SCIENTIFIC OPINION

By Prof. Dr. Ruzha Pancheva-Dimitrova, MD, PhD

Department of Hygiene and Epidemiology, Faculty of Public Health,

Medical University "Prof. Dr. Paraskev Stoyanov"-Varna

for the dissertation of Dr. Rozalina Stefanova Braykova

on the topic "Control of trade in organically produced agricultural products and food in

North-Eastern Bulgaria"

for awarding the educational and scientific degree "doctor" in the area of higher education 7. Healthcare and sports,

Professionally direction 7.1. Medicine, scientific specialty Hygiene

In agreement with Order No. P-109-110/07.02.2023 of the Rector of the Medical University – Varna, Prof. Dr. Valentin Ignatov, MD, PhD I have been appointed as a member of the Scientific Jury, and on the basis of protocol No. 1 of the meeting of the Scientific Jury - to prepare a Scientific opinion in the procedure for the defense of the dissertation of Dr. Rozalina Stefanova Braykova for awarding the Doctor of Phisophy.

The documents in the procedure are presented according to the requirements of MU-Varna. No procedural violations were found.

1. Brief information about the professional development of Dr. Braykova:

Dr. Rozalina Braykova was born on December 15, 1961 in the city of Simitli, Blagoevgrad region, Bulgaria. She received her secondary education from the Geo Milev Language High School in Dobrich, and later obtained a higher education at the MU-Varna and the St. Petersburg State Medical Academy. Rozalina Brayikova specialized in "Nutrition and Dietetics" at Sofia University and "Health Management" at Varna University.

Dr. Rozalina Braykova has many years of professional experience as a resident, head of sector, head of department, expert in control of food and food facilities, manager, director of RIOKOH - Dobrich/RHI - Dobrich and RFSD - Dobrich. She currently works as an assistant at the Varna Medical University, Department of Hygiene and Epidemiology. Rozalina Braykova is a full-time doctoral student since 2019. She is a teacher of hygiene and ecology in Bulgarian and English in the specialties of medicine, pharmacy, dentistry, nursing, midwives, she teaches the subject "Food safety" for Masters - Protection and control of public health

Dr. Rozalina Braykova speaks Bulgarian, Russian, German and English. Her level of understanding, speaking and writing in these languages is basic to high. She has a variety of social and professional skills, including communication, tolerance, ability to work in a team, skills for organizing common work and distributing functions and duties, skills for dealing with

conflicts and keeping correspondence. Rozalina Braikova also has experience in developing GMP and HACCP for food production and trade sites, as well as in consulting in the field of healthy and dietary nutrition. She has very good computer skills in programs such as Word, Excel and Power Point.

2. Relevance of the dissertation.

Regulation of trade in organic agricultural products and food is an important topic for several reasons. First and foremost, organic foods are considered healthier for consumers because they are produced without the use of synthetic pesticides, fertilizers and other harmful chemicals. It is therefore essential to ensure that organic products available on the market meet the necessary standards and regulations to maintain consumer health and safety.

Furthermore, promoting the trade of organically produced agricultural products can be beneficial for local farmers and rural communities. Organic farming often requires more labor and attention to detail than conventional farming and can be more time-consuming and expensive. However, the high prices often paid for organic products on the market can provide farmers with higher incomes and contribute to the overall economic stability of rural areas.

At the same time, it is important to prevent fraudery in the organic food trade. In recent years, there have been cases of fraudulent labeling and misrepresentation of organic products, which can undermine consumer confidence in the industry and lead to unfair competition between producers. Effective control measures can help prevent such fraud and ensure that organic products are traded in an ethical and transparent manner.

Consumer demand for organic food is formed not only on the basis of knowledge and ideas about this specific method of food production. To a large extent, people's orientation towards organic products also depends on trust in them. Trust can be built, on the one hand, on the basis of the legally established characteristics of organically produced foods, and on the other hand, on the basis of the actions of the competent authorities and information about the results of their work. Therefore, it is important to carry out a thorough research not only on whether consumers are familiar with organic food, what motivates and deters them in their choice, but also to analyze the activity of the competent authority, BFSA, in the official control of the trade in organic food. The implementation of effective and comprehensive control related to the safety and quality of organically produced agricultural products and food guarantees the protection of the health and interests of consumers. In addition, the information that would be obtained about the level of knowledge of producers and traders regarding the regulatory requirements for the trade in organic food is valuable.

3. General characteristics of work. The dissertation consists of 251 standard pages, 113 figures, 33 tables and 9 appendices are included. The bibliographic list covers 368 titles, of which 34 are in Cyrillic and 334 are in Latin. More than 70% of the sources are from the last 5 years. The dissertation meets the structure requirements: Introduction – 3 pages; Literature review - 39 pages; Methodology - 9 pages; Results and analyzes – 123 pages; Discussion - 23 pages; Conclusions - 3 pages; Recommendations - 4 pages; Contributions - 3 pages; Bibliography - 18 pages.

4. Assessment of the content of the individual structural parts of the work. Evaluation of the Literature Review.

It's done historical-theoretical review of the concepts of organic food and organic agriculture/production. It is noted that in the scientific literature and regulatory documents, organic food and organic agriculture are defined as ecologically sustainable, healthy, safe for the environment and animals, produced through sustainable practices and without the use of synthetic chemicals, fertilizers, herbicides, pesticides, fungicides, growth hormones and regulators or genetic modifications. Organic foods are considered an alternative to chemically contaminated foods and offer natural, sustainable and healthy nutrition. In addition, they can improve animal welfare and promote biodiversity. However, producing organic food can be more expensive due to higher production, storage, transportation and canning costs. Terms and definitions are introduced according to reputable organizations such as FAO/WHO, USDA-ERS.

Attention has been paid to the development of organic agriculture and, in particular, a historical-geographical review has been made. It has been commented that organic farming is not simply a replacement of chemical pesticides and fertilizers with organic ones, but a system that seeks to increase the sustainability of the agro-ecological system by developing preventive strategies at the system level. It is based on the principles of health and ecology and aims to produce healthy and quality foods while preserving the environment, maintaining the health of soils, ecosystems and people. Organic farming combines tradition, innovation and science to benefit the shared environment and promote equitable relationships and a good quality of life for all involved. The main goal of the organic movement is to create a sustainable and healthy food system that includes primary production, processing, distribution, organic consumption and ethics. Organic farming has been practiced for 100 years and is defined at the regulatory level in many countries around the world.

Critically, IFOAM, together with the Food and Agriculture Organization of the United Nations (FAO), have begun a process of harmonizing regulations and standards for organic

farming to overcome trade barriers. In 2003-2005, IFOAM and its members formulated the principles of organic farming, which were adopted at the federation's general assembly in 2005. The principles are also included in the preamble of the IFOAM Core Standards as an introduction to the standards. This is a historic moment for organic farming. We are already talking about principles of health, ecology, justice and care.

The development of organic agriculture in Bulgaria, which began in 1987, is commented on. In 2019, the number of farmers who produce organically in Bulgaria represents about 7.3% of the total number of registered farmers. The market of organic products in Bulgaria is developing faster than their production. A large part of the organic products produced in Bulgaria are exported, mainly to the European market. Bulgaria is one of the largest exporters of wild dried berries and herbs. Organic frozen fruits (strawberries, raspberries and blueberries), honey, essential oils of rose, lavender, mint, cheese, cheese and jams are exported and are very well received in international markets.

Assessment of the Material and methods. The aim and six tasks of the dissertation are precisely and clearly formulated. An appropriate set of methods are used: documentary, sociological, statistical. Very reasonably and for the sake of clarity, the work is divided into 2 parts: 1/ Analysis on results from the official one control at the organic trade produced agricultural products and foods in an area Dobrich and region Varna for period 2014-2019. and 2/ Research among producers, traders and consumers about OF, which includes Research among manufacturers by issues related to organically produced agricultural products and foods in an area Dobrich; Research among merchants by issues related to organically produced agricultural products and attitudes on users on organically produced agricultural products and foods in an area Dobrich.

Evaluation of results and discussion. The results of the dissertation convincingly show that:

- 1. The system for controlling the trade in organic food in Bulgaria is effective thanks to the updating and harmonization of legislation with the EU.
- 2. Normative documents clearly regulate the bodies and procedures for the control of biological products. The public and biological users are not sufficiently informed about the results of OF control.
- 3. Women play an important role in the growing attitude towards OF in Bulgaria, being interested in and applying objective criteria for distinguishing OF from traditionally produced ones.
- 4. To better understand the demographic and socioeconomic characteristics of the organic

user, analysis of other regions and a younger population sample is needed.

- 5. Internet portals and specialized sites have the greatest influence on the participants in the production and market of OF. It is important to have credible sources of information.
- 6. Educating and informing consumers about the characteristics of biological products and the results of the control activity of the responsible institutions can help consumers make purchasing decisions.
- 7. Although most respondents have a positive attitude towards OF, the share of regular buyers is small. This necessitates further research into consumer preferences and barriers to OF.
- 8. Demand for OF would increase with more guarantees of origin and labelling, access to more seasonal foods, support for the local economy, educational capacity of producers and distributors.

Evaluation of Conclusions, recommendations, contributions. There are 9 conclusions in total and they correctly synthesize the obtained results. They are the basis of the recommendations made to the responsible institutions.

Reasonable recommendations have been made to MAFF, MH, BFSA, associations on bio-producers based on the work devoted to the dissertation. They concern various proposals for improving consumer awareness and increasing their trust in organic foods are presented in the text. Among these proposals are the mandatory one-time submission of a declaration by the trading sites, online platforms, educational campaigns, training events, and the inclusion of topics related to organic foods in the training plans of the Departments Promotion and Prevention of Diseases at the RHI. These measures will be useful in increasing consumer confidence in BH, as well as promoting sustainability and environmental protection.

The Thesis abstract consists of 108 pages and accurately reflects the dissertation.

5. Conclusion.

The dissertation "Control of trade in biologically produced agricultural products and food in North-Eastern Bulgaria" is distinguished by relevance, originality, completeness and comprehensiveness. The aim and objectives are carefully formulated and achieved, the methodology is detailed and appropriate, the results are analyzed statistically well and the discussion covers a comparison with the data of contemporary international studies. The conclusions are very well formed and have a practical application. The contributions show the importance of the dissertation and, through the recommendations made, demonstrate the need for systematic educational measures to improve the understanding and quality of organic agriculture in our country.

I highly appreciate the scientific work of the doctoral student and consider that her dissertation fully meets the requirements for the educational and scientific degree "Doctor of Philosophy" of the Law on the Development of the Academic Staff and the Regulations of MU-Varna. I give a positive assessment and recommend to the members of the National Academy of Sciences to vote positively for *Dr. Rozalina Stefanova Braykova* to be *awarded the educational and scientific degree "Doctor"*. in the area of higher education 7. Healthcare and sports, professional direction 7.1. Medicine, scientific speciality Hygiene.

8th of March, 2023

Member of the scientific Jury:

Prof. Dr. Ruzha Pancheva-Dimitrova, MD, PhD

Tal