



**Karolinska
Institutet**

Course syllabus for

Nutrition and disease - treatment and clinical aspects, 10 credits

Nutrition och sjukdom - behandling och kliniska aspekter, 10 hp

This course syllabus is valid from autumn 2024.

Please note that the course syllabus is available in the following versions:

Autumn2024 , Spring2025

Course code	4NT025
Course name	Nutrition and disease - treatment and clinical aspects
Credits	10 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Nutrition Science
Level	AV - Second cycle
Grading scale	Pass with distinction, Pass, Fail
Department	Department of Medicine, Huddinge
Decided by	Education committee BioNut
Decision date	2024-03-05
Course syllabus valid from	Autumn 2024

Specific entry requirements

At least grade pass for the course "Diet and health - scientific evidence, recommendations and sustainability" (4NT000, 4NT021) within the Master's Programme in Nutrition Science.

Objectives

After completion of the course, the student should be able to:

- discuss translational research in nutrition focusing on the promotion of translating evidence-based dietary guidelines into routine clinical practice.
- explain the difference between dietary guidelines intended for the general population and dietary guidelines intended for treatment of disease or disease-related symptoms, as well as describe the type of scientific evidence on which the disease-related guidelines are based.
- describe the physiological mechanisms behind non-communicable diseases (NCDs) and how they relate to dietary factors.
- suggest evidence-based nutrition therapy to an individual suffering from disease.
- discuss how nutrient recommendations for specific diseases can be translated into foods.
- discuss factors that affect an individual's eating behaviour, such as gender, psychosocial, cultural,

economic and environmental factors.

- reflect on the importance of a multidisciplinary team in the treatment of NCDs.
- reflect on ethical aspects of the treatment of diseases related to lifestyle and psychosocial factors.
- discuss how popular/alternative diets relate to existing evidence and established dietary guidelines.
- discuss future perspectives of precision nutrition, based on scientific evidence.

Content

The course deals with the importance of diet for individuals suffering from the global non-communicable diseases (NCDs). During the course, the different diseases are discussed considering different aspects of relevance when providing nutrition therapy to individuals, such as physiological mechanisms, psychosocial, cultural and economic factors, including global aspects. During the course, the understanding of the scientific evidence for nutrition therapy of disease is emphasised.

Teaching methods

This course consists of seminars, group work, discussion of clinical cases, workshops, lectures, individual assignments and discussions and providing feedback on fellow-student's group work.

Examination

The examination consists of seminars (graded Pass/Fail) and two written exams (graded Pass/Fail and graded Pass with distinction/Pass/Fail, respectively). To pass the course, all examinations must fulfil the criteria for Pass. Final grade is based on the written exam graded Pass with distinction/Pass/Fail. The grading criteria for all examinations are provided in the study guide or on Canvas.

In the case a student fails a seminar, this can be complemented to get a Pass. If the student has not submitted complementation at given deadline, grad Fail is given. The assignment can be resubmitted a maximum of five more times. A student who has failed two examinations for a course or part of a course, is entitled to have another examiner appointed unless special reasons speak against it.

Compulsory participation:

Group work and some seminars are compulsory. The examiner assesses if and, in that case, how absence from compulsory parts can be compensated. Before the student has participated in all compulsory parts or compensated absence according with the examiner's instructions, the student's study results cannot be finalized. Absence from a compulsory activity may result in that the student cannot compensate absence until the next time the course is given.

If there are special reasons, or need for adaptations for a student with a disability, the examiner may decide to depart from the syllabus's regulations on examination form, number of examination opportunities, possibility of complementation of or exemption from compulsory activities, etc. Content and learning outcomes as well as the level of expected skills, knowledge and abilities must not be altered, removed or lowered.

Other directives

The course language is English.

This course replaces the course Nutrition and disease - treatment and clinical aspects, 10 credits (4NT004) and cannot be included in a degree together with the latter course.

Literature and other teaching aids

Reports, articles and other prescribed literature are listed at course start and will be available

electronically.