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HYGIENIC REQUIREMENTS FOR OPTIMIZING THE DAILY ROUTINE OF SCHOOLCHILDREN DIAGNOSED WITH VARYING DEGREES OF MYOPIA

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In the contemporary era of rapid development, the formulation of preventive measures aimed at maintaining the health status and ensuring the harmonious physical development of schoolchildren remains one of the most pressing challenges facing public health professionals. The rational organization of the daily routine of students, along with its implementation and monitoring based on hygienic requirements, is a critical issue that concerns not only the specialists of the Service for Sanitary and Epidemiological Well-being and Public Health, but the community as a whole. A scientifically structured daily routine serves as one of the fundamental factors ensuring the proportionality and consistency of the growth and development processes in schoolchildren.

Failure to adhere to hygienic requirements regarding daily routines and school-related environmental factors results not only in the disruption of students' cognitive performance and work capacity but also creates a significant predisposition for the development of various somatic and infectious diseases. Numerous scientific studies have documented that such discrepancies contribute to the onset of varying degrees of myopia, pathological changes in body posture, skeletal deformities, and neuropsychological strain.

In the contemporary global context, a paradoxical situation is observed: while schoolchildren in many countries suffer from excessive body weight and varying stages of obesity, other regions report an increasing incidence of diseases stemming from the deficiency of essential nutrients. Concurrently, protein-energy malnutrition creates conducive conditions for the manifestation of myopia and structural alterations in physical stature.

Addressing the complex interplay of environmental factors, familial conditions, and educational environments within the daily routine of children and adolescents remains a paramount challenge. This includes the development of systematic protocols for outdoor activities, ensuring adequate sleep duration, and mitigating the detrimental effects of prolonged exposure to computers, mobile devices, and digital gaming. Central to these preventive strategies is the pivotal role of rationally organized healthy nutrition as a fundamental component of public health maintenance.

The development and implementation of targeted measures aimed at improving health outcomes and mitigating risk factors among the cohort of children and adolescents diagnosed with myopia represent one of the most critical challenges currently facing school physicians and specialists within the Service for Sanitary and Epidemiological Well-being and Public Health.

The objective of our study is to implement and evaluate hygienic requirements for the optimization of daily routines among schoolchildren diagnosed with varying degrees of myopia in the southern region.

In the southern regions of our country, the provision of standard levels of cognitive performance and morpho-functional status among primary, secondary, and senior schoolchildren diagnosed with myopia depends fundamentally on a hygienically structured daily routine and an effectively organized educational process. To ensure the implementation of an educational environment that complies with school hygienic requirements, the following optimal standards must be strictly observed:

Establishing educational institutions in close proximity to the residential areas of children and adolescents; maintaining student enrollment in classrooms within established regulatory limits; ensuring the prioritized seating of students with visual impairments at desks on the left side of the classroom; arranging desks, tables, and chairs in strict accordance with the physical height of the students; ensuring the full operational capacity of artificial lighting systems in classrooms; adhering to the service life of modern lighting fixtures and performing periodic replacements; monitoring the duration of reading and the quality of textbooks utilized by students diagnosed with myopia; organizing the daily routine based on hygienic principles; ensuring a high level of physical activity within the student cohort; conducting the educational process in accordance with the sanitary and hygienic requirements of the institution; normalizing daily and weekly academic loads; accounting for the distribution of mentally intensive and lighter days throughout the week; considering the complexity levels of individual subjects; adhering to hygienic criteria for the sequence of consecutive lessons; implementing optimal recess intervals (such as 10-20-10, 10-10-30-10, or 10-20-20-10 minutes); regulating the duration of computer and mobile device usage among myopic students; tailoring lesson organization to age, gender, and developmental capacity; maintaining optimal schedules for autumn, winter, spring, and summer vacations; organizing physical education classes based on hygienic requirements; categorizing students into primary, preparatory, and special physical education groups; utilizing hardening (tempering) procedures systematically with periodic monitoring of their physiological effects; and ensuring the timely organization and execution of medical examinations by school physicians, alongside the continuous monitoring of schoolchildren with chronic health conditions.

It is pertinent to emphasize that a daily routine and educational process structured in accordance with hygienic requirements serve as the fundamental basis for maintaining high cognitive performance and ensuring the superior mastery of assigned academic tasks among schoolchildren. Such an organization facilitates not only the preservation of health status but also guarantees the harmonious physical and mental development of the students.