London South Bank University

Module Guide

Nutrition Health & Disease

School of Applied Sciences

Level 4

be what you want to become

Template version: 8

Table of Contents

1. MODULE DETAILS

Module Title:	Nutrition Health and Disease
Module Level:	4
Module Reference Number:	(ASC_4_409_1920)
Credit Value:	Credits = 20 CAT points
Pre-requisite Learning (If applicable):	None
Co-requisite Modules (If applicable):	None
Course(s):	Bioscience, Food & Nutrition
Year and Semester	19/20, Semester 1

Subject Area:	Food Science
Summary of Assessment Method:	100% Multiple choice question (MCQ) exam at end of Semester 1
External Examiner Appointed for Module:	Dr Alan Seddon

This guide is designed to help you structure your learning by providing an indicative structure and content for the module. It is a guide and not a definitive statement of what you will be taught. We will try to follow this published schedule as far as possible, but there may be some variation as the module develops and as we try to match the pace and content of our teaching to student needs.

2. SHORT DESCRIPTION

The physiological basis for the study of nutrition is a key theme throughout this module. Attention is given to the physical principles that underlie physiological function which forms the basis for further studies in health and disease. The concept of integration and control is developed beginning with the study of cell membrane physiology leading to an appreciation of whole body function. The role of nutrition evolves from this. Emphasis is given to food as a source of nutrients and their role in the human body. Dietary recommendations for the maintenance of health and well-being are examined. Assessment of food intake is considered in this context. Factors determining food choice are reviewed.

3. AIMS OF THE MODULE

- To introduce nutritional science, its scope, applications and sub-disciplines
- To explore concepts of energy, energy balance, over and under nutrition
- To introduce the concept of the role of nutrients in maintaining health and well being.
- To highlight that factors determining food choice.
- To foster a critical approach to dietary evaluation.

4. LEARNING OUTCOMES

Knowledge and Understanding

- Demonstrate an understanding of dietary energy and whole body energy balance
- Appraise foods as a source of nutrients.
- Appreciate the role of macro and micro nutrients in the human body.
- Demonstrate an understanding of the methods available for assessing nutritional status.
- Develop a critical approach to dietary evaluation and factors determining food choice.

Intellectual Skills

This module gives students the opportunity to develop numerical skills. The use of information technology is fostered. A critical approach is encouraged in the interpretation of data.

Practical Skills

Practical skills in physiological measurement will be developed. Assessment of food portions and use of nutritional data will be undertaken.

Transferable Skills

Students should be able to communicate effectively and take responsibility for self-managed learning

5. ASSESSMENT OF THE MODULE

Assessment of the module will consist of the following element:

- Multiple choice/short answer questions at the end of semester 1 (100%)

AWARD OF MARKS

Most modules offered within the programme contain more than one type of assessment. Each type of assessment is called an element of assessment. You will normally be required to achieve a minimum threshold mark of 30% in each element of assessment as well as an overall aggregate, based on the weighting of the elements, of a minimum of 40%. Ensure that you prepare well for assessment; it is not good practice to merely achieve the minimum mark. A good performance in other modules may enable the Examination Board to decide in your favour on the basis of overall performance if you have performed less well in other areas.

As a general guide, marks are awarded for the following levels of achievement:

>70%	Comprehensive and competent answer. Well communicated. Evidence of additional reading and original thinking. Good analysis of the problem and logical solutions. Factually correct.
60 - 70 %	Overall competent and logical insight into the problem. Largely factually correct. Coverage not extensive but original thinking.
40 - 60%	Generally competent. Some factual errors. Overall understanding but lack of convincing answer
below 40%	A lack of understanding of the problem. Superficial answer. Factual errors. Poor communication skills.

ACADEMIC MISCONDUCT

Students are referred to the University's Student Handbook Section 10.12 Academic misconduct, which summarises Chapter 13 of the academic regulations. The full version of the regulations is available from the registry (situated in Technopark building).

Sections taken from 10.12 academic misconduct section of the student handbook:

Academic misconduct is defined as 'any attempt to gain unfair advantage in assessment, or to help another student gain unfair advantage, by deception or fraudulent means.'

Some examples of academic misconduct:

Assisting another student to gain unfair advantage – for example by allowing another student to copy your work, or use an electronic copy of your work.

Syndication: The submission of pieces of work, which are substantially similar by two or more students. This may apply within the same institution or in a number of institutions, either at the same time or different times.

Plagiarism: To 'take and use another person's thoughts, writings, inventions as one's own'. Representing another person's work as your own, without acknowledging the source. Examples of this are provided in your student handbook (10.12d).

Collusion: Representing as your own piece of work which two or more students have undertaken together, without permission to do so.

Bribery: Offering payment or other inducement to another person in order to gain improper advantage in assessment or to falsify the result of assessment.

Commission: Commissioning another person to undertake all or part of an assignment presented as your own work, or knowingly undertaking work for another student to present his or her own work.

6. FEEDBACK

Students will be given feedback from their semester 1 MCQ following the exam boards once marks have been ratified.

7. INTRODUCTION TO STUDYING THE MODULE

7.1 Overview of the Main Content

- Introduction to nutritional science
- Dietary balance and essentiality
- Principles of gastrointestinal physiology-GI tract
- Principles of gastrointestinal physiology-associated organs
- Energy.
- Protein.
- Fat.
- Carbohydrate.
- Minerals and trace elements.
- Vitamins
- Over and under nutrition
- Dietary recommendations.
- Nutritional assessment.
- Food choice.

7.2 Overview of Types of Classes

A range of teaching methods may be employed including: key lectures and tutorials.

Students should attend all lectures to successfully pass the module. Students must be punctual. No student will be allowed to join the class after the first 15 minutes (according to Department of Applied Science Policy).

7.3 Importance of Student Self-Managed Learning Time

It is important for you to plan your work schedule in advance (use this module guide to help). Use time efficiently. Make effective notes (Use key words, flow charts, diagrams and personal short-hand). Review material (Re-read lecture notes following each session; this will aid learning). Carry out directed reading. Remember, you must make an effort! Lectures are there for overview and guidelines. Learning must come from your own reading. Private study: you are expected to contribute to your learning by participating in the designated private study time associated with this module. You will not pass the module by simply attending sessions. Ask for help (don't be afraid to ask!!).

7.4 Employability

This module provides students with a basic knowledge of nutrition and the underlying physiology to enhance their understanding of nutritional concepts.

8. THE PROGRAMME OF TEACHING, LEARNING AND ASSESSMENT

The weekly programme is outlined below. You need to **check for any room changes** on the module blackboard site, or on the door to the room, if an extreme emergency. Please make **every effort** to turn up on time so that the class is not disrupted. **Please note 80% attendance is required to pass the module**. All mobiles **to be turned off/silent** during class contact time!

Semester 2

The weekly programme is outlined below. You need to **check for any room changes** on the University web pages, or on the door to the room, if an extreme emergency. Please make **every effort** to turn up on time so that the class is not disrupted. All mobiles **to be turned off/silent** during class contact time!

Wk	Key Lecture	
1	Introduction to module Principles of dietary essentiality and balance	
2	Energy	
3	Principles of gastrointestinal physiology	
4	Macronutrients	
5	Micronutrients	
6	The control of food intake	
7	Nutritional assessment	
8	Overnutrition	
9	Undernutrition	
10	Nutritional supplements	
11	Nutrition and Research	
12	Reading week	
	Christmas Break	
	MCQ test	

9. STUDENT EVALUATION

Overall students enjoyed the module. Following on from student feedback there are now more tutorial slots. Students reported the things they liked most about the module were:

- Clarity at the end of each lecture/topic.
- Interesting, engaging lecturers.
- Accessible online material to supplement lectures.
- Well presented lectures

Students fed back they would like some more summative assessment as practice for the final exam/MCQ

10. LEARNING RESOURCES

10.1 CORE MATERIALS

- Geissler and Powers. Human Nutrition 13th ed (2017). Oxford University Press
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- Gibney, M.J., Lanham-New, S.A., Cassidy, A., Vorster, H.H., (2009) *Introduction to Human Nutrition* 2nd edition. Wiley-Blackwell.
- Mann J & Truswell A.S (2012) *Essentials of Human Nutrition*, 4th Edition. OUP. Oxford.
- Shils ME, Shike M, Ross AC, Caballero B, Cousins RJ (2006) Modern Nutrition in health and Disease. 10th Edition. Lippincott Williams & Wilkins. London.
- McAdrdle WD, Katch FI, Katch VL (2010) Exercise Physiology: Nutrition, Energy, and Human Performance. 7th Edition. Lippincott Williams & Wilkins. London.Maurice E. Shils, James A. Olson, Moshe Shike (Editor) *Modern Nutrition in Health and Disease* (Volumes One and Two)Lea & Febiger.
- Tortora, GJ and Derrickson , BH (2011) *Principles of Anatomy and Physiology,* 13th edition. John Wiley & Sons: New York.

10.2 OPTIONAL MATERIALS

- Department of Health (1991) *Dietary Reference Values for Food Energy and Nutrients for the Moduleed Kingdom.* Report on Health and Social Subjects No. 41. The Stationery Office: London.
- Food Standards Agency (2002/12) *Food Portion Sizes*, 3rd edition/4th edition. The Stationery Office: London.
- Food Standards Agency (2002) *McCance and Widdowson's The Composition of Foods. Sixth summary edition.* Royal Society of Chemistry: Cambridge.
- Hoare, J Henderson, L Bates, CJ Prentice, A Birch, M Swan, G & Farron, M (2004) *The National Diet & Nutrition Survey: adults aged 19 to 64 years Summary report*. The Stationery Office: London.
- Webb, GP (2007) *Nutrition a Health Promotion Approach*, 3ndedition. Hodder Arnold: London.

Useful web addresses

British Nutrition Society	http://www.nutritionsociety.org/
British Nutrition Foundation	http://www.nutrition.org.uk/
The Physiological Society	http://www.physoc.org/

Search Engines

Google (Scholar)	http://scholar.google.co.uk/
PubMed	http://www.ncbi.nlm.nih.gov/pubmed/

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