



OPIS PREDMETA / SUBJECT SPECIFICATION

Predmet:	Nutriceutiki in sodobni trendi v prehrani
Subject Title:	Nutraceuticals and new trends in nutrition

Študijski program Study programme	Študijska smer Study field	Letnik Year	Semester Semester
Biomedicinska tehnologija		2	3 ali 4

Univerzitetna koda predmeta / University subject code:

Predavanja Lectures	Seminar Seminar	Sem. vaje Tutorial	Lab. vaje Lab work	Teren. vaje Field work	Samost. delo Individ. work	ECTS
15	30				105	5

Nosilec predmeta / Lecturer:

Red. prof. dr. Dušanka Mičetić-Turk

Jeziki / Predavanja / Lecture: slovenski jezik

Languages: Vaje / Tutorial: slovenski jezik

Pogoji za vključitev v delo oz. za opravljanje študijskih obveznosti:

Prerequisites:

Kandidat mora doseči 300 ECTS na predhodnem študiju.

Graduate degree 300 ECTS

Vsebina:

Contents (Syllabus outline):

- Zgodovina prehrane.
- Vrste prehrane: uravnotežena, varna, varovalna, priporočena, alternativna prehrana, klinična prehrana (enteralna in parenteralna).
- Nutraceutiki
- Vitamini
- Elementi v sledovih
- Deficitarna stanja
- Raziskave na področju prehrane
- Prehrana kot dejavnik tveganja pri nastanku bolezni.
- Dodatki v prehrani.
- Aditivi in kontaminanti hrane.
- Hranilne in energijske potrebe človeka.
- Ocena stanja prehrane in prehranjenosti prebivalcev (ocena prehranskega statusa).
- Planiranje prehrane v zdravju posebno ogroženih skupin prebivalcev.
- Prehrana in promocija zdravja.
- Prehrabene navade in razvade ljudi.

- Nutrition history
- Type of nutrition: balanced, safe, recommended, alternative nutrition, clinical nutrition (enteral and parenteral nutrition)
- Nutraceuticals
- Vitamins
- Elements in traces
- Deficit status
- Research on the nutrition area
- Nutrition as risk factor at disease origin
- Nutrition additives
- Additives and contaminants in nutrition
- Nutrition and energy needs
- Nutrition state and nourishment evaluation (evaluation of nutrition status)
- Planning the nutrition of health threatened people
- Nutrition and health promotion
- Nutrition habits and bad habits

Prehrana postaja v sodobnem svetu vedno bolj pomembna veja znanosti, ker prodira med najbolj komplicirane mehanizme našega življenja in počutja. Pestra prehrana sodi v posebno obliko sodobne in zdrave prehrane, ker je pri taki prehrani tudi najmanj mogoče, da pride do pomanjkanja posameznih življenjsko pomembnih hranil.

Načrtovanje take prehrane zahteva veliko znanja, izkušenj in sposobnosti prilagajanja veljavnim

In modern world the nutrition is becoming very important branch of sciences. It penetrates in most complicated mechanisms of our lives. Variety of nutrition is a special part of kind of modern and healthy nutrition, because with this kind of nutrition lack of life important substance is not possible.

Planning of this kind of nutrition requires a lot of knowledge, experiences and ability of adaptation to valid regulations, guidelines of European society and recommendations of

predpisom, smernicam evropske skupnosti in priporočilom svetovne zdravstvene organizacije. Za doseg te ciljev se uporabljajo v praksi različne računalniške metode, modeli, prehrabene tablice ali živilske banke podatkov in statistične metode za vrednotenje hranilne in energijske vrednosti obrokov oziroma prehrabnih navad tako zdravih kot bolnih ljudi.

world health organization.

For accomplishment of this goals in practice we use different computer methods, models, nutrition tables and data of nutrition bank and statistical methods for evaluation of nutritive and energetic value of meals or the nutritive habits of healthy and sick people.

Temeljni študijski viri / Textbooks:

1. Jason O'Neale Roach. Metabolism and nutrition, London, Elsevier Science: Mosby, 2003
2. Victor R Preedy, George Grimble, Ronald Watson. Nutrition in the infant: problems and practical procedures, London: Greenwich Medical Media, 2001
3. Cataldo, Corinne Balog. Nutrition and diet therapy: principles and practice, Belmont, CA: Wadsworth/Thomson Learning, 2003
4. Human nutrition and dietetics, Livingstone, 2000
5. Holden, Cris. Nutrition and child health, Edinburgh, 2000
6. Insel, Paul M. Discovering nutrition, Jones and Bartlett Publishers, 2003
7. Brown, Judith E. Nutrition now, Belmont, 2002
8. Whitney Eleanor, Understanding normal and clinical nutrition, Belmont Wadsworth, 2002
9. Bray George A. An atlas of obesity and weight control, Boca Raton: Parthenon Pub. Group, 2003
10. Vaughan John Griffith, The Oxford book of health foods, Oxford University Press, 2003
11. International Congress of Nutrition, Modern aspect of nutrition: present knowledge and future perspectives, Basel: Karger, 2003
12. Van Way, Charles W. Nutrition secrets, Hanley & Belfus, 1999
13. Lang Sandra, Breastfeeding special care babies, Edinburgh: New York: Bailliere Tindall, 2002
14. Rugg-Gunn, Andrew J. Nutrition, diet, and oral health, Oxford University Press, 1999
15. Handbook of nutrition in the aged, Boca Raton: CRC Press, 2001
16. Total parenteral nutrition: a practical guide for nurses, Edinburgh: Churchill Livingstone, 2000
17. Handbook of nutrition and food, Boca Raton, Fla: CRC Press, 2002
18. Advanced nutrition: macronutrients, Boca Raton: CRC Press, 2000
19. Handbook of nutraceuticals and functional foods, Boca Raton: CRC Press, 2001
20. Parizkova, Jana. Childhood obesity: prevention and treatment, Boca Raton: CRC Press, 2001
21. CRC handbook of dietary fiber in human nutrition, Boca Raton: CRC Press, 2001
22. Srečanje pediatrov v Mariboru z mednarodno udeležbo, Maribor, Zbornik predavanj, 2003
23. Vitamini i minerali u dječjoj dobi, Zagreb: Klinika za dječje bolesti Zagreb, 2004
24. Referenčne vrednosti za vnos hranil, Ministrstvo za zdravje, Ljubljana, 2004
25. Pokorn Dražigost. Prehrana v različnih življenjskih obdobjih: prehranska dopolnila v prehrani, Ljubljana: Marbona, 2003
26. Rokorn Dražigost, Oris zdrave prehrane: priporočena prehrana, Inštitut za varovanje zdravja Republike Slovenije, 2001
27. Mušič Ema, Zdrava prehrana odraslih, ki imajo neugodne reakcije in alergijo za hrano, Društvo pljučnih bolnikov, 2001
28. Rauch-Petz, Gisela. Alergije in hrana: kaj resnično pomaga: kako kljub alergijam uživamo v hrani, Ljubljana: Mladinska knjiga, 2002
29. Vaclavik, Vickie. Dimensions of food, Boca Raton: CRC Press, 2002
30. Krepimo zdravje z gibanjem in zdravo prehrano, Ljubljana, 2002
31. Nutrition: a practical guide, London, 2003

Cilji:

Vzgojno izobraževalni cilji:

- kemijska sestava hrane
- hranilna vrednost hrane
- biološka polnovredna hrana
- ocena nutritivnega statusa
- nutritivne potrebe različnih starostnih skupin
- vpliv hrane na človekovo zdravje in bolezen

Objectives:

Educational goals:

- chemical structure of food
- nutritional value of food
- biological full value food
- evaluation of nutritive status
- nutritive needs of different age groups
- food influence to human health and human disease

Predvideni študijski rezultati:

Znanje in razumevanje:

Vpliv in učinek hrane na človekovo zdravje in bolezen.

Intended learning outcomes:

Knowledge and Understanding:

Food influence and effect to human health and human disease.

Prenesljive/ključne spretnosti in drugi atributi: Študent pridobi znanja načrtovanja zdrave in sodobne prehrane, tudi s pomočjo računalniških metod, modelov, prehrabnih tablic, ...	Transferable/Key Skills and other attributes: Student gets of knowledge planning of healthy and of contemporary nourishment, also by the help of computer methods, of models, nutrition tables, ...
Metode poučevanja in učenja:	Learning and teaching methods:
predavanja, seminarske vaje po skupinah, problemsko naravnano učenje, učenje na daljavo	lectures, seminary training in small groups, problem based learning, e-learning
Načini ocenjevanja:	Delež (v %) / Weight (in %) Assessment:
Način (pisni izpit, ustno izpraševanje, naloge, projekt) pisni izpit, ustno izpraševanje, seminarske naloge	Type (examination, oral, coursework, project): Written and oral examination, seminary work
Materialni pogoji za izvedbo predmeta :	Material conditions for subject realization
Uporaba vseh avdiovizualnih pripomočkov, osebni računalnik, LCD projektor.	Use of all audiovisual resources, computer, LCD projector.
Obveznosti študentov:	Students' commitments:
(pisni, ustni izpit, naloge, projekti) Pisni in ustni izpit, seminarske naloge	(written, oral examination, coursework, projects): Written and oral examination, seminary work