

STUDY OF THE FUNCTIONAL STATE OF THE CARDIORESPIRATORY SYSTEM IN STUDENT-ATHLETES

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Key words. physical development, physical activity, cardiorespiratory system, adaptability, risk factors.

Annotation. The paper is devoted to the study of the problems of ensuring the normal functioning of the students' bodies and protecting their health. During the research generally accepted methods were used to study the activity of the cardiorespiratory system with the determination of capacitive and volumetric indicators of the cardiorespiratory system.

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The level of human health is mainly determined by the body's energy capabilities and adaptability to various loads. In this case, the aerobic capabilities of the organism, i.e., the process of oxygen transport necessary for the production of energy in the body during physical work, and the potential of its use serve as a physiological basis. In addition, health and its condition depend on heredity, people's lifestyle, the presence of various exogenous risk factors and other factors. In the complex methodology of studying the cardiovascular system in sports medicine, great attention is paid to studying the dynamics of its indicators in connection with physical activity, and many functional tests related to physical activity have been developed in this direction [1].

The way of life of students is unique. Among the factors that have a negative effect on their health, it is possible to include the incompatibility of educational loads and teaching methods with the functional capabilities of the examinees' body, various stressful factors in life, and improper nutrition. The specific effects of mental and physical loads, especially their continuous increase, can act as a continuous stressor on the body of young people who have insufficient adaptive capabilities.

Physical exercises increase muscle strength and provide adaptation to unfavorable factors of the external environment [2].

It is known that the maintenance of homeostasis in the body under various exogenous influences is primarily related to the activity of the autonomic nervous system. The importance of this system is determined by its participation in the control of substance and energy exchange, excitability, and activity of peripheral organs [3].

Studies conducted in the Irkutsk region emphasize the importance of taking into account the area where the test subjects live when assessing physical development. Because the socioeconomic factors, the impact of nature and climate, are not the same in urban and rural areas. Therefore, the physical development indicators of permanent residents of rural areas differ from those of urban residents [4].

References list

1. Макарова Г.А. Спортивная медицина: Учебник. - М.: Советский спорт, 2003. - 480 с.
2. Баевский Р.М., Берсенева А.П. Оценка адаптационных возможностей организма и риск развития заболеваний. – [http\med.alu.ru\](http://med.alu.ru/) 2009.
3. Дибнер Р.Д. Физкультура, возраст, здоровье / Р.Д. Дибнер. – М.: Физкультура и спорт, 1985. 80 с. <https://doi.org/10.47529/2223-2524.2023.1.3>
4. Бурякина Т.А., Затейщиков Д.А. Клинико-диагностические особенности кардиологического обследования спортсменов. Трудный пациент, № 2-3. Том 9, 2011. – стр. 34-40.
5. Хайруллаева L.M. Ochlikni neyroendokrin tartibga solish orqali semizlikni davolashda o'simlik birikmalaridan foydalanish. Xorazm Mamun Akademiyasi, 2023. -14 b.
6. BG Boymuratovna, KS Kurbanovich, RY Shokirovich -Supplying of Certain Vitamins for Pregnant Women in the Southern Regions of the Republic of Uzbekistan. Annals of the Romanian Society for Cell Biology, 2021. 7609–7615.
7. 6. BG Boymuratovna, B Shokhsanam, P Kamola PROBLEMS OF RATIONALIZATION OF NUTRITION OF PREGNANT WOMEN NOVATEUR PUBLICATIONS INTERNATIONAL JOURNAL OF INNOVATIONS IN ENGINEERING RESEARCH AND TECHNOLOGY [IJIERT] ISSN: 2394-3696 Website: ijert.org VOLUME 8, ISSUE 4, Apr.-2021.
8. Boymuratovna, Buranova Gulnoza. **PHYSIOLOGICAL REQUIREMENT OF PREGNANT WOMEN FOR MICRONUTRIENTS.** *NeuroQuantology.* Bornova *Izmir* Том 20, Изд. 15, (2022): 2499 - 2504. DOI:10.14704/NQ.2022.20.15.NQ88238.
9. Hamzayeva Nargiza Rajabbayevna, Do`Stov Karim Turayevich, Buranova Gulnoza Boymuratovna, Hazratova Hulkar Normurodovna. Importance Of Dietary Fibers In Health European Journal of Research Development and Sustainability (EJRDS) Available Online at: <https://www.scholarzest.com> Vol. 2 No.4, April 2021, ISSN: 2660-5570