

Principles of human nutrition (IIIrd Year of study, IVth Semester)

Credit value (ECTS) 3

Course category

Domain (Optional)

Course holder:

Assoc. Prof. PhD. Daniel SIMEANU

Discipline objectives (course and practical works)

- Awareness of the role and importance of nourishment in health maintaining.
- Knowledge regarding: food chemical content, human body chemical content as well as the role of different substances into human organism.
- Determination of foods' nutritive value.
- Study of biological value of alimentary proteins and calculation of some protein mixes with a maximum possible biological value.
- Knowing the specificity of digestion at humans.
- Knowing of energy and nutritive substances necessary at humans to satisfy the basal metabolism and of the necessary differentiated on categories of activities, age and sex.
- Acquiring of techniques for preparation of food ratios and nourishment regimes.

Contents (syllabus)

Course (chapters/subchapters)
1. Introduction; Terminology; Nourishment; Food components
2. Nutrients and their role in nourishment. Proteins
3. Nutrients and their role in nourishment. Lipids
4. Nutrients and their role in nourishment. Carbohydrates
5. Nutrients and their role in nourishment. Vitamins
6. Nutrients and their role in nourishment. Minerals
7. Nutrients and their role in nourishment. Water; natural antinutritive substances
8. Digestion specific at humans
9. Energy and nutritive demands at humans
10. Principles of rational nourishment. Nutritional characteristics of some food groups
11. Principles of rational nourishment. Recommendations regarding rational nourishment

Practicum
1. Establishment of nutritive value of the main groups of alimentary products
2. Nutritional evaluation of alimentary proteins
3. Establishment of some protein mixes with a maximum possible biological value
4. Nutritional consequences of food processing
5. Analysis of technological processing influence on nutritive value of food products

6. Increasing of food nutritive value by supplementation with nutrients
7. Establishment of energy and nutritive substances necessary for different types of activities
8. Composition and analysis of food ratio structure
9. Establishment of an alimentary regime for one person for a period of 14 days

References

1. Lean M., Combert E.– *Barasi's Human Nutrition a healt perspective*, third edition. CRC Press, 2017.
2. Mielîța D. – *Nutriție umană*. Ed. Risoprint, Cluj-Napoca, 2019.
3. **Simeanu D.** – *Nutriție umană*. Ed. Ion Ionescu de la Brad, Iași, 2015.

Evaluation

Evaluation form	Evaluation Methods	Percentage of the final grade
Exam	Written and oral examination	70%
Appreciation of the activity during the semester	Project	30%

Contact

Assoc. Prof. Dr. Daniel SIMEANU

Faculty of Animal Sciences - USAMV Iași

Aleea Mihail Sadoveanu nr. 8, Iași, 700489, Romania

telefon: 0040 232 407591

E-mail: dsimeanu@uaiasi.ro