LITHUANIAN SPORTS UNIVERSITY

STUDY MODULE PROGRAMME (SMP)

Module Code	B	440	B	048	Accredited until				Renewal date		
	Branch of Science		Progr.	Registr. №.							

Entitlement

Sport (exercise) nutrition and antidoping

Prerequisites

Knowledge of biology, biochemistry

Main aim

ITo promote personal and professional development of students in relation to communication skills, ability to apply recent scientific evidence considering impact of life style modification including changes in nutrition.

Provided knowledge and abilities

tudents will know the general principles of nutrition and nutrients requirement, exercise nutrition is relatively new discipline that is rapidly gaining importance and recognition. Students will know about the macronutrients: carbohydrates, fats and proteins, fuel sources for muscle and exercise metabolism, energy requirements of different sports, Weight management in athletes.

Summary

his module the focus is on principles and essentials of human nutrition, biochemistry with the main purpose of helping the students to develop a holistic and integrated understanding of this complex multifaceted scientific domain. Students will have understanding of the basics of the subject, the properties and sources of nutrient, and have focused attention upon how nutrition-related factors shape human health and disease across all stages of the life.

Level of module

Level of programme		Subject group (under the regulation of the area)
Cycle	Type	
First	Bachelor	Bendrojo universitetinio lavinimo

Group under financial classification

Syllabus

№.	Sections and themes	Responsible lecturer
1.	Introduction	
2.	Proteins requirement	
3.	Energy requirement	
4.	Weight management	
5.	Carnohydrates before exercise, competition, recovery	
6.	Endurance athletes nutrition	
7.	Supplements in sport	
8.	Nutrition and immune function	
9.	Doping	

Teaching/learning methods:

This module the focus is on principles and essentials of human nutrition, biochemistry with the main purpose of helping the students to develop a holistic and integrated understanding of this complex multifaceted scientific domain. Students will have understanding of the basics of the subject, the properties and sources of nutrient, and have focused attention upon how nutrition-related factors shape human health and disease across all stages of the life.

Evaluation procedure of knowledge and abilities:

References

№.	Title	Edition in Lithuanian Sports University library		In Lithuanian Sports University bookstore	Number of ex. in the methodical cabinet of the depart.
		Pressmark	Number of exemplars		
1.	Gibney M., Vorster H., Kok J. 2002 Introduction to Human Nutrition ISBN 0-63205624-x Oxford, UK			No	2
2.	Jeukendrup, M. Gleeson 2016 Sport Nutrition, Human Kinetic, USA		4	No	2
3.	A. Skurvydas ir kt 2006 Sveikata ir Fizinis aktyvumas ISBN 9955-622-30-x LKKA, Kaunas		30	No	1
4.	Burke L., Deakin V. 2006 Clinical sports nutrition, ISBN 0 074 70828 7 McGraw-Hill, Australia		4	No	2
5.	WADA Anti-doping Textbook. 2015. www.antidopinglearninghub.org			No	

Additional literature

№.	Title
1.	Choi E.Y., Cho Y.O., (2013) Interaction of physical trainings and coffee intakes in fuel utilization during exercise in rats. Nutr. Res Pract. 7 (3) 178-84.
2.	Pinckaers P.J., Churchward-Venne T.A., Bailey D., Van Loon L.J. (2017) Ketone Bodies and Exercise Performance: The Next Magic Bullet of Merely Hype? Sport Med; 47(3):383-391.
3.	Rosset R., Lecoultre V., Egli L., Cros J., Dokumaci A.S., Zwygart K., Boesch C., Kreis R., Schneiter P., Tappy L. (2017) Postexercise repletion on muscle energy stores with fructose or glucose in mixed meals. Am J Clin;105(3):609-617.
4.	Jeff S. Volek, Timothy Noakes, Stephen D. Phinney (2015) Rethinking fat as fuel for endurance exercise European Journal of Sport Science, Vol.15, No 1, 13-20
5.	McBride A, Hardie DG. AMP-activated protein kinase: a sensor of glycogen as well as AMP and ATP? Acta Physiol. 2009;196:99–113.
6.	www.antidopinglearninghub.org/en/textbook/what-is-doping
7.	David R. Mottran and Neil Chester. 2015. Drugs in Sports. Chapters 1 and 2
8.	Anti-Doping Convention of the Council of Europe. http://conventions.coe.int/Treaty/en/Treaties/Html/135.htm
9.	Hatton CK, Green GA, Ambrose PJ. 2014. Performance-enhancing drugs: understanding the risks. Phys Med Rehabil Clin N Am. 2014 Nov;25(4):897-913
10.	Vogliardi S, Tucci M, Stocchero G, Ferrara SD1, Favretto D. 2015. Sample preparation methods for determination of drugs of abuse in hair samples: A review. Anal Chim Acta. 2015 Feb 1;857:1-27.
11.	Burke L., Castell L., Casa D. et al. International Association of athletics Federations Consensus Statemet 2019: Nutrition for Athletics. International Journal of Sport Nutrition and Exercise Metabolism, 2019, 29, 73-84.

Coordinating lecturer

Position	Degree, surname, name	Schedule №.
Associate Professor	Assoc. Prof. Dr. Daiva Vizbaraitė	346

Subdivision

Entitlement	Code
Department of Health Promotion and Rehabilitation	2006

Study module teaching form №. 1

Semester		Mode of studies	Structure				Total hours	Credits
			Theory	Seminars	Lab Works	Ind. work		
A	S	D	0	0	0	130	130	5

Languages of instruction:

Lithuanian	L	English	E	Russian	R	French	F	German	G	Other	Oth.

Plan of in-class hours

№. of Themes	Academic hours			№. of Themes	Academic hours		
	Theory	Seminars	Lab Works		Theory	Seminars	Lab Works
				Total:	0	0	0

Schedule of individual work tasks and their influence on final grade

	№. of syllabus	Total hours	Influence on grade, %	Week of presentment of task (*) and reporting (o)														
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17-20
Total:	-	0	0																	