


UČNI NAČRT PREDMETA / COURSE SYLLABUS

Ime predmeta:	Klinična prehrana 1
Course title:	Clinical nutrition 1

Študijski program in stopnja Study programme and cycle	Študijska smer Study option	Letnik Year of study	Semester Semester
Splošna medicina, enovit magistrski študijski program		Tretji	5.
General medicine, Uniform master's degree study program		Third	5th

**Vrsta predmeta (obvezni ali izbirni) /
Course type (compulsory or elective)**

izbirni

elective

Univerzitetna koda predmeta / University course code:

Predavanja Lectures	Seminar Seminar	Vaje Tutorial			Klinične vaje Clinical training	Druge oblike študija Other forms of study	Samost. delo Individual work	ECTS
5	40	AV	LV	RV			45	3

**Nosilec predmeta / Course
coordinator:**

red. prof. dr. Dušanka Mičetić Turk

Jeziki /Languages:

Predavanja / Lectures: slovenski/slovene

Vaje / Tutorial: slovenski/slovene

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

**Prerequisites for enrolling in the course or for
performing study obligations:**

Vsebina (kratek pregled učnega načrta):

-Ocena prehranskega stanja,
- Klinična in biokemijska analiza stanja prehranjenosti, sestava telesa,
-Prehranski vnos glede na sestavo po posameznih skupinah hranil in energetski vnos, ocena ustreznosti vnosa .
-Voda in elektroliti
-Vpliv pomanjkanja makro in mikrohranil na fiziološke funkcije v različnih bolezenskih stanjih
-Nutraceutiki in njihov pomen za zdravje
- Pomen probiotikov, prebiotikov in antioksidantov v prehrani
- Sodobne smernice prehrane dojenčkov, predšolskih in šolskih otrok ter odraslih

Content (syllabus outline):

Assessment of nutritional status,
-Clinical and biochemical analysis of nutritional status, Body composition,
-Nutritional intake regarding composition by individual nutrient groups and energy intake, intake adequacy assessment
-Water and electrolytes
-The impact of macro and micronutrient deficiencies in the physiological function in various disease states
-Nutraceuticals and their importance for health
- The importance of probiotics, prebiotics and antioxidants in nutrition
-Contemporary guidelines for nutrition of infants, preschool and school children as well as the adults

-Najpogostejše prebavne motnje povezane s prehrano
 - Enteralna in parenteralna prehrana
 - Prehranska modulacija in imunske funkcije
 -Prehrana akutno bolnih (na pr. akutni gastroenteritis)
 -Prehrana kritično bolnih(na pr. KVČB, ledvične bolezni..)
 -Motnje hranjenja in prehranska podpora teh bolnikov

- The most common gastrointestinal disorders in connection with the food
 -Enteral and parenteral nutrition
 -Nutritional modulation and immune functions
 -Nutrition of acute illpatients (i.e. ac.gastroenteritis)
 -Nutrition of critically ill patients (IBD, renal diseases ..)
 -Eating disorders and nutritional support of these patients

Temeljni literatura in viri / Reading materials:

Temeljna literatura
 1.Študijsko gradivo- zapiski predavanj/ Course material- lecture notes
 2.Slovensko združenje za Klinično prehrano in Ministrstvo za zdravje R Slovenije, Klinična prehrana, 2017
 3.Mahan K. Escott-Stump S. Krause' Food & Nutrition Therapy (12th ed.) Elsevier - Health Sciences Division, St. Louis, 2008
 4. Kleinman R.E.,Greer F.R., Pediatric Nutrition,(7th ed),American Academy of Pediatrics,2014.

Dodatna literatura
 A.S.P.E.N. and E.S.P.E.N. guidelines
 Strokovne publikacije v periodiki

Cilji in kompetence:

Cilji:
 poznavanje prehrane za vzdrževanje zdravja in za različna bolezenska stanja in motnje hranjenja

Splošne kompetence:
 Razumevanje konceptov znanstvenih izhodišč klinične prehrane in dietetike, ki študenta usmerjajo k analiziranju in reševanju problemov.
 Razvijanje zmožnosti za iskanje, izbiro in uporabo relevantnih podatkov in najnovejših informacij iz področja prehrane

Predmetno specifične kompetence:
 Študent zna oceniti stanje prehranjenosti bolnika
 Študent zna prepoznati osnovne simptome, pozna diagnostične postopke in principe zdravljenja bolezni ter najprimernejšo obliko prehrane pri določeni bolezni vključno z vsemi oblikami umetne prehrane
 Razvija sposobnosti sodelovanja v multidisciplinarnem timu
 Razvija sposobnosti raziskovanja, dokumentiranja, analize rezultatov , prikaza rezultatov in njihove objave v strokovni /znanstveni literaturi.

Objectives and competences:

Goals:
 Understanding the role of nutrition in health and different diseases and eating disorders

General competences:
 Understanding the concepts of scientific principles of clinical nutrition and dietetics, which direct students to analyze and solve problems.
 Developing the ability to find, select and use relevant data and the latest nutrition information.

Subject-specific competences:
 The student can evaluate the patient's nutritional status
 The student can recognize the basic symptoms, familiar diagnostic procedures and principles of treatment of the disease, and the most appropriate form of nutrition in a particular disease, including all forms of artificial nutrition
 Develops the ability to participate in a multidisciplinary team
 Develops the ability to research, document, analyze results, display results and publish them in professional / scientific literature

Predvideni študijski rezultati:

Znanje in razumevanje:
 Študent razume pomen prehrane v zdravju in bolezni
 Pozna osnove učinkov hrane na bolezenske procese in razume patofiziološko dogajanje pri različnih motnjah

Prenesljive/ključne spretnosti in drugi atributi:
 Pozna različne načine prehranske podpore bolnikov in zna načrtovati prehrano
 Ima teoretično podlago za sodelovanje pri raziskovalnem delu.

Intended learning outcomes:

Knowledge and understanding:
 Student understand the role of nutrition for health and for different pathological conditions
 Student know the basic concepts of the effects of food to different diseases and understand the pathophysiological processes in different disorders

Transferable/Key Skills and other attributes:
 Student have to know the different types of nutritional support and know planning nutrition
 Student have the theoretical foundation to collaborate in research work.

Metode poučevanja in učenja:

Predavanja
 Seminarji
 Seminarske vaje –sodelovanje z gosti iz prakse

Learning and teaching methods:

Lectures
 Seminars
 Seminar tutorial-including guests from practice

Načini ocenjevanja:	Delež (v %) / Share (in %)	Assessment methods:
Seminarska naloga in ustna predstavitev	100%	Seminar essay and oral presentation

Reference nosilca / Course coordinator's references:

PRIMEC, Maša, KLEMENAK, Martina, DI GIOIA, Diana, ALOISIO, Irene, CIONCI BOZZI, Nicole, QUAGLIARIELLO, Andrea, GORENJAK, Mario, **MIČETIĆ-TURK, Dušanka**, LANGERHOLC, Tomaž. Clinical intervention using Bifidobacterium strains in celiac disease children reveals novel microbial modulators of TNF- α and short-chain fatty acids. *Clinical nutrition : an international journal devoted to clinical nutrition and metabolism*. June 2019, vol. 38, iss. 3, str. 1373-1381, ilustr. ISSN 0261-5614.

ŠIKIĆ POGAČAR, Maja, LANGERHOLC, Tomaž, **MIČETIĆ-TURK, Dušanka**, SMOLE MOŽINA, Sonja, KLANČNIK, Anja. Effect of Lactobacillus spp. on adhesion, invasion, and translocation of Campylobacter jejuni in chicken and pig small-intestinal epithelial cell lines. *BMC veterinary research*. 2020, vol. 16, str. 1-14. ISSN 1746-6148

GREGORIČ KUMPERŠČAK, Hojka, GRIČAR, Alja, ÜLEN, Ina, **MIČETIĆ-TURK, Dušanka**. A pilot randomized control trial with the probiotic strain Lactobacillus rhamnosus GG (LGG) in ADHD : children and adolescents report better health-related quality of life. *Frontiers in psychiatry*. 17. Mar. 2020, vol. 11, str. 1-9. ISSN 1664-0640.

ŠIKIĆ POGAČAR, Maja, **MIČETIĆ-TURK, Dušanka**. The influence of dietary compounds on gut microbiota = Vpliv prehrane na črevesno mikrobioto. *Zdravniški vestnik : glasilo Slovenskega zdravniškega društva*. [Tiskana izd.]. 2021, letn. 90, št. 3/4, str. 178-192. ISSN 1318-0347.

PRIMEC, Maša, ŠKORJANC, Dejan, LANGERHOLC, Tomaž, **MIČETIĆ-TURK, Dušanka**, GORENJAK, Mario. Specific Lactobacillus probiotic strains decrease transepithelial glucose transport through GLUT2 downregulation in intestinal epithelial cell models. *Nutrition research*. [Print ed.]. February 2021, vol. 86, str. 10-22, graf. prikazi. ISSN 0271-5317

ŠIKIĆ POGAČAR, Maja, **MIČETIĆ-TURK, Dušanka**, FIJAN, Sabina. Knowledge of fermentation and health benefits among general population in North-eastern Slovenia. *BMC public health*. 2022, vol. 22 article number: 1695, str. 1-11, tabele, graf. prikazi. ISSN 1471-2458.

FIJAN, Sabina, KOLČ, Nina, HRAŠOVEC, Metka, JAMTVEDT, Gro, **ŠIKIĆ POGAČAR**, Maja, **MIČETIĆ-TURK, Dušanka**, MAVER, Uroš. Single-strain probiotic lactobacilli for the treatment of atopic dermatitis in children : a systematic review

and meta-analysis. *Pharmaceutics*. [Online ed.]. Apr. 2023, vol. 15, iss. 4, [article no.] 1256, 21 str., ilustr. ISSN 1999-492