

Course syllabus

Livsmedlens näringsmässiga grunder Basic Nutrition

YTHA66, 7,5 credits, G1 (First Cycle)

Valid for: 2023/24

Faculty: Faculty of Engineering, LTH

Decided by: PLED LIV

Date of Decision: 2023-04-17

General Information

Main field: Food Science. **Depth of study relative to the degree requirements:**

First cycle, has less than 60 credits in first-cycle course/s as entry requirements.

Compulsory for: KLMT1

Language of instruction: The course will be given in Swedish

Aim

The aim of the course is to describe digestion, absorption and metabolism of nutrients in the body, and their effects on our health. The course will give the relation between different nutrients and their content in different foodstuffs.

Learning outcomes

Knowledge and understanding

For a passing grade the student must

- describe and explain the digestion, absorption and metabolism of carbohydrates, fat and proteins
- describe the energy nutrients present in ordinary Swedish food products
- give an overview of how different nutrients are affected during handling and processing of food
- understand the principle of the recommendations in the dietary guidelines concerning energy nutrients
- describe and explain how the nutritive value of carbohydrates, fat and proteins, respectively, is determined

Competences and skills

For a passing grade the student must

- execute assessments of nutritive values

Judgement and approach

For a passing grade the student must

- value the composition of energy nutrients in relation to the Swedish/Nordic dietary guidelines

Contents

The course covers basic nutrition of food regarding food quality and characteristics. The course addresses the digestion and absorption of nutrients in the gastrointestinal tract. The metabolism in the body of energizing nutrients related to health are discussed as well as some vitamins and minerals. Focus are also put on the link between the food and the Swedish/Nordic dietary guidelines, as well as on nutritional changes during processing. Food recording and nutritional calculations are included as tasks.

Examination details

Grading scale: UG - (U,G) - (Fail, Pass)

Assessment: Written examination, food recording, written tasks and laboratory experiments.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

Parts

Code: 0120. **Name:** Laboratory Experiments.

Credits: 2. **Grading scale:** UG. **Assessment:** Attendance at laboratory experiments and approved written laboratory reports.

Code: 0220. **Name:** Written Examination.

Credits: 3,5. **Grading scale:** UG. **Assessment:** Passed written exam.

Code: 0320. **Name:** Food Recording.

Credits: 1. **Grading scale:** UG. **Assessment:** Approved individual food recording.

Code: 0420. **Name:** Written Tasks.

Credits: 1. **Grading scale:** UG. **Assessment:** Handed in and approved written tasks.

Admission

Assumed prior knowledge: YTHA71 Food Chemistry I

The number of participants is limited to: No

The course overlaps following course/s: YTHA65

Reading list

- Johansson U. & Stubbendorff A.: Näring och hälsa. Studentlitteratur AB, 2020, ISBN: 978-91-44-12594-7.

Contact and other information

Course coordinator: Maria Glantz, maria.glantz@food.lth.se

Course homepage: <https://www.ple.lth.se/en/>

Further information: Laboratory exercises, seminars, study visits and guest lectures are compulsory. In case of legal impediment the student could accomplish an individual task with equivalent content.