

Statement

by

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With Order No. **P-109-234 of 21.05.2025**

REGARDING

the dissertation work of

Dr. Kristiyana Lyubomirova Mineva

– PhD student

At the Department of Pediatric Dentistry, Faculty of Dentistry, Varna,

On the subject

**“NUTRITION AND ITS INFLUENCE ON ORAL HEALTH DURING
ADOLESCENCE”,**

submits her application for the conferment of the academic and scientific degree of "Doctor"
within the doctoral program "Pediatric Dentistry."

Her scientific supervisor is

Assoc. Prof. Dr. Milena Todorova Georgieva-Dimitrova, MD, PhD

1. Relevance of the topic

The 20th century experienced major changes in how people eat and prepare food. Food processing factories, the fast food industry, ready-made and frozen products, and mass marketing emerged, significantly influencing modern nutrition worldwide. People increasingly ate quickly, on the go, or while busy, and ordering food from restaurants and fast food outlets became common. These changes led to two main problems – undernutrition and overeating.

The eating habits of different groups depend on their geographic location, traditions, economic and technological development, social status, education, food prices, urbanization, and media influence. There are many sources of information about nutrition, but they often target advertising and product sales rather than public health. Aggressive advertising, especially

directed at children, can negatively influence food choices, which calls for efforts to limit the advertising of harmful products.

The assessment of dietary patterns should be carried out by specialists from various fields to ensure sustainability and healthfulness. There is a demonstrated relationship between advertising and increased consumption of high-calorie products, especially among children and adults.

A balanced diet is crucial for overall and oral health, as it impacts not only the teeth but also the condition of the gums, oral mucosa, tongue, and salivary glands. Foods high in sugar and acids damage the tooth enamel and raise the risk of cavities and other oral issues. A diet lacking in minerals can also cause problems with hard dental tissues and the oral mucosa. Maintaining a balanced diet is essential for preventing and supporting good oral and general health, directly affecting quality of life.

The choice of topic is relevant, given that our country lacks sufficiently detailed data on adolescents' dietary habits and how this relates to their oral health.

2. Having an understanding of the issue

The doctoral student conducts a comprehensive review of relevant literature, providing detailed information regarding the primary nutrients, macro- and micronutrients, including their properties and sources.

In distinct sections, the student highlights the specific characteristics of the adolescent period, divided into subchapters: early adolescence, middle adolescence, and late adolescence.

The chapter analyzing modern food pyramids and principles of balanced nutrition leaves a highly favorable impression.

Correspondingly, the literature review concludes with data emphasizing the significance of nutrition and nutrients for oral health.

Overall, the doctoral student exhibits commendable proficiency in analyzing scientific data related to the subject matter, clearly reflecting their expertise in the issues discussed.

3. Structuring the dissertation

The analysis of the given topic in the literature review demonstrates the doctoral student's exemplary understanding of the issue, serving as the foundation for accurately identifying unresolved problems and precisely defining the aim and objectives of the dissertation. The subsequent sections include the goal, objectives, research methods, and discussion of the study's results.

4. Research Methodology: Purpose, Objectives, Material, and Methods.

The purpose of the dissertation is articulated in response to the deficiency of current data within Bulgarian literature concerning children's nutrition and its correlation with oral health during adolescence.

The three objectives are systematically arranged, thereby facilitating the attainment of the research aims.

The material and methodologies are suitably chosen and align with the goals and objectives of the dissertation.

The statistical techniques employed are meticulously selected, enable appropriate analysis of the collected data, and are sufficiently detailed in presentation.

5. Results and discussion

The results and discussion are presented appropriately and thoroughly, further enhancing the doctoral student's comprehensive understanding of the issue.

6. Implications and Contributions

Seven implications have been formulated, reflecting the results of the tasks set for the dissertation, among which the following implications are of particular significance for practical application:

1. The present study establishes that more than two-thirds of the research adolescents are overweight and fall into the category of "risk of obesity." When comparing height and body mass across different age periods, it becomes evident that the primary concern for adolescents is their body weight.
4. The low quality of diet is characterized by an increased overall level of stress, prolonged screen time, lack of physical activity, minimal water intake, overeating, preference for high-calorie snacks, frequent consumption of sweet foods, foods with added sugar or honey, "fast foods," iced tea, sweetened tea, natural and fruit juices, soft and energy drinks, as well as harmful habits such as smoking, alcohol consumption, and coffee intake.
5. In adolescents with high-quality diets, there is a predominance of home-cooked meals, preferences for raw foods, seeds and nuts, higher intake of dairy products, white meat, the use of artificial sweeteners (sugar substitutes), food supplements, and an interest in the composition, nutritional content, and caloric value as indicated on food labels.
7. Enhancing dietary quality significantly contributes to a reduction in the activity of carious lesions, limits the development of dentinal caries and associated complications, decreases plaque accumulation, and improves gingival health, thereby positively influencing the oral health profile of adolescents.

The contributions of the dissertation are also outlined, with notable innovations including:

- The inaugural use of the DQI-A score in our country to examine the effectiveness of the diet, establishing a relationship with anthropometric indicators among adolescents aged 11-17 years.
- Demonstration that the degree of dietary improvement (DQI-A score) is influenced by factors such as gender, age, eating habits, meal frequency, diet type, and the quantity and quality of food consumed during main and intermediate meals, as well as risk factors, personal preferences, and dietary habits.
- The finding that adolescents who monitor the composition, content, and caloric value indicated on food labels tend to have higher DQI-A scores.

- The first indication of the dynamics of key oral health indicators in relation to dietary improvement (DQI-A score), achieved through the implementation of specific nutritional recommendations within a preventive program targeting the studied adolescents.
- An algorithm comprising 29 nutritional recommendations has been developed and validated to enhance dietary practices concerning oral health in adolescents.

7. Conclusion

The aforementioned information leads me to believe that **Dr. Kristiyana Lyubomirova Mineva** has submitted a completed dissertation that complies with the standards outlined for the development of academic personnel. I endorse and affirm my favorable vote for the conferral of the educational and scientific degree of "doctor".

23.06.2025

Prepared by: 

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

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