to recommend appropriate nutritional care for prevention / and treatment of the various diseases.</li> </ul>

Course content		
Unit	Description	Weightage %
1	Introduction:Applications of principles of diet therapyTips for diet prescription, Dietetic care in hospital patients, Team approach to health care, Assessment of patient needs based on interpretation of patient data – clinical, biochemical, biophysical, personal etc.• Therapeutic adaptations of the normal diet Soft diet, Liquid diet, Bland diet, Routine hospital diets • Modes of feeding• Enteral, Tube feeding, composition of tube feeds & their preparation, parenteral feeding, Indications for use	20%
2	<ul> <li>Diet, nutrient and drug interaction         <ul> <li>Effect of drugs on ingestion,</li> <li>Digestion, absorption and metabolism of nutrients.</li> <li>Effect of food, nutrients and nutritional status on drug dosage and efficacy.</li> </ul> </li> <li>Nutritional support:         <ul> <li>Recent advances in techniques and feeding substrates</li> <li>Diet for healthy living</li> </ul> </li> </ul>	20%



	- Risk factors for chronic degenerative	
	disorders	
3	<ul> <li>1. Nutritional care for weight imbalance <ul> <li>(A) Obesity &amp; overweight</li> <li>Types of obesity,</li> <li>Health Risks,</li> <li>Causes: neural, hormonal, psychological,</li> <li>Physiology of obesity,</li> <li>Dietary treatment, surgical treatment,</li> <li>Physical activity and exercise in the obese</li> <li>Types of diet &amp; desirable rate of loss of weight</li> <li>Physical activity and exercise &amp; energy expenditure for various types of activities with respect to body weight.</li> <li>Activity pattern: Criteria &amp; calculations using latest guidelines for classifying various types of activities eg. CDS, WHO</li> </ul> </li> <li>(B) Underweight <ul> <li>Causes,</li> <li>Health risks,</li> <li>Dietary Treatment,</li> <li>Psychotherapy, Eating disorders</li> <li>Anorexia Nervosa and Bulimia</li> </ul> </li> </ul>	20%
4.	G.I Tract Disorders- Diagnostic tests for G.I. disease,- Pathophysiology and diet therapy of all G.I. disorders and their nutritional care,- Disorders of esophagus,- Disorders of stomach: Gastric & duodenal ulcers- Disorders of small intestine & large intestine: Diarrohea, diverticulars diseases, inflammatory bowel disease- Malabsorption syndrome, Celiac sprue, tropical sprue, intestinal brush border deficiencies (Acquired Disaccharide Intolerance), protein losing enteropathy- Parasitic infections, ulcerative colitis, irritable bowel syndrome, haemorrhoids, flatulence, constipationLiver and Biliary System & Physiology and function of liver (normal & deranged) gall bladder and pancreas, & Pathophysiology and its implications,	20%



<ul> <li>Disorders, liver function tests &amp; nutritional care in liver diseases</li> <li>Viral hepatitis,</li> <li>Cirrhosis,</li> <li>Alcoholic liver diseases</li> <li>Cholecystitis, cholelithiasis, cholecystectomy, pancreatitis</li> <li>Hepatic encephalopathy, Wilson's disease</li> </ul>	
<ul> <li>Respiratory Disorders</li> <li>Dietary management in following disorders – bronchitis, Respiratory distress syndrome, Cystic fibrosis, Chronic obstructive pulmonary disorder (COPD), Asthma, Aspiration, Pneumonia, TB, Lung cancer.</li> <li>Anaemias&amp; some special conditions <ul> <li>(A) Anemias:</li> <li>Pathogenesis, nutritional anemias, sickle cell anemias, megaloblastic /pernicious anemia as a result of blood loss due to acute haemorrhages etc.</li> </ul> </li> <li>(B) Some special conditions: requiring nutritional support <ul> <li>Fabrile conditions: acute &amp; chronic (thyroid tuberculosis)</li> <li>Infections &amp; injury (sepsis, trauma &amp; burns): physiological changes in relation to trauma, assessment of nutritional status in surgical &amp; burn patients</li> <li>Pre &amp;post operative care</li> <li>Bone disorders: osteoporosis, osteoarthritis, rheumatoid arthritis</li> <li>Burns patients: nutritional management</li> <li>Food allergies: Definition, symptoms, diagnosis, elimination of diets &amp; selection of foods. Food allergies in infancy &amp; their management</li> <li>Metabolic disorders: Diseases of the adrenal cortex, thyroid &amp; parathyroid gland &amp; gout.</li> </ul> </li> </ul>	20%

<i>.</i>	Classroom lectures (Blackboard/Power Point Presentations), Discussion on recent updates with related examples.
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Evalution Pattern		
Sr. No.	Details of the Evaluation Weightage %	
1.	Internal Written examination	15%
2.	Internal Continuous Assessment in the form of Viva voce, Quizzes,	15%
	Seminars, Assignments, Attendance	
3.	University Examination	70%

Note: Students will have to score a minimum of 40 % to pass the course.

Course Outcomes		
1.	Get knowledge about dietary control of various diseases.	
2.	Understand the drug interaction with dietary modification.	

Suggested References:		
Sr. No.	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.	Williams, S.R (1993) : Nutrition and Diet Therapy, 7 <sup>th</sup> Edition, Times Mirror/Mosby College Publishing.	
5.	Walker, W.A and Watkins, J.B.(Ed) (1985): Nutrition in Pediatrics, Boston, Little, Brown & Co.	
6. World Cancer Research Fund (1997). Food, Nutrition and the Pre 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	



