

THE CONCEPT OF A PROFESSIONAL MASTER'S PROGRAM: FITNESS AND NUTRITION

Purposes of the article. To put the basis of the Fitness and Nutrition Master's Program.

Scientific novelty. The given article presents the purpose and content of the «Fitness and Nutrition» master's program. There are defined goals, objectives, competencies. The mentioned program is focused on preparing fitness trainers that would be able to conduct various areas of health-improving and recreational activities, developing nutrition programs for it, depending on their specifics, orientation and preferences of those involved.

Conclusions. Graduates of the Fitness and Nutrition master's program will be able to work in fitness centers and clubs, sports schools, specialized educational institutions, recreation organizations – sanatoriums, rest homes, hotel fitness rooms, etc., occupying different positions from the hierarchical profile step.

The master's program will cover the demands of the labor market with specialists in the field of physical education, fitness, sports: fitness centers and clubs, sports schools, sports centers and clubs. Graduates will have the opportunity to work as a fitness nutritionist, sports nutritionist, specialist advisor in nutrition and sports diet, carrying out different nutritional programs adapted to the type and volume of physical effort, counseling in order to adjust the diet for weight gain or loss, long-term follow-up of nutritional status and counseling for supporting the effort, recovery after the effort and recommendations regarding hydration and the administration of nutritional supplements.

Keywords: master's program, fitness, nutrition.

Statement of the problem. At the present stage, fitness as a whole can be defined as a system of physical exercises for health purposes, tuned to the individual state of the psychophysical sphere of a person, his motivational accuracy and personal interest. In accordance with this, there is a need to train a specialist of a high category in the field of fitness, who must know the variety of fitness systems used for various groups of people involved, the forms of organization and methods of conducting fitness training, as well as medical biological problems, both of the person himself and those physical exercise that are being performed.

Analysis of the main studies. The problem of excess weight has always existed and continues to exist in a person's daily life. The arsenal of means to combat excess weight and cellulite has expanded in recent years. As you know, demand creates supply. In this regard, various creams, pills and procedures have appeared to help get rid of extra pounds. But such measures are not always effective or are not recommended to everyone. The causes of excess weight can be: heredity, eating disorders, socio-economic factors, excess fat in the diet, excess consumption of simple carbohydrates and carbohydrates with a high glycemic index, lack of muscle mass, sedentary lifestyle, fasting and «extreme» diets, rare (2-3 times a day) and large meals, rushed eating, ignored energy balance, medications [3]. A balanced diet is the foundation on which a person's physical and emotional well-being is being built. Violation of the composition of the diet, a decrease in some and an increase in other nutrients leads to excess weight, which contributes to the development of many diseases: atherosclerosis, hypertension and coronary heart disease, diabetes, gout, etc. [4, 5]. Under the term **rational nutrition** is understood a properly organized, timely supply of the body with well-prepared, nutritious and tasty food containing optimal quantities of various substances necessary for its development and functioning. These substances include *proteins, fats and carbohydrates*, as well as *mineral salts, vitamins, microelements*, which ensure continuous renewal of organs and tissues, as well as a constant flow of energy [6, 7].

Fitness programs represent a health-improving and recreational training aimed at maintaining health, increasing the performance of the human body, correcting the shape, building muscle mass, etc. [1, 2].

Purposes of the article. To put the basis of the Fitness and Nutrition Master's Program.

Main material. The development of the Fitness and Nutrition master's program pursued the following purposes:

1. To form a system of concepts regarding the main legalities of the specialist's professional activity in the field of fitness and sports nutrition.

2. To perfect the ideas about the basic principles, which ensure the process of the fitness activity and the nutrition program under the aspect of theoretical knowledge, technological and technical skills.

3. To acquire professional pedagogical skills oriented towards the design, organization and modelling of scientific research in the field of professional activity in fitness and sports nutrition.
 4. To analyse fitness activities from the position of professional pedagogical mastery.
 5. To form the self-improvement process of the specialist in the field of fitness and sports nutrition.
 6. To conduct recreational training and strengthening lessons following various fitness and nutrition programs.
 7. To demonstrate the pedagogical skills that are needed to organize and carry out fitness training with a different contingent: children, teenagers, adults, women, elderly people.
 8. To express the creative potential in organizing and conducting fitness activities.
- In accordance with this, the matrix of the correlation of the study objectives of the program with those of the course units was developed (Tab. 1).

Table 1

**The correlation matrix of the study purposes
of the *Fitness and nutrition* program with those of the course units**

Code	Course Units	Study purposes							
		1	2	3	4	5	6	7	8
F 01 O.001	Epistemology and research methodology in physical culture	+	+	+		+		+	
F 01 O.002	Fitness kinesiology		+			+			
F 01 O.003	Human nutrition	+	+						
F 01 O.004	Theory of learning motor actions		+					+	
F 01 O.005	Fitness Acmeology	+			+	+			+
S 02 O.006	Online fitness methodology	+			+	+			
S 02 O.007	Psychophysiodiagnostics in fitness		+						+
S 02 A.008	Cardio Fitness Methodology			+	+			+	
S 02 A.009	Nutritional physiology		+	+			+		
S 02 O.010	Food hygiene								
S 02 O.011	Recreational technologies of strength fitness						+	+	+
S 03 O.012	Biochemistry of nutrition	+	+						
S 02 O.013	The basics of sports nutrition		+	+					
S 03 A.014	Mental fitness	+			+	+		+	
S 03 A.015	Nutrition in fitness			+		+	+		
S 03 A.016	Individual fitness methodology				+	+			
S 03 A.017	Adaptive fitness	+							
S 03 O.018	Vitaminology		+	+			+		
S 04 O.019	Food supplements in sports								
S.04 O.020	Specialized practice	+	+	+		+			+
S.04 O.021	Research practice/elaboration of the master thesis	+		+		+			+
S.04 O.022	Defense of the master thesis	+	+	+	+				+

According to this, the knowledge, skills and competences developed in the program are as follows:

- Identifying and using in practice the concepts, principles, theory and methodology of fitness and nutrition and related fields of professional activity.
- Application of knowledge in the field of fitness and nutrition in the activities associated with the typical organizational processes of preparation and publication of the results of studies and research carried out on the basis of the accumulated theoretical-practical experience.
- Applying the basic principles and methods of fitness and nutrition in related activities, in order to design and develop solutions specific to the professional field, by using economic, social, political and demographic information.
- Analysis and formulation of strategies and policy solutions for problems identified in the field of fitness and sports nutrition.
- The effective networking with different categories of institutions and organizations from environments related to the fitness industry and sports nutrition, in order to make collaboration activities more efficient.
- Identifying the need for professional training in the process of self-analysis of one's own professional development activity with the appropriate use of communication resources and professional training (internet, e-mail, computer programs, databases, courses, seminars, conventions and conferences with physical presence or online etc.).
- Capitalizing on the principle of continuous improvement, using continuous training opportunities, learning tools and resources for professional and personal development.

In correlation with the Nomenclature of professional training fields, the National Framework of Occupations of the Republic of Moldova, as well as in the debates held with employers, graduates, academic staff and students, the following *specific skills* were identified:

Cognitive skills:

Knowledge of scientific sources and working documentation on various fitness and sports nutrition programs through the development, planning, implementation and permanent monitoring of fitness-related activities.

Knowing the methods of collecting and recording data regarding the results of the evaluation, their follow-up in order to maintain the quality level of fitness services and nutrition programs and the degree of satisfaction of fitness practitioners and ways of continuous improvement.

Promoting the self-improvement process of the specialist in the field of fitness and nutrition.

Organization and development of scientific research activities in fitness and nutrition.

Systematization and generalization of the latest theories, interpretations, methods and techniques in the field of fitness and nutrition.

Application skills:

The services, oriented to the personal needs of the practitioners: the development of individual fitness, nutrition and rehabilitation programs.

The rational and efficient use of the activities carried out in relation to the requirements of fitness practitioners, the whole of which provides for the achievement of all the assumed objectives in order to obtain the expected results.

Compliance with the legal norms that regulate the assessment, certification, monitoring and control process to ensure quality in the field of fitness and sports nutrition.

Implementation of pedagogical control and regulation of physical activity and diet.

Improving the methods of carrying out exercises, the methods of developing complex exercises and teaching-learning methods.

The practical implementation of the instructional process of theoretical courses and planned seminars.

Implementation of an individual approach (the ability to find contact and take into account the psychophysical state of each fitness practitioner and his characteristics).

Carrying out scientific research within the fitness activity in the direction of adaptive physical culture, fitness-specific nutrition and rehabilitation programs.

Interpretation of the online fitness service system.

Development of psycho -physio -diagnostic tests.

Completing the surveys for the organization of the sociological survey regarding the practice of different fitness programs and specific nutrition.

Analysis and synthesis skills:

Fitness-activity analysis from the position of pedagogical mastery.

Analysis of the pedagogical and professional activity of the fitness trainer through the prism of skills: educational, organizational, recreational, research-diagnostic, constructive design, creative and self-improvement.

Elaboration of arguments in support of the expressed opinion.

Argued support of points of view in interpersonal, group or public communication.

Preparation/editing of case studies, as a result of specialized literature research or discussions.

Interpretation of non-traditional recreation systems and technologies, implementation of non-traditional recreation methods and means in functional, psychological and pedagogical aspects.

Communication skills:

Establishing the correct relationship with the group of practitioners, colleagues, with representatives of the administration.

Demonstration of a high professional culture of communication, defined by the following levels: linguistic, didactic, terminological, aesthetic.

The use of verbal (methodical instructions) and non-verbal (gestures, facial expressions) forms of communication with people from the field of fitness.

Creating an atmosphere of goodwill, stimulating the success and achievements of fitness practitioners, contributing to the creation of a positive attitude and a favorable emotional environment in a fitness training.

Implementation of assistance for those involved in determining personal fitness goals and real opportunities to achieve them.

The use of appropriate training methods sustained throughout the whole fitness training.

Evaluation of the attitudes of fitness practitioners involved in the training process.

Selection and use of appropriate communication tools for solving tasks in fitness training.

Learning competences:

The ability to convey information to practitioners (knowledge of a healthy lifestyle, explaining exercise techniques or eliminating mistakes, etc.)

Forecasting a high level of the formation of physical abilities and their development potential.

Ability to promote proper nutrition in accordance with the selected fitness programs.

Self-regulation of the continuous professional training course.

The aim of the study program is to train highly qualified specialists in the field of fitness and sports nutrition, capable of making decisions and establishing strategies for the development of this side of the fitness activity; offering master's students a package of specialized knowledge in such fields as recreational, adaptive and

rehabilitation physical culture, the theory of learning motor actions, kinesiology and acmeology of fitness, biochemistry and nutritional physiology, vitaminology, as well as a working tool necessary for active involvement in fitness and sports nutrition development projects.

The goals of the *Fitness and Nutrition* master program are:

- Preparing future graduates in the field of fitness and sports nutrition by developing their skills and this way providing the sports industry with highly qualified specialists.
- Providing knowledge, skills and competencies specific to the organization, coordination and activities of fitness and those in the field of sports nutrition.
- The deepening of the general knowledge acquired through the Fitness and nutrition program will allow the use of additional scientific approaches specific to the fitness activities and sports nutrition in which the master's student was trained, which will ensure the added value of the professional training to the undergraduate cycle within the master's program, ensuring thus the easier integration into the labour market.
- The use of ICT tools in the educational process, by analysing the latest innovations in the fitness and sports nutrition industry.
- Elaboration and application of projects in the field of fitness and sports nutrition to support the respective activities by creating and using various strategies for the development of fitness organizations.
- Development of thinking, creativity and initiative to justify solutions to specific problems and situations in the fitness industry, sports nutrition and related fields.

The objectives of the program correspond to the institutional development strategy by: continuously increasing the quality of the professional training program in relation to the new social expectations; the permanent cooperation of the faculty, of the relevant departments with the community, regarding the increase of concerns for the qualified training of the fitness and sports nutrition specialist on a local, national, and international level; by attracting an increased number of quality master's students from the country and abroad, for their professional training.

The study program and the content of the Education Plan are in line with international trends in this field and in accordance with international standards, as well as the study programs of prestigious universities in different member states of the European Union. At the same time, the content of the fitness and nutrition program is adjusted to the changes in the fitness and sports nutrition market on a national and international level, mentioned in the annual reports of the institutions that coordinate the respective activities, both in the Republic of Moldova and abroad, being permanent influenced by the development of information technologies to ensure the organization, coordination and management of the respective sector.

The *Fitness and Nutrition* study program is designed in accordance with the requirements of the National and European Qualifications Framework, with an emphasis on advanced knowledge in the field of fitness and sports nutrition, involving a critical understanding of theories and principles; developing the advanced control and innovation skills needed to solve complex and unforeseen challenges in fitness activity, professional work or vocational training, as well as to manage complex professional activities or projects, taking responsibility for the decision to act in unpredictable work situations or studies, assuming responsibility for managing the professional development of those involved in such activities. These arguments are also based on the analysis of job descriptions from potential employers with which the institution has cooperation agreements, as well as on the analysis of the national and international fitness and sports nutrition market by various institutions.

In order to develop the *Fitness and Nutrition* study program, it were held consultations with potential employers (fitness centres and clubs, sports schools, specialized educational institutions, the Department of Physiotherapy and Sports Medicine of the State University of Physical Education and Sports, etc.), nutritionists, teachers and master's students who find that the program respects the rules and trends in this field in order to professionally prepare the future specialist in fitness and sports nutrition.

The content of the Education Plan is oriented towards the formation of professional skills and will be reviewed periodically, depending on the changes that will occur in the qualification profile and their impact on the organization of this master's field. In this sense, the department, according to its own strategic plan and that of the institution as well, has organized collegial analyses in collaboration with master's students, graduates and employers' representatives on priority issues of the educational process and, as the case may be, to establish directions for modifying the training programs.

The program is considered relevant due to the fact that it is exclusive to its content, given that it is an intersection point of several disciplines in the field of physical culture, fitness, acmeology, kinesiology, physiology, biochemistry, hygiene and sports medicine, the main objective of which is to train specialists knowledgeable about the issue of a healthy way of life, based on physical activity and rational nutrition, capable of offering and controlling various forms of activity through the learning process of all members of society.

The program is also timely/relevant by the fact that it contains a wide area of information, namely the necessary information, in line with the current trends of contemporary society.

Conclusions from the study and prospects for further scientific research. Graduates of the *Fitness and Nutrition* master's program will be able to work in fitness centers and clubs, sports schools, specialized educational institutions, recreation organizations – sanatoriums, rest homes, hotel fitness rooms, etc., occupying different positions from the hierarchical profile step.

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carrying out different nutritional programs adapted to the type and volume of physical effort, counseling in order to adjust the diet for weight gain or loss, long-term follow-up of nutritional status and counseling for supporting the effort, recovery after the effort and recommendations regarding hydration and the administration of nutritional supplements.

References

1. Aftimichuk, O. E. (2009) Teoria i metodika fitnessa (Teoria i metodika rekreativno-ozdorovitel'noi fizicheskoi kul'tury) [Theory and methodology of fitness (Theory and methodology of recreational and health-improving physical culture)]: Kurs lektsii dlia spets. «Rekreativnaia fizicheskaia kul'tura» / Gos. un-t fiz. vospitaniia i sporta. Chişinău: «Valinex» SA.
2. Bulich, E. G., Muravov, I. V. (2003) Zdorov'e cheloveka: Biologicheskaiia osnova zhiznedeiatel'nosti i dvigatel'naia aktivnost' v ee stimulatsii [Human health: Biological basis of life activity and physical activity in its stimulation]. Kiev: Olimpiiskaia literatura.
3. Paffenbarger, R. S., Ol'sen, E. (1999) Zdorovy obraz zhizni [Healthy lifestyle]: Per. s angl. Kiev: Olimpiiskaia literatura.
4. Potgieter S. (2016) Sport nutrition: A review of the latest guidelines for exercise and sport nutrition from the American College of Sport Nutrition, the International Olympic Committee and the International Society for Sports Nutrition. In: *South African Journal of Clinical Nutrition*, 26(1):6-16.
5. Sportivnoe pitanie. Prakticheskie rekomendatsii (2003) / per. s angl.; pod. red. R. Jackson. Kiev: Olimpi'skaia literatura.
6. Strutinskii, F.A. (2006) Fiziologicheskii adekvatnoe pitanie i zdorob'e [Physiologically adequate nutrition and health] / In-t fiziologii i sankreatologii Akademii nauk Moldovy. Chişinău: Tipograf. A.Ş.M.
7. Volkov, N. I., Nesen, E. N., Osipenko, A. A., Korsun, S. N. (2000) Biokhimiia myshechnoi deiatel'nosti. Kiev: Olimpi'skaia literatura.

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КОНЦЕПЦІЯ ПРОФЕСІЙНОЇ МАГІСТЕРСЬКОЇ ПРОГРАМИ: ФІТНЕС ТА ХАРЧУВАННЯ

Мета статті. Висвітлення концептуальних основ магістерської програми з фітнесу та харчування.

Наукова новизна. У статті представлено мету та зміст магістерської програми «Фітнес та харчування». Визначено мету, завдання, компетенції. Зазначена програма орієнтована на підготовку фітнес-тренерів, які були б здатні реалізовувати різні напрями оздоровчо-рекреаційної діяльності, розробляти програми харчування, залежно від її специфіки, спрямованості та вподобань тих, хто займається.

Висновки. Випускники магістерської програми «Фітнес та харчування» зможуть працювати у фітнес-центрах та клубах, спортивних школах, спеціалізованих навчальних закладах, рекреаційних організаціях – санаторіях, будинках відпочинку, фітнес-залах готелів тощо, обіймаючи різні посади.

Магістерська програма забезпечить потреби ринку праці у фахівцях сфері фізичного виховання, фітнесу, спорту: для роботи фітнес-центрів та клубів, спортивних шкіл, спортивних центрів та клубів. Випускники матимуть можливість працювати фітнес-дієтологом, спортивним дієтологом, спеціалістом-консультантом з питань харчування та спортивної дієти, розробляти різні програми харчування, адаптовані до виду та обсягу фізичних навантажень, консультувати з метою коригування дієти для збільшення або зменшення маси тіла, здійснювати довготривале спостереження за станом харчування, регулювання навантажень, відновлення після навантажень, надавати рекомендації стосовно харчових добавок та гідратації.

Ключові слова: магістерська програма, фітнес, дієтологія.

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