

ALAGAPPA UNIVERSITY, KARAIKUDI
DEPARTMENT OF NUTRITION AND DIETETICS

About the Department:

The Department of Nutrition and Dietetics was established in the year 2023. The Department offers a two-year M.Sc., Degree Programme in Nutrition and Dietetics from the Academic year 2023 - 2024. Our work focuses towards nurturing the students in solving the nutritional issues and setbacks faced by the community to forge a society with fitness and finesse. The postgraduate programme in Nutrition and Dietetics includes the complete study of basic components of foods; their nutrients chemistry and metabolism; technology involved in food processing and preservation; food safety; functional food, meal planning, quantity food production and therapeutic dietary modifications with a focus on human health and well-being. Since its inception, the department has directed its activities towards development of the community to shape the prospective academicians, administrators, researchers, entrepreneurs and health-conscious citizens.

VALUE ADDED COURSE – III

***Offers value added courses on
NUTRITIONAL PSYCHOLOGY***

Course Code: 558VAC03

Duration: 20 Hrs



Summary of the content

- ✚ Basics of Nutritional Psychology
- ✚ Dietary and Nutrient Mechanisms in Mental Health
- ✚ Microbiome and Mental Health
- ✚ Significance of the Nutritional Psychology
- ✚ Hormonal Regulation & Energy Balance Mechanism on Nutritional psychology

Objectives

- ✚ Understand basics of Nutritional Psychology and their elements.
- ✚ Learn nutrient mechanisms and dietary patterns with remedies in mental health.
- ✚ Study the relationship between Microbiota-Gut-Brain Axis and diet-mental health relationship interconnects.
- ✚ Know the Nutrition Education for Mental health and Disorders.
- ✚ Know the hormonal Regulation & energy balance mechanism in Nutritional psychology.



COURSE CO-ORDINATOR:

Dr. P. Rameshthangam

Professor & Head i/c

Department of Nutrition and Dietetics

Alagappa University, Karaikudi.

Outcome

After successfully completing the course, students will be able to:

- ✚ Apply the appropriate knowledge on nutrition in mental health
- ✚ Explain the mechanism of nutrients in mental health
- ✚ Understand the relationship between Gut microbiota and DMHR
- ✚ Create awareness on diets for psychological wellbeing through nutrition education and interventions.
- ✚ Explain the mechanism of hormonal regulations in nutritional psychology.

VALUE ADDED COURSE – III

Summary of the Course

This course consolidates the world's research on interconnection between diets with human psychological, behavioural, cognitive, sensory-perceptual, interoceptive, psychological processes, functioning, and experience. It is for anyone seeking to develop their understanding of the concepts, language, and methods used within nutritional psychology and who wishes to improve their understanding of the diet-mental health relationship (DMHR). This course provides the theoretical foundation for further education in nutritional psychology.

SYLLABUS				
Course code: 558VAC03	Title of the Course	Nutritional Psychology	T	Hours: 20
Unit - I				
Objective 1	Understand basics of Nutritional Psychology (NP) and their elements.			
Unit-I: Introduction to Nutritional Psychology				
Define – Nutrition, Nutritional Psychology. Nutrients and Mental Health; Different elements encompassed by nutritional psychology: the psychological, behavioural, cognitive, interoceptive, sensory-perceptual, and psychosocial elements. Define - Mood, cravings, and addiction, hunger, appetite, satiety.				
Outcome 1	Apply the appropriate knowledge on nutrition in mental health			K2
Unit - II				
Objective 2	To learn the dietary, nutrient mechanisms, dietary patterns with remedies in mental health.			
Unit – II: Dietary and Nutrient Mechanisms in Mental Health				
Early-life Nutrition and Brain Development. Essential Nutrients for Brain Function. Phytonutrients and Neuroactive Compounds in mental health. Herbal Remedies and Adaptogens in mental health. Nutritional Deficiencies and Mental Health. Dietary Patterns and Mental Health - Mediterranean Diet, MIND diet, Ketogenic Diet, Western Diet.				
Outcome 2	Explain the mechanism of nutrients in mental health			K3
Unit - III				
Objective 3	Study the relationship between Microbiota-Gut-Brain Axis (MGBA) and diet-mental health relationship interconnects (DMHR).			
Unit-III: Microbiome and Mental Health				
Introduction to the Microbiota-Gut-Brain Axis. Structure and function of the gut barrier. concept of gut permeability, gut dysbiosis, and eubiosis, Role of the gut barrier in MGBA. Mechanisms of Gut-Brain Communication. Gut Microbiota Evolution and Brain Development. Relationship between Gut Microbiota, Nutrition, and Brain Health; Microbiota-Targeted Therapeutic Approaches – Probiotics, Prebiotics, Symbiotic, Postbiotics, Psychobiotics, Fecal microbiota transplantation (FMT).				
Outcome 3	Understand the relationship between Gut microbiota and DMHR			K2

Unit - IV		
Objective 4	Know the Nutrition Education and Nutrition Interventions for Mental health and Disorders.	
Unit- IV: Significance of the Nutritional Psychology		
Nutrition Education and Mental Health; Early-Life Nutrition and Mental Health; Gut-Brain Axis and Psychobiotics; Nutrition Interventions for Mental Disorders; Cultural Factors and Dietary Practices; Nutrigenetics and Personalized Nutrition; Mindful Eating and Emotional Well-being; Culinary Therapy and Mental Health; Holistic Approaches to Mental Health Management; Public Health Policy and Mental Health; Interdisciplinary Collaboration for Mental Well-being.		
Outcome 4	Create awareness on diets for psychological wellbeing through nutrition education and interventions.	K3
Unit - V		
Objective 5	Know the hormonal Regulation & energy balance mechanism in Nutritional psychology.	
Unit-V: Hormonal Regulation & Energy Balance Mechanism		
Hypothalamus and Appetite Regulation. Key Hormones in Energy Balance, Energy Balance and Mental Well-being. Current research on Nutritional Psychology.		
Outcome 5	Explain the mechanism of hormonal regulations in nutritional psychology.	K3
Suggested Readings:		
- Chris Bjorndal.2017.The Essential Diet: Eating for Mental Health. Natural Terrain Inc.ISBN: 9781770849655 (ISBN10: 1770849653) - David Perlmutter, Kristin Loberg 2015.Brain Maker: The Power of Gut Microbes to Heal and Protect Your Brain for Life. Little, Brown Spark ISBN: 9780316380102 (ISBN10: 0316380105The Psychology of Nutrition, David Booth, (1994). Psychology press book. Taylor & Francis; 1st edition. ISBN-10 : 0748401598 ISBN-13 : 978-0748401598 - Melinda Blackman , Colleen Kvaska, Nutrition Psychology: Improving Dietary Adherence, Jones and Bartlett Publishers, Inc; 1st edition (2010), ISBN-10 : 0763780405 ISBN-13 : 978-0763780401 - Shoba Sreenivasan and Linda E Weinberger. Psychological Nutrition. Holy Moly Press (2015). ISBN-10 : 0985360496 ISBN-13 : 978-0985360498 - Robert Drewett.2007. The Nutritional Psychology of Childhood. Cambridge. ISBN-13: 9780521827874		
Web Resources:		
https://www.nutritional-psychology.org/research_studies/diet-depression-and-anxiety/ https://www.iican.in/2022/11/17/nutritional-psychiatry/ https://purerecoveryca.com/nutritional-psychiatry-for-improved-mental-health/ https://www.onlymyhealth.com/what-is-nutritional-psychiatry-important-food-groups-for-mental-health-1569588649 https://link.springer.com/article/10.1038/s41398-022-01922-0?fromPaywallRec=true https://www.nutritional-psychology.org/		

