### REVIEW

From

## Prof. Dr. Veselka Duleva, MD Head of Food and Nutrition Department National Center for Public Health and Analysis

**Subject:** participation in a competition for the academic position of "Associate Professor" in the scientific specialty "Hygiene" in the field of higher education 7. Health and sports, professional field 7.1. Medicine, specialty "Hygiene" (including labor, communal, school, radiation, etc.) for the needs of the Faculty of Public Health, Department of Hygiene and Epidemiology at the Medical University "Prof. Dr. Paraskev Stoyanov "- Varna, according to a notice published in the State Gazette no. 61 of 23.07.2021

By order No P-109-395 / 20.09.2021 of the Rector of the Medical University - Varna, decision of FS (Minutes 70170 / 10.09.2021) and minutes No 1 / 01.10.2021 of a meeting of the scientific jury of I have been appointed by the Optional Council to prepare a review of a competitive procedure for holding the academic position of "Associate Professor" in the scientific specialty "Hygiene" in the field of higher education. 7. Health and sports, professional field 7.1. Medicine, specialty "Hygiene" (including labor, communal, school, radiation, etc.) for the needs of the Faculty of Public Health, Department of Hygiene and Epidemiology at the Medical University "Prof. Dr. Paraskev Stoyanov "- Varna.

The only candidate in the competition is Chief Assistant. Dr. Rositsa Hristova Chamova, PhD

## 1. Brief biographical data and career development of the candidate.

Dr. Rositsa Hristova Chamova graduated Medicine at the Higher Medical Institute, Medical Faculty - Plovdiv in 1996.

Dr. Rositsa Chamova has consistently worked as a doctor - resident from 1996 - 2005 - in CSMP - Yambol, from 2005 to 2013 in CSMP - Varna. During the period 2009 - 2011 she was a part-time assistant at the Department of Hygiene and MBS, MU - Varna, from 2011 to 2018 she was an assistant at the Department of Hygiene, MU - Varna, and from 2018. Until now, Dr. Chamova is a senior assistant at the Department of Hygiene and Epidemiology - MU - Varna.

The total work experience of Dr. Rositsa Chamova is 24 years, 7 months and 10 days.

Dr. Rositsa Chamova, MD has two medical specialties, since 2006 - Emergency Medicine and since 2017 - Nutrition and Dietetics.

In 2017, after defending a dissertation on the topic: " "Breastfeeding and urinary tract infections in children up to 3 years in Varna" and was awarded the scientific and educational

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degree "Doctor" in the scientific specialty "Hygiene" (including labor, utilities, school, radiation, etc.) by the Medical University "Prof. Dr. Paraskev Stoyanov.

Dr. Rositsa Chamova, PhD is a member of BMA, BDHD (Bulgarian Society of Nutrition and Dietetics), BSDGHH (Bulgarian Association of Pediatric Gastroenterology, Hepatology and Nutrition), BNDOZ (Bulgarian Scientific Society of Public Health), EUPHA public health), BAH (Bulgarian Public Health Association), ESPGHAN (European Society of Pediatric Gastroenterology, Hepatology and Nutrition).

Dr. Rositsa Chamova, PhD has a very good language training and speaks English and Russian.

# 2. General description of the presented materials and fulfillment of the scientometric criteria.

Dr. Rositsa Chamova, PhD has presented a total of 33 scientific papers. 15 of them participate as evidence in the reference for fulfillment of the minimum requirements for borrowing of AD "Associate Professor", according to ZRASRB from 2018. Habilitation work (monograph) is presented - 1 pc. and 2 publications, outside the evidence for the implementation of the minimum requirements for borrowing of AD "Associate Professor" - 1 pc. and a book based on a defended dissertation for the acquisition of ONS "Doctor" - 1 pc.

Scientific publications of Dr. Chamova are 30 (for senior assistant - 16; for associate professor - 14), of which in scientific publications, referenced and indexed in world-famous databases with scientific information are 5 and 25 pcs. in unreferred journals with scientific review.

The scientific participations of Dr. Rositsa Chamova are 21 in national and international scientific events with 15 reports.

The provided ACADEMIC REFERENCE for the publications, citations and scientific profiles of Assoc. Assistant Dr. Rositsa Hristova Chamova, PhD, Department of Hygiene and Epidemiology, Faculty of Public Health, Medical University-Varna, prepared in the Library of MU-Varna, based on information provided by the applicant and automated information from international scientific databases, in In accordance with the Regulations for application of the law for the development of the academic staff in the Republic of Bulgaria and the Regulations for the development of the academic staff of the Medical University - Varna certifies that the publications, citations and scientific profiles of the candidate correspond to the minimum scientometric requirements.

The academic reference certifies: 100 p (with a mandatory minimum of 100 p) of habilitation thesis (monograph), 140 p of 5 scientific publications in publications that are referenced and indexed in world-famous databases with scientific information; 160 p of 7 Publications and reports published in non-peer-reviewed journals with scientific review or published in edited collective volumes; (with a mandatory minimum of a total of 200 tons) and 55 p of 8 citations, reflecting the scientific activity of the candidate - (with a mandatory minimum of 50).

The candidate's publications in Impact Factor jurnals are missing.

The publications submitted by the candidate for participation in the competition, such as number, citations, scientific profiles and categories, correspond to the recommended quantitative scientometric criteria for holding AD "Associate Professor", defined in the Regulations for the development of the academic staff at the Medical University "Prof. Dr. Paraskev Stoyanov "- Varna.

### 3. Qualitative evaluation of research and contributions.

In the presented scientific production of Assoc. Assistant Dr. Rositsa Hristova Chamova, PhD scientific papers and results of research work are divided into 5 thematic research areas: Importance of healthy eating during pregnancy; Breastfeeding - a behavioral factor with extremely favorable health consequences for the child and the mother; Health benefits of consuming bee products; Hygiene of children and adolescents; Study the eating habits of different population groups.

The scientific contributions of Assoc. Assistant can be outlined. Dr. Rositsa Hristova Chamova, PhD in the individual thematic areas, as follows:

#### I. Importance of healthy eating during pregnancy:

Cognitive and practical contributions - applied nature - Nutrition of the pregnant woman and metabolic programming of the diseases (habilitation work) -A monograph was developed, the first manual in our country, analyzing the relationship between maternal nutrition and metabolic programming of diseases in the offspring. Modern scientific evidence for the effects of maternal eating behavior and nutritional deficiencies on the child's health in later life is presented. Attention is paid to the importance of adequate maternal energy intake, maintaining a healthy weight during pregnancy, the relationship of fatty acid composition of maternal food, optimal levels of long-chain polyunsaturated fatty acids and the impact on the programming of the child's health, discussed the role of food sources of methyl groups and the growth and development of the central nervous system.

*Cognitive contributions* - about the results of clinical studies published in scientific journals on the role of choline during pregnancy, daily needs and nutritional intake on the brain development of the offspring are summarized; cases in which the intake of food supplements during pregnancy is justified, risks to the health of the pregnant woman and / or the fetus when taking food supplements without proven medical indications or in large doses are emphasized.

# II. Breastfeeding - a behavioral factor with extremely beneficial health consequences for the child and the mother

*Contributions with practice - applied nature -* analyzed in detail the role of breast milk in infections of the urinary system, which are the second most common infections in childhood, with a tendency to recurrence, the protective effect of breast milk is emphasized; in an original study, it was found that the duration of breastfeeding and the duration of exclusive breastfeeding among sick children is low; development is a possible tool for the preparation of practically applicable recommendations to parents by general practitioners, pediatricians, nutritionists, etc .; The protective effect of breast milk on urinary tract infections in children up to three years of age was studied, and a case-control study was conducted in Varna. The frequency, duration and type of

breastfeeding in children (from birth to 3 years) diagnosed with urinary tract infection (cases) and in children without such (controls) were evaluated, it was found that the duration of breastfeeding and exclusive breastfeeding have a protective effect against the development and severity of urinary tract infection in infancy and early childhood.

*Cognitive contributions* - issues related to the availability of probiotics and breast milk are addressed; fat-soluble vitamins in breast milk; antioxidant activity of breast milk - comment on the benefits and potential risks for the health and development of the child's body.

### III. Health benefits of consuming bee products

Cognitive contributions - described the biological effects and the role of royal jelly for human health

## IV. Hygiene of children and adolescents

*Contributions with practice - applied nature -* A study was conducted to establish a link between the working capacity of primary school students and the ergonomics of school furniture in classrooms in four schools in Varna. Based on the results of the proofreading test, the number of examined symbols and the coefficient of accuracy, it is established that students trained in non-ergonomic conditions quite often show mental fatigue at the end of the day. It was found that the fatigue of primary school students is related to school furniture. Training in good ergonomic conditions improves mental work. An assessment of the anthropometric nutritional status of students in the initial course of study from the city of Varna was performed. 3010 children (1523 boys and 1487 girls) were covered. The study reveals the need to create conditions that prevent weight gain during full-time training in the primary school.

## V. Study the eating habits of different groups of the population

Contributions with practice - applied nature- A sectional study of the diet and working conditions was conducted with an emphasis on psycho-emotional stress among persons of working age from Northeastern Bulgaria. 502 employees aged 19 to 80 were interviewed. Workplace stress affects diet. A recommendation has been made for the promotion of health in the workplace, occupational health services should monitor eating habits and adequately advise and train workers in intense psycho-emotional stress for healthy eating behavior. A survey of the eating habits of 139 women from the city of Varna was conducted. It is recommended that among the groups at risk for osteoporosis, the benefits of consuming certain foods that have a prophylactic effect on bone health be explained. A pilot study of the eating habits of women of childbearing age from the city of Varna identified women at risk of nutritional deficiencies, which could have a number of adverse effects - impact on a woman's reproductive functions, on the course and outcome of pregnancy, and on health. condition of the offspring in the long run. The results serve to highlight the need to promote healthy eating and explain, especially among younger people, the risks of applying restrictive eating patterns. as well as on the long-term health of the offspring. The results serve to highlight the need to promote healthy eating and explain, especially among younger people, the risks of applying restrictive eating patterns. as well as on the long-term health of the offspring. The results serve to highlight the need to promote healthy eating and explain, especially among younger people, the risks of applying restrictive eating patterns.

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The contributions of the scientific works for awarding JSC "Chief Assistant" are also presented.

### **Teaching activity**

The teaching experience of Assoc. Assistant Dr. Rositsa Hristova Chamova, PhD, marked in the Certificate with registration № 099-2207 / 09.08.2021 is 9 years, 10 months and 8 days in the Department of Hygiene and Epidemiology at MU-Varna. According to the attached Information (Issue 12112-311 / 27.07.21) the study load of Assoc. Assistant Professor Dr. Chamova exceeds the approved standard in MU-Varna.

Assoc. Assistant Dr. Rositsa Hristova Chamova, PhD gives lectures in various disciplines: "Communal Hygiene", "Food Hygiene" - Inspector of Public Health; "Environment, nutrition and health" - Health Management - Bachelor; "Hygiene of hospitals and nosocomial infections" - Health Management - Bachelor; "Environment, nutrition and health" - Health Management and Medical and Social Care - Master; "Hygiene and Ecology" - Nurse and Midwife; "Medical Ecology" - Medical beautician; "Hygiene and safety of laboratory work" -Medical laboratory assistant; "Hygiene and ecology" - X-ray technician; "Hygiene and ecology of health facilities" - UZG - Bachelor; "Environment and Health" - Public Health -Masters in Russian.

Dr. Chamova conducts exercises on "Hygiene and ecology" - for the specialty Medicine (BEO and AEO); Rehabilitator; Nurse; Midwife; "Environment and Health" - Health Management - Bachelor; "Environment, nutrition and health" - Health Management and Medical and Social Care - Master; "Nutrition and Health" - Health Management - Bachelor; "Nutrition and Dietetics" - RMUS-Master "Hygiene and Ecology of Ancient Institutions" - UZG-Master "Pharmaco-Medical Aspects of Nutrition" - Pharmaceutical Management and Care - Master.

#### **CONCLUSION**

The provided documents confirm the rich experience, the productive scientific and research work, professional competence and teaching experience of Assoc. Assistant Dr. Rositsa Hristova Chamova, PhD.

The analysis of the overall research, publication and teaching activities of Chief Assistant. Dr. Rositsa Hristova Chamova, PhD gives me reason to say that they fully comply with quantitative scientometric criteria for holding the academic position of "Associate Professor", defined in the Regulations for the development of the academic staff at the Medical University "Prof. Dr. Paraskev Stoyanov "- Varna and the Law on the Development of Academic Staff in the Republic of Bulgaria.

Based on the above, I express a positive assessment and strongly recommend the esteemed Scientific Jury to vote "FOR" the occupation of the academic position of "Associate Professor" by Assoc. Assistant. Dr. Rositsa Hristova Chamova, MD in the scientific specialty "Hygiene" in the field of higher education 7. Health and sports, professional field 7.1. Medicine, specialty "Hygiene" (including labor, communal, school, radiation, etc.) for the

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needs of the Faculty of Public Health, Department of Hygiene and Epidemiology at the Medical University "Prof. Dr. Paraskev Stoyanov "- Varna.

November 5, 2021.

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Prof. Vesselka Duleva, MD, PhD:

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