



Scientific Substantiation Of Nutritional Correction And Food Status Of School Age Children In Namangan Region

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ABSTRACT

In the article, it is learned to scientifically substantiate and implement organizational, hygienic and medical-preventive measures at the legislative and departmental levels aimed at reducing alimentary-dependent pathologies in schoolchildren of the Namangan region.

ARTICLE INFO

Article history:

Received 15 Feb 2021

Received in revised form 7 March 2021

Accepted 18 March 2021

Keywords: alimentary-dependent, medico-prophylactic endocrine system, full-faceted pathology, gastroenterological pathology, micronutrient deficiency.

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Introduction

Currently, about 70% of the child population of Uzbekistan are school-age children, while the most pronounced increase in the incidence is observed precisely at this age segment of the child's life, characterized by the activity of the endocrine system [1, 60].

About 53% of schoolchildren have poor health; the proportion of healthy children by the end of school does not exceed 20-25%; more than 30% of students have from 4 to 6 deviations in health, polysystemic and multiple organ pathology, which almost doubles with school experience [2, 92].

Main Part

According to the majority of domestic and foreign scientists, the reason for the increase in the overall morbidity of the child population may be nutrition that does not contain a sufficient amount of vitamins and minerals [3,54]. The high susceptibility of the child's body to diseases associated with micronutrient deficiencies is due to the widespread hypovitaminosis and hypoelementosis, which indicate the insufficiency of the exchange pool of vitamins and microelements, its rapid depletion

during the period of accelerated maturation and growth against the background of inadequate intake with food [4, 48].

At the same time, with a significant length of the territory of the Namangan region from north to south, a relatively low population density, the presence of hard-to-reach settlements, providing the child population with a sufficient amount of necessary food ingredients is a complex and poorly studied problem today.

The relevance of this study is due to the widespread prevalence of alimentary-dependent morbidity in children and adolescents in the Namangan region. The last thirty years have been characterized by a rapid increase in the level of gastroenterological pathology, which, despite the latest advances in this area of pediatrics, has a steady tendency to further increase. Up to 70-90% of all gastroenterological pathology accounts for chronic gastritis, gastroduodenitis, which is present in every second or third child [5,42].

Economic reforms destroyed the school catering system that had existed until the 1990s; and today there are no uniform approaches to the organization of school meals, which is an obligatory component of the schoolchild's day regimen, which makes it difficult to make managerial decisions in this area at the regional and municipal levels.

In this regard, the study of nutrition and nutritional status of schoolchildren is given special importance today [6, 117].

There was also a need to search for new effective criteria for assessing the health of the younger generation, monitoring and forecasting its changes, especially relevant for the Russian North and Eastern Siberia [7, 45]. Taking into account the multifactorial nature of the negative impact of inadequate and inappropriate nutrition on the body of school-age children, it is necessary to develop qualitatively new health-saving technologies, such as the organization of rational school meals, the introduction of new methods of production control, state supervision and social and hygienic monitoring.

Despite the significant amount of data obtained on the nutritional characteristics of certain groups of the child population, until now there has been no possibility of scientific substantiation and implementation of complexes of organizational and methodological measures aimed at reducing the level of alimentary-dependent health disorders in school-age children at the regional level. In the population of school-age children, the dietary regime, eating behavior, the frequency of consumption of certain products, the energy and biological value of actual nutrition, which characterize the nutritional status of schoolchildren in modern socio-economic conditions, have not been fully studied; no connection was established between eating disorders and the prevalence of nutritional-dependent health disorders, which determined the relevance of this study.

Purpose of the study: on the basis of a comprehensive hygienic and medical and social research, to develop, scientifically substantiate and implement at the regional level measures aimed at correcting the nutrition and nutritional status of school-age children in the modern socio-economic conditions of the Namangan region.

Tasks:

1. To analyze the patterns and trends in the dynamics, structure and prevalence of general and alimentary-dependent morbidity in schoolchildren in the Namangan region.
2. To give a hygienic assessment of the actual nutrition of schoolchildren at the present stage with the establishment of causal relationships between indicators of nutrition and health.
3. Using complex clinical and biochemical methods to study the level, structure and causes of the prevalence of micronutrient deficiency in the body of schoolchildren.
4. Scientifically substantiate and introduce indicators of nutrition and nutritional status into the system of social and hygienic monitoring using biological testing methods to manage the formation of the health of students in general education schools.
5. Analyze current trends and the level of organization of public catering in educational institutions to substantiate hygienic and medical-preventive programs to optimize nutrition.

The methodological approaches provided for a comprehensive assessment of the actual nutrition and health of schoolchildren, including a hygienic assessment of the characteristics of eating behavior, diet, frequency of consumption of food products and dishes, energy value and chemical composition of daily rations; the degree of safety and nutritional value of organized school meals; study of general and alimentary-dependent morbidity, clinical and biochemical indicators of the nutritional status of school-age children.

Scientific novelty of the research. New information was obtained on the levels and dynamics of alimentary-dependent morbidity, the prevalence of clinical signs of micronutrient deficiency in schoolchildren in the Namangan region. Based on the analysis of the energy and biological value of actual nutrition, indicators of digestion and metabolism processes, the relationship between the levels of alimentary-dependent diseases and the saturation of the body of schoolchildren with nutrients has been established. With the use of sociological, analytical and statistical methods, it was found that the potential danger of the development of alimentary-dependent pathological conditions in school-age children, in particular, is associated with eating disorders and irrational eating behavior. Relationships have been established between indicators of school catering and the health of students. Taking into account the studied indicators of health and actual nutrition, criteria for assessing the degree of nutritional deficiency in the body of schoolchildren were developed using biological testing methods, which made it possible to introduce parameters of the nutritional status of students into the regional system of social and hygienic monitoring. On the basis of the materials obtained, methodological approaches to managing the health of students in educational institutions by correcting dietary intake and monitoring nutritional status have been developed. Collected, supplemented with new blocks and presented in a sequence convenient for organizers of school meals, sanitary doctors and experts, methods of studying and correcting the actual nutrition of schoolchildren in the region. A set of measures aimed at preventing and reducing alimentary-dependent diseases in school-aged children has been scientifically substantiated and implemented at the regional level.

The theoretical significance of the work. The results obtained contribute to the development of the fundamental problem of reducing the negative impact of inappropriate nutrition on the health of school-age children, contribute to the further improvement of the methodology for monitoring the nutritional status of students. The obtained information about the peculiarities of the formation of micronutrient

deficiencies in the body of school-age children scientifically substantiate decisions on the preservation and strengthening of the health of students of educational institutions at the regional and municipal levels.

The practical significance of the work and the implementation of the results.

The scientific and practical significance of the study lies in the fact that on the basis of the results obtained, real possibilities were determined to preserve and strengthen the health of school-age children by improving the organization of meals in educational institutions.

On the basis of the materials obtained, a unified methodology for studying and correcting the actual nutrition of school-age children in the Namangan region was developed with the development of standards for individual nutritional factors.

The system of preventive measures to rationalize the nutrition of school-age children was substantiated and introduced, including the optimization of school meals, an increase in the level of hygienic literacy of parents and organizers of school catering, an increase in motivation for healthy eating, as well as an increase in the efficiency and effectiveness of production control and state sanitary and epidemiological supervision over food in educational institutions.

A list of nutritional factors to be monitored has been developed, the contingent and the procedure for dynamic observation of the nutrition of students of educational institutions have been determined; average marginal indicators of micronutrient content in urine and hair and criteria for assessing the severity of vitamin and mineral deficiency in children have been developed.

The research materials made it possible to develop, scientifically substantiate and introduce into the system of social and hygienic monitoring the results of biological testing of students, according to which it became possible to objectively and with a high degree of reliability evaluate the effectiveness and efficiency of preventive programs for optimizing school meals based on the feedback principle.

A system of mathematical expression of nonparametric nutritional factors for establishing links between morbidity and factors of the sanitary and epidemiological situation, which determines the level of nutrition in an educational institution, has been developed and introduced into the practice of institutions of the State Sanitary and Epidemiological Supervision of the Territory.

The main hygienic aspects of providing the child population with iodine with food have been formulated; the share of the contribution of individual food products to the provision of students with iodine with food has been established. Methods for the hygienic assessment of school meals were developed and implemented at the level of cyclical 10-day menus and assortment lists of products sold in buffets as additional meals for students during breaks between lessons. A procedure for the integrated assessment of organized nutrition using indicators of physical development and physical fitness of children has been developed and proposed for the practical activities of medical workers of educational institutions.

Based on the research materials, proposals were made and the following regulatory and methodological documents were developed:

The main provisions for the defense:

1. The nutritional behavior of schoolchildren formed at the present stage does not provide an optimal supply of micronutrients and energy with food rations, "and is a risk factor for the development of alimentary-dependent pathologies.

2. The structure, dynamics and level of general and alimentary-dependent morbidity, clinical signs of micronutrient deficiency, low and low indicators of physical development, established links with nutritional deficiencies in the body allow us to consider nutrition as one of the most important factors in managing the formation of the health status of schoolchildren.

3. The developed methods of biological testing make it possible to use the biochemical characteristics of the nutritional status as objective indicators of the degree of supply of the body with nutrients, which increases the evidence and validity of interdepartmental programs aimed at correcting the nutrition of students.

4. The introduction of hygienic and medical-prophylactic regulations in the school feeding system makes it possible to increase the nutritional and biological value of students' daily rations.

5. The developed complex of hygienic and medical-preventive measures ensures the coordination of the activities of institutions and departments for the organization of school meals and the adoption of informed decisions at the legislative level aimed at reducing the level of alimentary-dependent pathologies in school-age children.

The author's personal contribution consists in analyzing the literature on the research topic, formulating an idea, developing a program, a research schedule, identifying objects, methods, volumes, research nomenclature. The author has personally developed and implemented unified scientific approaches to collecting data, studying and correcting the nutrition and nutritional status of students in secondary schools in the Namangan region, organized the collection and analysis of data on the nutrition of schoolchildren. The author has scientifically substantiated a complex of biological testing methods for indicators of nutritional status; the primary research materials were statistically processed and published, regional standards for hygienically significant indicators of nutritional status were developed, regulatory and methodological documents on the correction of schoolchildren's nutrition were substantiated and introduced. The share of personal participation of the author is 85%.

Conclusion

1. It has been established that a high standard of living and quality of food do not have a directly proportional relationship. The problem of nutrition is part of a broader problem of well-being, the regulation of which remains the content of the social policy of any developed state. The problem of nutrition refers to both components of human well-being: both the level and the quality of life, moreover, if the standard of living, reflecting the quantifiable availability of food, allows society to achieve the necessary scientifically grounded rational amount of calories consumed (and regardless of social gaps in consumption), then the quality of life, which fixes the often not quantifiable efficiency of consumption, makes it possible for each member of society to achieve rational norms, to receive a balanced diet that includes all the necessary ingredients (such as animal proteins, vitamins, etc.).

2. Nutrition of the population is a subsystem that is a key social indicator of any society. Therefore, a neutral attitude of society, represented by its formal representative - the state, to the dominant provisions in the field of quality nutrition is unacceptable.

3. The food industry in its development finds optimal solutions to the problem of shortages of products with the help of new technologies, the socio-economic effect of which is not fully determined. The study of this aspect directly affects the quality of life of the population and should be taken into account when organizing food in modern society.

4. The most important factor in healthy eating is the preparation and formation of a specialized socio-cultural stratum of society - representatives of small and medium-sized businesses, in the public catering system, and in the restaurant business. These representatives of the business units follow generally accepted quality standards and promote healthy eating outside the home.

5. The determinants of the formation and implementation of the regional policy in the field of healthy nutrition are: the presence of a strictly defined regulatory and legal framework, the reduction of the bureaucratic apparatus, the creation of an adequate system of control over market participants. The development of the food industry is constrained by the lack of a mechanism to stimulate the agro-industrial complex and representatives of small businesses.

6. Creation of charitable conditions for the dissemination of adequate information about healthy and high-quality nutrition among various groups of the population, contributes to a more rational consumption of the services of the food industry. Involving the media in working with the population in the field of healthy and high-quality nutrition requires coordination and control from both state and civil institutions of society.

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