

## SCIENTIFIC OPINION

By Assoc. Prof. Dr. Rositsa Hristova Chamova, PhD  
Department of Hygiene and Epidemiology  
Faculty of Public Health, Medical University - Varna

**Subject:** Dissertation for the acquisition of a educational and scientific degree "Doctor" in Higher Education Area 7. "Healthcare and Sports", Professional Direction 7.1. "Medicine", Scientific Specialty "Hygiene (including occupational, community, school, radiation hygiene, etc.)"

**Author:** Dr. Violeta Dimitrova Snegarova, full-time doctoral student at the Department of Hygiene and Epidemiology, Faculty of Public Health, Medical University – Varna

**Dissertation Title:** *“Effectiveness of a Low-Histamine Diet in Patients with Irritable Bowel Syndrome”*

**Scientific Supervisor:** Prof. Dr. Darina Naydenova, PhD

By Order No. R-109-170/28.03.2025 of the Rector of the Medical University – Varna, I was elected as a member of the Scientific Jury. According to Protocol No. 1/10.04.2025, I was appointed to prepare an opinion on the procedure for awarding the educational and scientific degree “Doctor” with candidate Dr. Violeta Dimitrova Snegarova, full-time doctoral student at the "Hygiene and Epidemiology" Department, Faculty of "Public Health" at the Medical University - Varna.

### Procedure data

Dr. Violeta Dimitrova Snegarova was enrolled as a full-time PhD student in the doctoral program “Hygiene (including occupational, community, school, radiation hygiene, etc.)” in Higher Education Area 7. “Healthcare and Sports,” Professional Direction 7.1. “Medicine,” with the initial dissertation topic *“Assessment of Risk Factors for Micronutrient Deficiencies – Vitamin D, B9, and Ionized Calcium in Pregnant Women in the Varna Region”*, under the supervision of Prof. Dr. Darina Naydenova, PhD, by Order No. R-109-48/31.01.2020. The topic

was later changed to *“Effectiveness of a Low-Histamine Diet in Patients with Irritable Bowel Syndrome.”*

Dr. Snegarova successfully passed the doctoral minimum exam. She was discharged with the right to defend her dissertation by Order No. R-109-170/28.03.2025.

All administrative documents required by the Law on the Development of the Academic Staff in the Republic of Bulgaria (LDASRB), its regulations, and the internal regulations of MU-Varna have been duly submitted.

### **Brief Biographical Data**

Dr. Snegarova graduated from the High School of Foreign Languages “Yoan Ekzarh” in Varna with a major in French. In 2018, she obtained a Master’s degree in Medicine from the Medical University – Varna. In 2016, she worked as a demonstrator at the Department of Preclinical and Clinical Pharmacology, MU-Varna.

Her professional career began in 2020 as a resident physician at “Laborexpress 2000” Medical Diagnostic Laboratory. She also worked at Medicus & Sanador Medical Centers in 2020. She is fluent in German, English, and French.

Dr. Snegarova is a member of the Bulgarian Medical Association (BMA), the Association of Young Hepatogastroenterologists in Bulgaria (AYHB), the Bulgarian Society of Neurogastroenterology and Motility (BSNM), the Bulgarian Society of Nutrition and Dietetics (BSND), the Bulgarian Association for the Study of Obesity and Related Diseases (BASORD), and the Bulgarian Society of Coloproctology (BSC). She is a board member of AYHB, responsible for the Northeast Bulgaria region (centered in Varna), and Vice-President for Public Relations in the BSNM.

### **General Characteristics of the Dissertation**

The dissertation comprises 116 pages and includes 30 figures. The bibliography contains 135 sources in Latin script.

It is well-structured and balanced, consisting of:

- Literature Review (28 pages)
- Aims and Objectives
- Materials and Methods (9 pages)

- Results and Discussion (33 pages)
- Conclusions (2 pages)
- Final Summary (2 pages)

### ***Actuality of the topic***

Irritable Bowel Syndrome (IBS) is the most commonly diagnosed functional gastrointestinal disorder, with a prevalence ranging between 5% and 20%, and a female-to-male ratio of 2:1. IBS is a socially significant disorder that impacts patients' quality of life and psychosomatic health. Accurate diagnosis and accessible, effective treatment are essential for both patients and the healthcare system.

The literature review is thorough, focused, and well-organized, demonstrating the author's ability to critically evaluate, synthesize, and interpret scientific data.

The dissertation's aim is clearly defined. The eight listed objectives are well-formulated and aligned with the overall aim.

***The methodology*** is comprehensive, detailed, and appropriate. The selected research methods include:

- Document analysis – review of publications, reports, and other relevant documents
- Surveys – using PSS-4 (Perceived Stress Scale), GAD-7 (Generalized Anxiety Disorder Scale), IBS Severity Score, and quality of life questionnaires
- Clinical methods
- Statistical methods – evaluation of statistical significance, regression analysis, parametric and non-parametric methods, ANOVA, graphical methods, and programming using Python with Pandas, Matplotlib, Seaborn, Scipy, and Statsmodels

### ***Results and Discussion***

Dr. Snegarova presents the demographic characteristics of the participants. She analyzes the relationship between symptom severity, age, and employment status. The stress levels (via PSS-4) and the effect of dietary therapy are evaluated.

Results are presented graphically and statistically. Data from questionnaires completed immediately after and four weeks post-intervention are analyzed. The presentation of results aligns with the stated objectives.

**Conclusions** are accurately formulated, consistent with the objectives, and logically derived from the results.

## **Contributions**

I support contributions that are divided into:

### Contributions with original character:

- Demonstrates the effectiveness of a low-histamine diet for IBS patients
- First study in Bulgaria on dietary therapy effectiveness in IBS
- Comparative assessment of low-histamine diet vs. low-FODMAP and Mediterranean diets
- First study in Bulgaria examining the dynamics of stress and anxiety levels during and after IBS treatment

### Confirmatory and Practical Contributions:

- Confirms high stress and anxiety levels in IBS patients
- Confirms higher prevalence of IBS among women
- Confirms literature on the role of dietary therapy in IBS
- Proposes a one-month low-histamine diet as an optimal dietary approach for IBS
- Provides perspective for future research and treatment approaches

The dissertation is well-written, terminologically precise, and technically formatted in accordance with requirements. The bibliography is comprehensive.

The abstract accurately reflects the dissertation content. It spans 54 standard pages and presents the structure, content, contributions, and publications.

The doctoral student has published two articles in “*Biological Rationale and Diagnostic Value. Dig Dis*” and “*Scripta Scientifica Medica.*” No conference participation was noted.

In conclusion, the dissertation meets the requirements of the Law on the Development of the Academic Staff of the Republic of Bulgaria. It is a completed and well-structured work. The thorough analyses offer opportunities for innovative

public health approaches. The topic is highly relevant and timely. The dissertation content is rigorous, well illustrated, and professionally presented.

I therefore give a positive assessment of the dissertation “*Effectiveness of a Low-Histamine Diet in Patients with Irritable Bowel Syndrome*” and support the awarding of the educational and scientific degree “Doctor” to Dr. Violeta Snegarova in Higher Education Area 7. “Healthcare and Sports”, Professional Field 7.1. “Medicine”, in the scientific specialty “Hygiene (including occupational, community, school, radiation hygiene, etc.)”.

13.05.2025  
Varna

Заличено на основание чл. 5, §1, б. „В“ от Регламент (ЕС) 2016/679
--

/Assoc. Prof. Rositsa Hristova Chamova/