

Turkish Journal of

# Physiotherapy and Rehabilitation

Türk Fizyoterapi ve Rehabilitasyon Dergisi

ISSN 1300-8757  
e-ISSN 2148-0109



The Official Scientific Journal of Turkish Physiotherapy Association  
Türkiye Fizyoterapistler Derneği'nin Bilimsel Yayın Organıdır

## «MODERN APPROACHES TO RATIONALIZATION OF MEALING OF URBAN AND RURAL SCHOOL CHILDREN IN UZBEKISTAN»

**Inomjon Islamov<sup>1</sup>, Guzal Toshmatova<sup>2</sup>, Mavluda Mirsamatova<sup>3</sup>**

<sup>1</sup>*1<sup>st</sup> year Student, Faculty of Medical Prevention and Public Health, Tashkent Medical Academy,  
Tashkent, Uzbekistan. E-mail: inomjonislomov27@gmail.com*

*ORCID: 0000-0001-5855-3458*

<sup>2</sup>*Ph.D, Assistant, the Department of Environmental Hygiene, Tashkent Medical Academy, Tashkent,  
Uzbekistan E-mail: g.toshmatova@yahoo.com*

*ORCID: 0000-0003-0368-536X*

<sup>3</sup>*Assistant, the Department of Environmental Hygiene, Tashkent Medical Academy, Tashkent,  
Uzbekistan. E-mail: mavludamirsagatova0@gmail.com*

*ORCID: 0000-0002-2463-8311*

### ABSTRACT

During school, the child undergoes growth processes, complex reconstruction of metabolism, the endocrine system's activity, and the brain; these processes are associated with adults' final maturation and formation. That is why it is crucial to provide school children and teenagers with food and organize the diet correctly. According to the survey and questionnaire analysis, 6% of adolescent students are overweight, have a food allergy, cannot eat red food and have gastritis. After eating nuts, beans, mung bean (legume), which are of particular importance for health, several disease symptoms, such as various rashes on the faces, make them constantly irritated. Some researches are done to make a clear picture of these symptoms.

**Keywords:** Nutrition in children and adolescents, Overweight, Healthy eating, metabolism.

### I. INTRODUCTION

In order to implement the Decree of the President of Uzbekistan PF-№4887 (10.11.2020) on additional measures to ensure healthy nutrition and physical activity, not only to improve the education system but also to improve the optimal development and growth of children's material base, as well as the structure and quality of educational institutions. Following the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 146 on the approval of the Regulation on the Ministry of Public Education, measures are being taken to organize healthy eating in secondary schools.

According to the World Health Organization, failure to follow the rules and regulations of physical activity and nutrition, consumption of foods and sweets containing large amounts of salt, sugar and fats, as well as insufficient intake of vitamins and minerals can lead to stunted growth and mental development of young people. Creates vascular, endocrine, malignant tumours in the older generation and several other diseases that lead to premature death in humans.

However, lessons learned from the coronavirus pandemic's consequences showed a significant proportion of disease severity and mortality inextricably linked to comorbidities resulting from an unhealthy lifestyle.

At present, protecting the health of children and adolescents and prolonging human life is a priority in public policy. Harmonious growth and development, the absence of diseases in children and adolescents are seen to ensure the country's future well-being. One of the leading factors determining children's health is nutrition. During school, the child undergoes growth processes, complex reconstruction of metabolism, the endocrine system's activity, and the brain; these processes are associated with adults' final maturation and formation.



That is why it is crucial to provide school children and teenagers with food and organize the diet correctly. The diet of schoolchildren depends on the school's characteristics, workload, sports, social work and more. The standard diet may vary depending on the timing of visits to additional classes, sports sections, interest groups.

However, when creating a diet for teenagers, you need to monitor the proper distribution of food and calorie content throughout the day. As with preschoolers, it is best for school children to be given protein-rich foods in the first half of the day and primarily dairy-vegetable meals for dinner. The distribution of calories during the day is recommended as follows: breakfast - 25%, lunch - 35-40%, school breakfast (or afternoon tea) - 10-15%, dinner - 25%. It is imperative to ensure that students eat different meals, that the same dishes are not repeated during the day and not more than 2-3 times a week.

Despite the great emphasis on the organization of nutrition for school-age children, its impact on children's health remains insufficiently studied, given its regional component. However, food composition, quality, foreign chemicals, and actual nutritional supply are determined by habitat and nutrition. It is a risk factor for the development of diseases.

In this regard, the scientific substantiation of methodological and organizational approaches to the rationalization of nutrition of urban and rural school students in monitoring students' nutrition and health in educational institutions is essential. We see that the products that people loved and consumed in their youth and at the same time seem safe for the body, become active "Harmful" to their health in adulthood. With age, these products are the basis for the decline of immunity and some new metabolic disorders. However, with the need and order of proper nutrition, two different opinions have emerged about whether our studied products harm the growing organism.

To this end, we have studied the content of some products that teenagers love to consume, show in TV commercials, or beautiful bright packaging. We also aimed to study adolescents' need for light meals (snack – light snack), their health with nutrition.

When analyzing the literature, it became clear that one of the most common diseases among adolescents is diseases of the gastrointestinal tract, in particular, gastritis, ulcers, overweight or underweight, avitaminosis, dysbacteriosis. Gastritis can be acute in adolescents and some cases, chronic. They do not eat properly, drink carbonated beverages, chewing gum, and various snacks that lead to the diseases mentioned above. We know that carbonated beverages contain large amounts of sugar and carbonic acid, which, when consumed frequently, increase calcium excretion from the body, an essential element for bones and teeth' growth and structure. Carbonated drinks also contain emulsifiers, dyes, flavourings. Another disease is dysbacteriosis, accompanied by a change in the number of beneficial and harmful microbes in the gut. Its main symptoms are discomfort in the abdomen, bloating, restlessness, and so on.

Obesity is also a metabolic disorder caused by overeating, in which case parents should consult a doctor and replace sweets and snacks with a variety of fruits and vegetables. Because being overweight can lead to other severe illnesses in the future, such as diabetes and atherosclerosis.

## II. MATERIALS AND METHODS

The inspection object was to identify students' eating habits of secondary school No.29 of Almazar district of Tashkent city and secondary school No.32 of Shakhrisabz district of Kashkadarya region.

A questionnaire survey was conducted among school students to study the impact of nutrition on developing eating-related comorbidities among adolescent students.

## III. RESULTS

The survey was conducted separately among a total of 130 students among boys and girls. Several questions replied among students studying in urban and rural secondary schools. In particular, when asked how many meals a day you eat, 81% of children answered 3.4 meals a day, 5-6% of students 5, 6 times 14% 2 meals a day. 56% of students said they had breakfast regularly, and the rest said they would not eat breakfast because they had no appetite or woke up late. Besides, as a result of students' subjective self-assessment, persistent fatigue in 35.5 percent of students in urban areas and 29.2% of students in rural areas, persistent fatigue, 35% of students in urban areas, 29% in rural areas, nausea, 11% in abdominal pain, 12% said to had symptoms such as general weakness and decreased vision in 2%. When given by the type of food in the type of food consumed, 80%

expressed a desire to eat fast food, while 12% expressed a desire to eat hot food. When asked about beverages consumed during the day, 61% said they would drink at least 1 litre of non-carbonated water, 15% of sweet-tasting juices, the rest carbonated cola, Pepsi. A study of food between meals found that 53% of students wrote that they do not eat chocolate, 12% ice cream, 10% potato chips, and the rest only by chewing gum. They wrote that they had a general understanding of how foods fortified with vitamins and greens but did not have a clear idea of exactly which foods, when consumed properly, would have a positive effect on their mental and physical activities. The general answers to the question of "What do you understand by healthy eating?" found that 92% of most students' answers agreed that eating on time, the rest were satiated, and fatty eating positively affected their development.

According to the survey and questionnaire analysis, some researches did such as for overweight among adolescent students in 16% of students in urban areas, 5% in rural areas, food allergies, inability to eat red food, gastritis, legumes, beans, nuts, health several symptoms of the disease, such as the appearance of varicous rashes on the face after eating nuts of particular importance. They were also the most common disease in children. Dysbacteriosis was a disorder of the digestive process in the stomach. The problem of increased sensitivity was identified.

#### IV. DISCUSSION

A person's eating habits formed in childhood and affect his later life. Habits were beneficial and harmful, the latter being sustainable. The Greek scientist, philosopher, and sage Pythagoras put it succinctly and clearly: "Man, with his bad habits, activates the forces that will eventually destroy him". Today, many products that harm our body were on our table. Consumption of these products with age inevitably led to the deterioration of immunity and an increase in the number of diseases; The emergence of new diseases that could not be cured, based on which lay the general disorders of metabolism.

In the context of the pandemic, a study of the health effect of adolescent malnutrition found that eating disorders among adolescents were more prevalent among urban students than those studying in rural areas. The most common types of these diseases were overweight, food allergies, and increased facial rashes.

#### V. CONCLUSION

1. In urban and rural areas of Tashkent, we found that among adolescents studying in secondary schools, the prevalence of comorbidities resulting from unhealthy eating was higher among students in urban areas.
2. The abundance of light foods and unhealthy foods in the diet of adolescents, the lack of vitamin-rich fruits and vegetables in the diet, the inadequate consumption of milk and dairy products would undoubtedly affect their health.
3. The study results confirmed that light foods (ice cream, chewing gum, chocolate, so on.) preferred by adolescents caused irreparable damage to health.
4. To increase the dissemination of information about proper nutrition among adolescents studying in secondary schools in urban and rural areas of Tashkent, a booklet "Tips on proper nutrition" developed and distributed to students.

#### CONFLICT OF INTERESTS AND CONTRIBUTION OF AUTHORS

The authors declare the absence of obvious and potential conflicts of interest related to the publication of this article and report on the contribution of each author.

#### SOURCE OF FINANCING

No funding was required for this research.

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