



**PHYSICAL DEVELOPMENT OF CHILDREN AND ADOLESCENTS  
IN THE REPUBLIC OF UZBEKISTAN: ISSUES OF STUDY AND  
ASSESSMENT**

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***Abstract.*** The article presents an analysis of studies on the physical health (physical development and physical fitness) of children, adolescents, and young people living in Uzbekistan. It examines the influence of environmental and socio-economic factors on physical health indicators. Special attention is given to the role of the ethnic factor in shaping the physical health of this population category.

***Keywords:*** Stages of child development in Uzbekistan, hygienic changes, anthropometric changes in children.

Due to the deterioration of the health status of children and youth in Uzbekistan [24,25], the issue of physical health among children, adolescents, and young people in this region has become particularly relevant. Harsh climatic and geographical conditions, high anthropogenic load associated with the development of the chemical, mining, and energy industries in this region, as well as worsening socio-economic and environmental problems, significantly contribute to the adaptation processes and create several causes for the increasing negative trends in their physical development.

The physical development of children and adolescents is one of the main criteria for assessing their physical health, reflecting the impact of endogenous and exogenous environmental factors on its condition. The bodies of this population group are in a constant and continuous process of growth and development, and any disruption in this process should be considered an indicator of health issues. Therefore, timely information on the physical development of the younger generation



is necessary, as it can serve as a basis for developing regulatory documents aimed at strengthening their health.

Mass examinations of children, adolescents, and youth in various regions of Uzbekistan, conducted at different times, have not only established patterns of their body development but also helped develop regional age- and sex-specific standards for the physical development of the child population living in Uzbekistan. Systematic observations of the development of children and adolescents residing in different climatic and geographical zones of the Republic of Uzbekistan, as well as belonging to various ethnic groups, were carried out according to a standardized program and summarized in the publications of the "Materials on the Physical Development of Children and Adolescents in Urban and Rural Areas (Uzbekistan)."

Anthropometric examinations of children of different age groups (from infancy to 17 years) were conducted according to a unified program, and the obtained data were processed using a uniform variation-statistical method. These collections contained all the initial information necessary for developing assessment tables for physical development using regression analysis (regression scales). At the same time, the development of regional age- and sex-specific standards necessary for assessing the physical development of the child population in Uzbekistan, carried out using monitoring technologies, is an important and priority task. The implementation of this task is highly relevant for pediatricians, hygienists, morphologists, public health organizers, and specialists in physical development. Representatives of leading medical schools in Uzbekistan participated in this work [1].

An article titled "Indicators of Physical Development and Maturity Level of Adolescent Girls Engaged in Sports," authored by Akbarova Gulnoza Khaydaraliyevna, Mamasoliev Ne'matjon Soliyevich, and Nazarova Gulchekhra Usmanovna, was published in the "International Journal of Scientific Pediatrics." The aim of the study was to assess the physical development and maturity level of schoolgirls and adolescent girls engaged in sports. The research was conducted between 2019 and 2022.



[1] This collection included original articles on the issues of physical development of children and adolescents. They also reflect the physical development status of the child population living in various regions of the country over the period from 2019 to 2022. The collection presents research results from employees of the Federal State Budgetary Institution "Scientific Center for Children's Health" of research institutes, leading medical universities and research institutes of the Republic of Uzbekistan, pediatricians, school doctors, as well as morphologists and physiologists.

The factual data presented in the collection in the form of summary tables represent the collective and meticulous work of staff from many departments of medical universities and scientific institutions of the Ministry of Health.

An analysis of the presented materials makes it possible to assess the dynamics of physical development in children and adolescents, identify key trends in its changes, and predict the further course of their growth and development processes. The factual data in the summary tables contain information necessary for the development of regional standards for the physical development of the child population.

In the Republic of Uzbekistan, regulatory assessment tables for the physical development of children aged 7 to 17 years have been developed. In 2016, studies were conducted covering more than 6,500 children from Tashkent, Karakalpakstan, as well as the Samarkand, Syrdarya, Kashkadarya, and Khorezm regions. The results showed significant differences in the physical development indicators of children from Tashkent compared to their peers from other regions. This served as the basis for the development of separate assessment tables for children from Tashkent, regional cities, and Karakalpak children. These tables were published as methodological recommendations under the title "Regulatory Assessment Tables of Physical Development for Children Aged 7–17 Years in the Republic of Uzbekistan" in 2016.

For younger children, from birth to 7 years, the "State Requirements for the Development of Early and Preschool-Aged Children in the Republic of Uzbekistan"





were published in September 2018. This document defines standards for comprehensive development, education, and school readiness for children in this age group. The requirements are divided into five main areas of development, including physical development and the formation of a healthy lifestyle.

In recent years, research on the physical development of children, adolescents, and youth has been conducted in all regions of Uzbekistan, and the number of studied indicators varies in each case.

A large number of studies on the health of the child population have been conducted in the Republic of Uzbekistan. Below are some of the significant dissertations and methodological materials on this topic.

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