



Nutri-psychiatry

Nutripsychiatria

1. IMPRINT

Academic Year	2026/2027
Department	Faculty of Medicine
Field of study	Medicine
Main scientific discipline	Medical sciences
Study Profile	General academic
Level of studies	Uniform MSc
Form of studies	Full time studies
Type of module / course	Non-compulsory
Form of verification of learning outcomes	E-LEARNING test (credit)
Educational Unit / Educational Units	Department of General, Gastroenterology and Oncologic Surgery, Medical University of Warsaw, 1a Banacha St, 02-097 Warsaw, phone: (22) 599 22 57 e-mail: gastrochirurgia@wum.edu.pl
Head of Educational Unit / Heads of Educational Units	Prof. Maciej Słodkowski, MD, PhD
Course coordinator	Aneta Jachnis-Morzy, Msc, PhD Email: aneta.jachnis@wum.edu.pl
Person responsible for syllabus	Aneta Jachnis-Morzy, Msc, PhD Email: aneta.jachnis@wum.edu.pl
Teachers	Aneta Jachnis-Morzy, Msc, PhD Email: aneta.jachnis@wum.edu.pl

2. BASIC INFORMATION

Year and semester of studies	IV-V year, winter semester	Number of ECTS credits	2.00
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FORMS OF CLASSES	Number of hours	ECTS credits calculation
Contacting hours with academic teacher		
Lecture (L)		
Seminar (S)	30 (e-learning)	1.20
Classes (C)		
e-learning (e-L)		
Practical classes (PC)		
Work placement (WP)		
Unassisted student's work		
Preparation for classes and completions	20	0.80

3. COURSE OBJECTIVES

O1	To familiarize students with the fundamentals of dietetics, principles of proper nutrition, and human nutritional requirements in the prevention and treatment of selected psychiatric and neurological disorders, as well as during psychotherapy.
O2	To introduce students to the multidirectional relationships between dietary habits, nutritional status, gastrointestinal function, and human mental, emotional, and cognitive health.
O3	To understand the neurohormonal mechanisms responsible for regulating hunger and satiety centers, as well as the impact of stress on the functioning of the gastrointestinal and nervous systems.
O4	To learn the role and dietary sources of individual nutrients essential for proper body function within the scope of nutripyschiatry
O5	To teach the physiological and anatomical foundations of the gut-brain axis and its role in the pathogenesis of selected mental disorders.
O6	To understand the role of specific macro- and micronutrients, essential nutrients, and the gut microbiota in neurotransmitter synthesis and the maintenance of mental well-being.
O7	To understand the impact of malnutrition, catabolic states, and nutritional deficiencies on mental health, cognitive functions, and the course of psychiatric treatment.
O8	To familiarize students with the indications, contraindications, and evidence-based medicine (EBM) regarding the use of supplementation, psychobiotics, and dietary therapy in psychiatry.

4. STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING

Code and number of the effect of learning in accordance with standards of learning	Effects in the field of: SCIENTIFIC FOUNDATIONS OF MEDICINE PRE-CLINICAL SCIENCE NON-SURGICAL CLINICAL SCIENCE
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Knowledge – Graduate* knows and understands:

B.W10.	structure of organic and inorganic compounds present in cells, extracellular matrix and body fluids;
B.W11.	structure of lipids and polysaccharides and their roles in cellular and extracellular structures;
C.W47.	influence of oxidative stress on cells and its meaning to pathogenesis of diseases and in aging processes;
C.W48	consequences of deficiency or excess of vitamins or minerals in human organism;
C.W49	enzymes participating in digestion, mechanism of the production of hydrochloric acid in the stomach, the role of bile, course of absorption of digestion products;
C.W50	consequences of improper nutrition, including long-term starvation, too square meals and unbalanced diet and disorders of digestion and absorption of digestion products;
C.W51	mechanism of hormone activity.
D.W14	rules of promotion of health, its objectives and main directions of operation, with a special focus on the awareness of healthy lifestyle;
E.W15	basic concepts of the pathogenesis of mental disorders;

Skills– Graduate* is able to:

D.U2	perceive signs of unhealthy and self-destructive behaviours and react properly to such behaviours;
D.U5	conduct an interview with an adult patient, a child and the family with empathy and listeni actively; is able to discuss the patient's life situation;
D.U9	advise on the observance of therapeutic guidelines and healthy lifestyle

D.U11	apply the basic psychological interventions of motivational and supportive character;
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* In appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019 „graduate“, not student is mentioned.

5. ADDITIONAL EFFECTS OF LEARNING (non-compulsory)

Number of effect of learning	Effects in the fields of:
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Knowledge – Graduate knows and understands:

K1	The physiological and anatomical foundations of the gut-brain axis and their role in the pathogenesis of selected mental disorders.
K2	The neurohormonal mechanisms responsible for regulating hunger and satiety centers, as well as the impact of stress on the functioning of the gastrointestinal and nervous systems.
K3	The role of individual macro- and micronutrients, essential nutrients, and gut microbiota in neurotransmitter synthesis and maintaining mental well-being.
K4	The impact of malnutrition, catabolic states, and nutritional deficiencies on mental status, cognitive functions, and the course of psychiatric treatment.
K5	Indications, contraindications, and evidence-based knowledge (EBM) regarding the use of dietary supplementation, psychobiotics, and nutritional therapy in psychiatry.

Skills– Graduate is able to:

S1	Perform an initial assessment of the patient's nutritional status and identify the risk of malnutrition or nutritional deficiencies affecting mental health
S2	Plan basic dietary recommendations supporting the treatment of mental disorders (e.g., depressive, anxiety, and stress-related disorders), incorporating the principles of psychodietetics.
S3	Critically evaluate scientific evidence regarding the efficacy and safety of dietary supplements, psychobiotics, and alternative dietary models.
S4	Select and propose non-pharmacological stress reduction methods and lifestyle modifications to support mental health.

Social Competencies – Graduate is ready for:

SC1	Approach the patient holistically, recognizing the close link between physical health (with a particular focus on the gastrointestinal tract) and mental well-being.
SC2	Collaborate within an interdisciplinary team (physician, psychologist, psychotherapist, dietitian) to optimize the diagnostic and therapeutic process.
SC3	Educate patients on the safe use of diet and supplementation, and promote healthy dietary habits and lifestyle.
SC4	Formulate opinions on various aspects of professional activity and seek expert advice when facing challenges in resolving problems independently.

6. CLASSES

Form of class	Class contents	Effects of Learning
Seminar 1-10 (e-learning)	Nutripsychiatry Anatomy and physiology of the gastrointestinal tract	B.W10. B.W11.

	from the perspective of nutripyschiatry • Basic concepts and principles of dietetics • Regulation of food intake centers: hunger and satiety centers • The role and significance of the gut-brain axis • The impact of individual dietary components on mental health • Nutritional therapy with elements of psychodietetics in psychiatric patient care and psychotherapy • Supplementation in nutripyschiatry and the role of psychobiotics • Malnutrition – impact on the human body, nutritional status assessment, and management • The impact of stress on the human body • Selected lifestyle factors and interventions for stress reduction	C.W47. C.W48 C.W49 C.W50 C.W51 D.W14 E.W15 D.U2 D.U5 D.U9 D.U11 K1-k5
Seminar 1 (e-learning)	Anatomy and physiology of the gastrointestinal tract from the perspective of nutripyschiatry	C.W49, K1, S1, SC1,
Seminar 2 (e-learning)	Basic concepts and principles of dietetics	B.W10, B.W11, C.W48, C.W50, D.W14,D.U9, S2, SC3
Seminar 3 (e-learning)	Regulation of food intake centers: hunger and satiety centers	Knowledge: C.W51, K2 Skills: S1, S2 Social Competencies: SC1
Seminar 4 (e-learning)	The role and significance of the gut-brain axis	Knowledge: E.W15, K1, K2 Skills: S1, S2 Social Competencies: SC1
Seminar 5 (e-learning)	The impact of individual dietary components on mental health	Knowledge: B.W10, B.W11, C.W47, C.W48, K3 Skills: D.U9, S2 Social Competencies: SC3
Seminar 6 (e-learning)	Nutritional therapy with elements of psychodietetics in psychiatric patient care and psychotherapy	Knowledge: E.W15, K3, K5 Skills: D.U2, D.U5, D.U9, D.U11, S2 Social Competencies: SC1, SC2, SC3
Seminar 7 (e-learning)	Supplementation in nutripyschiatry and the role of psychobiotics	Knowledge: C.W48, K3, K5 Skills: D.U9, S3 Social Competencies: SC3, SC4
Seminar 8 (e-learning)	Malnutrition – impact on the human body, nutritional status assessment, and management	Knowledge: C.W50, K4 Skills: D.U2, S1, S2 Social Competencies: SC1, SC2

Seminar 9 (e-learning)	The impact of stress on the human body	Knowledge: C.W47, C.W51, E.W15, K2 Skills: D.U2, S4 Social Competencies: SC1
Seminar 10 (e-learning)	Selected lifestyle factors and interventions for stress reduction	Knowledge: D.W14 Skills: D.U2, D.U9, D.U11, S4 Social Competencies: SC3, SC4

7. LITERATURE

Obligatory

All materials included in the e-learning course (prepared by the lecturer)

Supplementary

1. Introduction to Human Nutrition, Third Edition. Susan A. Lanham-New. Wiley.
2. <https://www.cambridge.org/core/books/nutritional-psychiatry/basic-principles-of-nutrition/8CDCDC38AA1DCC3544D3300C3AEC4C48>
3. Cryan, J. F., et al. (2019). *The Microbiota-Gut-Brain Axis*. Physiological Reviews, 99(4), 1877-2013.

- Lachance, L. R., & Ramsey, D. (2018). *Antidepressant foods: An evidence-based nutrient profiling system for depression*. World Journal of Psychiatry, 8(3), 97-104.
- Marx, W., et al. (2017). *Nutritional psychiatry: the present state of the evidence*. The Australian and New Zealand Journal of Psychiatry, 51(1), 27-36.
- Sobotka, L. (Ed.). (2019). *Basics in Clinical Nutrition* (5th ed.). ESPEN / Galen. (*Świetna pozycja referencyjna dotycząca ocen stanu odżywienia i niedożywienia*).
- Jacka, F. N. (2017). *Nutritional Psychiatry: Where to Next?* EBioMedicine, 17, 24-29.

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8. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
B.W10. B.W11. C.W47. C.W48 C.W49 C.W50	On e-learning platform: quiz, test, written report	1. Credit >60% or correct answers 2. >60% of correct answers of test and quiz

C.W51 D.W14 E.W15 D.U2 D.U5 D.U9 D.U11 K1-k5		
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9. ADDITIONAL INFORMATION

Link to e-learning will be sent by mail to MUW student email account within 2 weeks of the end of registration.

Access to course will be available from 26/10/2026 till 31/01/2027 year !

The student is required to check the student email regularly during the course. All current information will be sent only in this way.

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ATTENTION

The final 10 minutes of the last class of the block/semester/year should be allotted for students to fill out the Survey of Evaluation of Classes and Academic Teachers