

Food and Nutrition Epidemiology (I002730)

Due to Covid 19, the education and evaluation methods may vary from the information displayed in the schedules and course details. Any changes will be communicated on Ufora.

Course size (nominal values; actual values may depend on programme)
Credits 5.0 Study time 150 h Contact hrs 50.0 h

Course offerings and teaching methods in academic year 2020-2021

A (semester 2)	English	Gent	self-reliant study activities	2.5 h
			group work	6.25 h
			guided self-study	2.5 h
			seminar: coached exercises	6.25 h
			lecture	32.5 h

Lecturers in academic year 2020-2021

Kolsteren, Patrick	LA23	lecturer-in-charge
Lachat, Carl	LA23	co-lecturer

Offered in the following programmes in 2020-2021

	crdts	offering
Master of Science in Bioscience Engineering: Food Science and Nutrition	5	A
Master of Science in Nutrition and Rural Development	5	A
Exchange Programme in Bioscience Engineering: Food Science and Nutrition (master's level)	5	A

Teaching languages

English

Keywords

Epidemiology, food intake, food safety surveillance, evidence base

Position of the course

This course is a basic course that introduces common concepts of epidemiology to understand the relationship between nutrition and food intake and occurrence of diseases. The course aims at understanding different research tools with a particular emphasis on their relation to evidence base. The course also gives an overview of the different methodologies to estimate food intake.

Contents

This course has 5 modules:

Module 1

What is evidence base?

Basic concepts and applications of epidemiology

Practical 1: Systematically searching for information using PubMed and selecting papers. Setting up a field survey and calculating a sample size.

Module 2

Diagnosis

Epidemiological measures of frequency of diseases

Epidemiological measures of association and impact

Practical 2: Measures of association

Module 3

Common research designs used in epidemiology I

Food intake study designs

Sampling and sample size calculation

Practical 3: Sampling and sample size calculation

Practical 3: Analyse data of a food intake study

Module 4

Common research designs used in epidemiology II

Validity and reliability of screening and diagnostic tests

Practical 4: Making a questionnaire, getting info from a 24 hr recall, data entry and analysis

Module 5

Surveillance of food safety and analysis of an outbreak

Practical 5: Outbreak analysis : a case study

Initial competences

Having followed applied statistics in semester 1 or equivalent course in former study programme - Basic knowledge of statistics

Final competences

- 1 The participant defines a public health nutrition problem and identify solutions.
- 2 The participant sets up a food intake study and analyses food intake data.
- 3 The participant evaluates critically research results
- 4 The student applies measures of association, risk and their statistical limits.
- 5 The student investigates an outbreak

Conditions for credit contract

Access to this course unit via a credit contract is determined after successful competences assessment

Conditions for exam contract

This course unit cannot be taken via an exam contract

Teaching methods

Guided self-study, group work, lecture, self-reliant study activities, seminar: coached exercises

Extra information on the teaching methods

Seminars: between 8-10 seminars will be organised where student present a critical review of a recent article on a nutrition subject (8-10 hrs). Care will be taken that the articles document different research methodologies or tools. The selection of the papers is based on an individual assignment to define a research question and find and select relevant papers.

Ex cathedra classes (35 hrs) are alternated with individual exercises in class, group work to set up a survey and individual preparations (5 hrs).

Learning materials and price

Course material is provided for every session including: an overview of the session, a list of learning objectives and the core text.

Slides and relevant up-to-date articles will be made available on Minerva

Estimated price: 15 EUR

References

See reference list in course notes.

Course content-related study coaching

Organised 'question hours' enhancing regular follow-up of students. Use of Minerva.

Evaluation methods

end-of-term evaluation and continuous assessment

Examination methods in case of periodic evaluation during the first examination period

Written examination with open questions

Examination methods in case of periodic evaluation during the second examination period

Written examination with open questions

Examination methods in case of permanent evaluation

Possibilities of retake in case of permanent evaluation

examination during the second examination period is possible

Extra information on the examination methods

The exam combines theoretical questions to evaluated knowledge with practical questions that evaluate the analytical capacity of the participant and his/her problem-solving ability. Questions are very much based on a problem-based approach. Since a large part of the knowledge acquisition is based on practicals, students will only be accepted for the final evaluation if they have participated in the practicals.

Calculation of the examination mark

The final score is based on the final examination

Students who eschew period aligned and/or non-period aligned evaluations for this course unit may be failed by the examiner.