PERSPECTIVES ON THE DEVELOPMENT OF PROFESSION OF NUTRITION AND DIETETICS IN THE REPUBLIC OF MACEDONIA

(Review article)

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Abstract

This paper focuses on the design and implementation of a new academic program for food, human nutrition and dietetics in higher education of the Republic of Macedonia, in 2010. A National healthcare reform planning process and identifying priority concerns, needs and areas for strategic action have been included designing and delivery of the academic education study program, registration and quality of practice in the field of human nutrition and dietetics in the Republic of Macedonia. The idea of the government and the University St. “Kliment Ohridski” in Bitola has been started as governmental project with aim to introduce a new profession of Nutrition and Dietetics in the Republic of Macedonia at 1st and 2nd cycle qualifications.

Keywords: nutrition, food science, Higher education institution, postgraduate master study

The beginning of a history for the nutrition profession in Macedonia took place in a “Steering Committee for the Advancement of Healthcare system” at the Ministry of Health, in 2009. For the first time, the Committee produced laws and regulations rather than reports that are ignored and stashed away to be soon forgotten. In the chapter Good governance of the “Green Book” is presented national needs assessment focused on development of Preventive and Clinical Nutrition (Simovska, et all., 2010).

The idea of the government and the University St. “Kliment Ohridski” in Bitola has been started as governmental project with development of the academic curricular and structures of the practice placements including ECTS calibration (Bologna Working Group on Qualifications Frameworks, 2005; Towards European Higher Education Area- Bologna Process, 1999; The European Higher Education Area: The Bologna Declaration, 1999) and the statements of the European Federation of the Associations of Dietitians: European Dietetic Benchmark Statement (EDBS, 2005), European Dietetic Competencies (EDC 2009) and their Performance Indicators (PIs 2009) and the European Commission/ EACEA: Thematic Network for Dietetics – DIETS2 (2010-2013). WP2 of DIETS2 has developed advanced level benchmark competence statements for European dietitians, European Dietetic Advanced Competences (EDAC, 2012), and is also suggesting strategies for individual dietitians and for EFAD to encourage and support LLL among dietitians.

The profession of Nutrition and Dietetics in Macedonian context covers two main areas of work: Food Technology and Biotechnology as well as Nutrition and Dietetics.

In 2010, the Republic of Macedonia introduced a new profile of multidisciplinary academic staff with a title “Engineers of Technology - Nutritionists”. They will be trained in both areas: food technology and biotechnology, but also in the domain of nutrition and dietetics. From that reason, we propose the new profile of Nutritionist as 5th category under the European classification (The European Federation of the Associations of Dietitians (EFAD, 2005, 2009). Introduction of Bachelor and Master degree (1st and 2nd cycle qualifications) of multidisciplinary studies of Nutrition in the Republic of Macedonia are a result of numerous scientific findings that confirmed the important role of food, innovative food technology and proper nutrition in health promotion and prevention of nutrition-related diseases and conditions, including noncommunicable diseases (NCDs) (Simovska, & Vidin, 2012).

The main goal of Macedonian academic study in the domain of food science, nutrition and dietetics is a professionally qualified persons in the domain of science.
to food production and food processing, biotechnology closely related to nutrition, normal growth, health maintenance, prevention and treatment of disease, on individual and population level.

The process for the design and implementation of the National Framework for Higher Education Qualifications in the Republic of Macedonia is compatible with the overarching Framework for Qualifications of the European Higher Education Area (Bologna Working Group on Qualifications Frameworks: 2005; Службен вешник на Република Македонија (Official Gazete of the Republic of Macedonia), 2010).

The first two Bologna cycles are associated with the following ECTS credit ranges: Bachelor degree, 1st cycle qualifications typically include 240 ECTS credits equivalent to level 6 of European Qualifications Framework (EQF). Master degree, 2nd cycle qualifications typically include 60 and 120 ECTS credits equivalent to level 7 of EQF.

Also, the academic program for Master (2nd cycle) study of nutritional scientific discipline is prepared in accordance with next documents:

- Improving the attractiveness and the European dimension in the domain of higher education and establishing a European Credit Transfer System (ECTS), (Towards European Higher Education Area- Bologna Process, 1999);
  - The Bologna Declaration, 1999; The European Higher Education Area: The Bologna Declaration, 1999;
  - European standards for improving academic and practical curricula of Dietetics, 2010;
  - The European Federation of the Associations of Dietitians (EFAD), 2005, 2009;

Recalling to the strategic development plan of profession of nutrition and dietetics, the Republic of Macedonia (2011-2016) will strive for further improvement and development of the role of nutritionists in health care, but also in the domain of food production, food technology and biotechnology.

The model of designing, planning and implementation of curriculum in the 1st and 2nd cycle qualifications is within the methodology proposed in the EU project “Tuning” (2009) and Dublin description of program design (2004), lack of national recommendations for creating programs to gain the title of “Nutritionist”.

In 2011, the Republic of Macedonia becomes an associative member of the European Thematic Network for Dietetics (DIETS2) and a team member of the Working Package 2 “Second and third cycle competences for dietitian” (HEPA Macedonia National organization for the promotion of health-enhancing physical activity) which will contribute to future development of the profession of nutrition and dietetics. Creating the European Dietetic Advanced Competences (EDAC, July 2012), we provided the baseline of knowledge, skills, understanding and competence of a dietitian working as a dietetic practitioner at advanced and specialist level (Figure 1) in the European region and in the Republic of Macedonia (The European Federation of the Associations of Dietitians (EFAD), 2009; Службен вешник на Република Македонија, (Official Gazete of the Republic of Macedonia), 2010).

The theoretical part of the study program for advanced level training of specialized staff in nutrition (2nd cycle) in the Republic of Macedonia is divided into the following four sub-groups (Магистерски студии по нутриционизам (Master’s degree in nutrition, 2012).

I - Basic Sciences: biology, physics, chemistry, nutritional biochemistry (cell and molecular basis of disease and metabolic complications), genetics, anatomy, nutrition anthropology, nutritional physiology, histology, pharmacology, immunology, biostatistics and mathematics, computers and methods of scientific research.

II - Science for Food and Food Technology and Science of Nutrition and Dietetics which is applicable natural science that connects the science of food with the effects of food on the human organism: The 2nd cycle of studies in nutrition and dietetics include the following areas:

a) Food Science and separate chapters of Food Technology (food science and food technology): nutritional composition of food modification in food product development, food technology and biotechnology,

b) Science of Nutrition and Dietetics: nutrition care process, techniques of food preparation, methodology of nutritional assessments, examination of dietary intake, nutritional testing, modification of diet in people with different dietary habits, cultural and socio-economic conditions, hygiene of nutrition for healthy and sick people, medical terminology and classification of diseases, differences between etiology and risk factors, medical nutrition therapy (MNT), common types of diet therapy and diagnostic procedures, dietetics, modeling and optimizing in nutrition, sensory evaluation, microbiology, food safety and hygiene of food, creating of traditional food composition database, a practice based on data and evaluation of practice.

III - Administration of Food Services: management, health care organizations, planning and production of food legislation (NASSP), economics, equipment, packaging, distribution and system services (marketing).

IV – Public Health Nutrition as a field of scientific research and practice that includes nutrition and physical activity related to public health strategies to promote health, examining the eating habits related to health status, needs, planning, coordination and evaluation of nutrition components in the health policy, ethics, sociology, psychology, methods of learning, communication, cultural aspects of nutrition and nutritional epidemiology.

The role of nutritionists in the food industry is of particular interest in some countries in Europe. Social
and national need is the Republic of Macedonia to educate highly trained and specialized staff in nutrition Bachelor and Master degrees: 1st cycle qualifications in the engineer technologist-nutritionists who will be engaged in solving problems in the country and wider region and 2nd cycle qualifications in Nutrition, Master of Nutrition (MSc). The statement of EFAD, EDAC (2012) defines the competences highly qualified nutritionists/dietitians (MSc., Ph.D., specialty) should be able to reach after “some years” of practical experience combined with continued education and other experiences of Lifelong Learning (LLL).

Needs and interests of such a profile of staff are based on the next arguments:

- Monitoring of global and regional scientific and educational trends in nutrition and dietetics, healthy and quality food and nutrition;
- Necessity to educate own staff to meet the domestic and global problems related to food and human nutrition;
- Inclusion of specialists-nutritionists in educational and health system in the country;
- The necessity of practically trained nutritionists who would be included in the food industry and in the production of healthy, quality and environmentally acceptable food for domestic and export needs;
- Raising the general awareness of the importance of nutrition and the consequences caused by poor and unbalanced diet.
- The need for capable staff to respond to modern nutritional science positions for feeding specific categories of healthy persons;
- Expert staff will be ready for market and interinstitutional mobility within the earth, the region and beyond creating link between Academy – Industry - Business and Health.

Conclusion and future directions:

National authorities, higher education institution and professional association will continue to improve the preparation of nutritionists/dietitians so they can contribute fully to improve the nutritional health and to prevent health issues of the Macedonian population within the social, economic and cultural context of the community contributing to the economic competitiveness and sustainable development of the country (Simovska, & Vidin, 2012).

REFERENCES


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The European Federation of the Associations of Dietitians (EFAD): European Dietetic Competences and Their Performance Indicators; first cycle(2009). Brussels: EFAD.