

MD2B1-30 Food: Nutrition and Malnutrition

25/26

Department

Warwick Medical School

Level

Undergraduate Level 2

Module leader

Claire Bastie

Credit value

30

Module duration

7 weeks

Assessment

40% coursework, 60% exam

Study location

University of Warwick main campus, Coventry

Description

Introductory description

This module aims to facilitate a broad base understanding of nutrition and malnutrition by integrating knowledge and approaches from regulation of the food industry, local and global issues related to availability and security of food, and understanding of acute and chronic health conditions related to diet.

These integrated perspective of health and medical conditions will be consolidated and advanced through case-based learning

[Module web page](#)

Module aims

This module aims to facilitate a broad base of understanding nutrition and malnutrition. Students will experience integrated perspectives of systems from the course themes which are consolidated and advanced through case-based learning.

Outline syllabus

This is an indicative module outline only to give an indication of the sort of topics that may be covered. Actual sessions held may differ.

This is the first integrated module experienced by students in their second year. There will be an increase in the level of the content and expectations around self-directed learning responsibility for the students which will be communicated and will become clear through this block. The module will build from taught content with lecture theatre-based presentations and interactive presentations, as well as case-based learning sessions, all supported by TEL online content. Students will be encouraged to re-visit areas of previous learning and start to identify patterns in problem causation and management.

In the medical sciences, students will cover the anatomy and physiology of the gastrointestinal system. This will underpin the knowledge and understanding needed for study of nutrition, metabolism and disease, covering topics such as digestion, absorption of macronutrients, nutritional principles and energy, impact of malnutrition, obesity and diabetes. Students will also consider multigenerational effects of malnutrition on reproduction and health.

In the health sciences, the role of the World Health Organisation and Public Health England will be introduced as it relates to the global health problems of hunger, malnutrition, obesity and diabetes. Students will consider the role of the food industry, dietary choices, food safety and the role of media through use of examples. The lens of responsibility and influence will be used to view many of the discussions taking place in this module.

The cases in this module will explore contemporary examples of dietary choice with regard to health and sustainability, factors such as influence and parental responsibility will also be discussed through a case involving childhood obesity.

Learning outcomes

By the end of the module, students should be able to:

- 1. To develop a broad understanding of the key concepts, principles and theories, which will support a multidisciplinary approach to understanding of local and global problems surrounding nutrition and malnutrition
- 2. To use anatomical and physiological information about the GI and renal systems to inform an understanding of diet and metabolism
- 3. To explore the concepts of food availability, food safety and regulation of the food industry locally and globally
- 4. To demonstrate understanding of multigenerational effects of malnutrition on reproduction and health.
- 5. To identify patterns associated with food related diseases and the burden on society
- 6. To explain public health, legislation and policies with regard to nutrition related conditions
- 7. To develop and use strategic planning and reasoning skills to engage with others to individually or collectively put forward structured ideas that can have a positive influence on local and global challenges in health

Indicative reading list

1. Johnson M.H. (2007) Essential reproduction. 6th edition. Wiley-Blackwell.
2. Sanford P.A. (1992) Digestive system physiology. 2nd edition. Hodder Arnold.
3. Koeppen and Stanton. (2007) Renal physiology. 4th edition. Mosby.
4. Hyseni et al. (2017) Systematic review of dietary salt reduction policies: evidence for an effectiveness hierarchy? PLoS One, 12 (5). e0177535.
5. Sachs G. (2017) Introduction to European food law and regulation. International Food Law and Policy. 409-450.
6. Jackson D. (2017) Healthcare economics made easy. 2nd edition. Scion Publishing.

[View reading list on Talis Aspire](#)

Interdisciplinary

Students will explore food safety, regulation, and security alongside the mechanisms of food utilisation in humans, linking these to diet-related disorders. The module examines the role of nutrition in health and disease, with a focus on managing metabolic disorders and their societal impacts. Understanding these topics and their connection to the UK and global food industry regulations requires an interdisciplinary approach, integrating expertise from medical, health, and nutritional sciences.

International

Understanding of topics including food security, public health nutrition, epidemiology of undernutrition and double burden of malnutrition on a global level, and appreciation of regional variations in dietary practices and food components.

Subject specific skills

Knowledge and understanding of the local and global problems surrounding nutrition and malnutrition and ability to investigate such health problems from the integrated perspectives of Health Sciences and Medical Science

Ability to recognise factors that influence and determine access to food resources, dietary behaviours and nutrition associated diseases.

Ability to investigate the long-term impact of certain diets and malnutrition on the health of multiple generations

Transferable skills

Critical thinking and appraisal, self-directed learning, evidence-based approach to problem solving, time management, group learning, integration of information

Study

Study time

Type	Required
Lectures	38 sessions of 1 hour (13%)
Seminars	25 sessions of 1 hour (8%)
Online learning (scheduled sessions)	20 sessions of 1 hour (7%)
Private study	87 hours (29%)
Assessment	130 hours (43%)
Total	300 hours

Private study description

Students would be expected to engage in 87 hours of self-directed learning outside of other learning and teaching activities outlined above.

Costs

No further costs have been identified for this module.

Assessment

You do not need to pass all assessment components to pass the module.

Assessment group D1

	Weighting	Study time	Eligible for self-certification
Synoptic coursework: exploration of a cross-module case study with accompanying concept map	40%	60 hours	No
Students will explore a patient or population case that brings in elements from all of the shared-assessment modules in this year, this will be accompanied by a concept map and narrative that will be used to explain the relationship between factors and topics covered in the case exploration.			
Food: Multiple Choice Question/Short Answer Question examination	60%	70 hours	No
Total of 100 marks - 25 MCQ single best answer questions at 1 mark each, 75 marks from SAQs.			

Feedback on assessment

The coursework will be marked using standardised rubrics, which will provide feedback to the students (including individualised feedback) in line with WMS assessment criteria (including submission to Plagiarism software). Further verbal feedback will be available to students on request. Every student who fails an element will be offered an appointment for face to face feedback.

[Past exam papers for MD2B1](#)

Availability

Courses

This module is Core for:

- UMDA-B990 Undergraduate Health and Medical Sciences
 - Year 2 of B990 Health and Medical Sciences
 - Year 2 of B990 Health and Medical Sciences
 - Year 2 of B990 Health and Medical Sciences