



NMDF212

Nutritional Biochemistry

General information

Awards	Subject type	Study year	Study Semester
Bachelor of Health Science (Naturopathy)	Core	Year 2	Semester 3
Bachelor of Health Science (Clinical Nutrition)	Core	Year 2	Semester 3
Bachelor of Nutrition	Core	Year 2	Semester 3

EFTSL: 0.125

Delivery mode: Livestream, Online

Co-requisites: Nil

Pre-requisites: BIOA122, NMDF121

Subject overview

This subject draws on students' understanding of biochemistry and explores the metabolic functional relevance of nutrients and food constituents in the human body. Students gain an appreciation of the clinical applications of macro and micronutrients on biochemical pathways with the aim to modulate physiological dysfunction. Students integrate their previous knowledge of food sources, deficiencies, and excess of food-based nutrients with the development of clinical signs and symptoms while comparing a normal vs dysfunctional metabolic status. Learners develop their clinical understanding of the role that biological oxidation, microbiome dysbiosis and epigenetics plays in disease processes. Students acquire knowledge about the association of underlying nutritional biochemical mechanisms with the origin of modern diseases through investigation of liver detoxification pathways, neurotransmitter synthesis, antioxidant-quenching mechanisms, inflammation, immune system responses and the significance of mitochondrial function. This subject deepens students' understanding of clinical nutrition and diet therapy while developing their investigative and research skills in a way that will augment later nutritional medicine and clinical practicum subjects.

Assessments: Oral Presentation, Written Assignment