MEANS OF PHYSICAL CULTURE THAT ENSURE THE STABILITY OF HUMAN PHYSICAL PERFORMANCE

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There is a physiological classification of exercises in which all the diverse muscular activity is combined into separate groups of exercises based on physiological characteristics. The body's resistance to adverse factors depends on innate and acquired properties. It is very mobile and can be trained both by means of muscle loads and various external influences (temperature fluctuations, lack or excess of oxygen, carbon dioxide). It is noted, for example, that physical training by improving physiological mechanisms increases resistance to overheating, hypothermia, hypoxia, the action of certain toxic substances, reduces morbidity and increases efficiency. Trained skiers maintain high performance when their bodies are cooled to 35 °C. If untrained people are unable to perform work when their temperature rises to 37-38 ° C, then trained people successfully cope with the load even when their body temperature reaches 39 $^{\circ}$ C or more. Those who systematically and actively engage in physical exercises, mental, mental and emotional stability increases when performing strenuous mental or physical activities. The main physical (or motor) qualities that ensure a high level of physical performance of a person include strength, speed and endurance, which manifest themselves in certain proportions depending on the conditions of performance of a particular motor activity, its nature, specificity, duration, power and intensity. Flexibility and dexterity should be added to these physical qualities, which largely determine the success of certain types of physical exercises. The variety and specificity of the effects of exercise on the human body can be understood by familiarizing yourself with the physiological classification of physical exercises (from the point of view of sports physiologists). It is based on certain physiological classification features that are inherent in all types of muscular activity belonging to a specific group. So, by the nature of muscle contractions, muscle work can be static or dynamic. The activity

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of muscles in conditions of maintaining a stationary position of the body or its links, as well as the exercise of muscles while holding any load without moving it, is characterized as static work (static effort). Static efforts are characterized by maintaining a variety of body postures, and muscle efforts during dynamic work are associated with movements of the body or its links in space. A significant group of physical exercises is performed under strictly constant (standard) conditions both in training and in competitions; motor acts are performed in a certain sequence. Within the framework of a certain standard of movements and conditions for their performance, the performance of specific movements is improved with the manifestation of strength, speed, endurance, and high coordination when performing them. There is also a large group of physical exercises, the peculiarity of which is nonstandard, the variability of the conditions for their performance, in a changing situation requiring instant motor reaction (martial arts, sports). Two large groups of physical exercises related to the standard or non-standard movements, in turn, are divided into exercises (movements) of a cyclic nature (walking, running, swimming, rowing, skating, skiing, cycling, etc.) and exercises of an acyclic nature (exercises without the obligatory fused repetition of certain cycles that have clearly pronounced the beginning and end of the movement: jumping, throwing, gymnastic and acrobatic elements, weight lifting. What is common to cyclic movements is that they all represent work of constant and variable power with different durations. The diverse nature of movements does not always allow us to accurately determine the power of the work performed (i.e., the amount of work per unit of time, 234 associated with the strength of muscle contractions, their frequency and amplitude), in such cases the term "intensity" is used. The maximum duration of work depends on its power, intensity and volume, and the nature of the work is associated with the process of fatigue in the body. If the power of the work is high, then its duration is short due to the rapid onset of fatigue, and vice versa. When working cyclically, sports physiologists distinguish between a zone of maximum power (the duration of work does not exceed 20-30 seconds, and fatigue and decreased performance mostly occur after 10-15 seconds); submaximal (from 20-30 to 3-5 seconds); large (from 3-5 to 30-50 minutes) and moderate (duration 50 minutes or more). The reason for the fatigue of the muscles themselves is associated with a significant accumulation of anaerobic metabolism products and depletion of energy substances in them. The main mass of energy released during maximum power operation is formed due to the energy of ATP and CF decay. The oxygen debt eliminated during the recovery period after the work performed is used for oxidative resynthesis (reduction) of these substances. The decrease in power and the increase in the duration of work is due to the fact that in addition to the anaerobic reactions of energy supply to muscle activity, the processes of aerobic energy formation are also unfolding. This increases (up to full satisfaction of the need) the supply of oxygen to

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the working muscles. So, when working in a relatively moderate power zone (running long and ultra-long distances)- the oxygen consumption level can reach about 85% of the maximum possible. At the same time, part of the oxygen consumed is used for the oxidative resynthesis of ATP, CF and carbohydrates. With prolonged (sometimes many hours) work of moderate power, the body's carbohydrate reserves (glycogen) decrease significantly, which leads to a decrease in blood glucose, negatively affecting the activity of nerve centers, muscles and other working organs. In order to replenish the consumed carbohydrate reserves of the body during long runs and swims, special nutrition with solutions of sugar, glucose, and juices is provided. The means of physical culture include not only physical exercises, but also the healing forces of nature (sun, air and water), hygienic factors (work regime, sleep, nutrition, sanitary and hygienic conditions). The use of the healing forces of nature helps to strengthen and activate the body's defenses, stimulates metabolism and the activity of physiological systems and individual organs. To increase the level of physical and mental performance, it is necessary to be outdoors, give up bad habits, exercise motor activity, and engage in tempering. Systematic physical exercises in conditions of intense educational activity relieve neuropsychic stresses, and systematic muscular activity increases the mental, mental and emotional stability of the body during strenuous academic work.

ИСПОЛЬЗОВАННАЯ ЛИТЕРАТУРА

- Nazirjonovich, Khatamov Zafarjon, and Tolanbayev Farrukh. "METHODOLOGICAL FOUNDATIONS OF THE MANAGEMENT OF PHYSICAL CULTURE AND SPORTS ACTIVITIES OF STUDENTS IN ORDER TO PREPARE FOR PROFESSIONAL ACTIVITY." Proceedings of International Conference on Educational Discoveries and Humanities. Vol. 2. No. 4. 2023.
- 2. Nazirjonovich, Khatamov Zafarjon, and Muidinov Ikboljon Abdukhamidovich. "THE EFFECT OF PHYSICAL EXERCISES ON THE MENTAL ABILITIES OF STUDENTS." ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ 18.1 (2023): 15-19.
- 3. Akramovich, Talipdjanov Alidzhan, and Khatamov Zafarjon Nazirjonovich. "IMPROVEMENT OF PHYSICAL EDUCATION IN THE SYSTEM OF HIGHER EDUCATION." ОБРАЗОВАНИЕ НАУКА И NOVATEUR PUBLICATIONS JournalNX- A Multidisciplinary Peer ReviewedJournal ISSN No: 2581 4230 VOLUME 9, ISSUE 9, Sep. -2023 5 | P a g e ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ 18.1 (2023): 10-14.
- 4. Nazirjonovich, X. Z. (2023). Inomov Faxriddin o'rmonjonovich." Physical Education In Higher Educational Institutions Problems Of Formation Of Professional Skills On The Basis Of Science And Practice Ytegration In The Training Of Teaching Staff.". Journal of Positive School Psychology, 870-876.

- 5. Nazirjonovich, Khatamov Zafarjon, and Akhmedova Nargiza Alidjanovna. "Social and pedagogical function of sport in spiritual development of youth." INTERNATIONAL JOURNAL OF SOCIAL SCIENCE & INTERDISCIPLINARY RESEARCH ISSN: 2277-3630 Impact factor: 7.429 11.11 (2022): 255-260.
- Nazirjonovich, Khatamov Zafarjon, and Akhmedova Nargiza Alidjanovna. "Importance of travelling and tourism at the formation of healthy lifestyle of the pupils of beginning classes." INTERNATIONAL JOURNAL OF SOCIAL SCIENCE & INTERDISCIPLINARY RESEARCH ISSN: 2277-3630 Impact factor: 7.429 11.11 (2022): 81-86.
- Khatamov, Zafarjon Nazirjonovich. "Special physical of students of higher education preparation." Educational Research in Universal Sciences 1.3 (2022): 151-157.
- Nazirzhonovich, Khatamov Zafarjon, and Akhmedova Nargiza Alidzhanovna. "The importance of travel and tourism in the formation of a healthy lifestyle danang primary school students." INTERNATIONAL JOURNAL OF SOCIAL SCIENCE & INTERDISCIPLINARY RESEARCH ISSN: 2277-3630 Impact factor: 7.429 11.11 (2022): 75-80.
- 9. Хатамов, Зафаржон Назиржонович. "Педагогические условия формирования спортивной мотивации." INTERNATIONAL SCIENTIFIC AND PRACTICAL CONFERENCE" THE TIME OF SCIENTIFIC PROGRESS". Vol. 1. No. 2. 2022.
- 10. Toxirjonovich, Arabboyev Qaxramon, et al. "THE ROLE OF SPORT IN PEOPLE'S HEALTH." International Journal of Early Childhood Special Education 14.7 (2022).
- 11.Akramovich, Alikulov Akmal, and Xatamov Zafar Nazirjonovich. "Technologies for developing of future physical education teachers through media education tools." Academicia: an international multidisciplinary research journal 11.2 (2021): 885-890.
- 12.Nazirjonovich, Khatamov Zafarjon. "The use of modern educational technologies in the organization of physical education is a guarantee to increase the effectiveness of education." ACADEMICIA: An International Multidisciplinary Research Journal 11.10 (2021): 477- 480.
- 13.Nazirjonovich, Xatamov Zafarjon, and Inomov Faxriddin o'rmonjonovich. "Physical Education In Higher Educational Institutions Problems Of Formation Of Professional Skills On The Basis Of Science And Practice Ytegration In The Training Of Teaching Staff." Journal of Positive School Psychology (2023): 870-876.
- 14.Nazirjonovich, Khatamov Zafarjon, and Tolanbayev Farrukh. "WORKING WITH SCALES AND EXERCISES." Conferencea (2023): 113-115.

- 15.Nazirjonovich, Khatamov Zafarjon. "THE IMPORTANCE OF PHYSICAL EDUCATION IN THE FORMATION OF A STUDENT'S PERSONALITY." Galaxy International Interdisciplinary Research Journal 11.4 (2023): 262-267
- 16.Nazirjonovich, Khatamov Zafarjon. "IMPROVING ENDURANCE FROM PHYSICAL QUALITIES IN STUDENT YOUTH." *Open Access Repository* 9.9 (2023): 115-118.
- 17.Nazirjonovich, Khatamov Zafarjon. "THE ROLE OF MODERN PEDAGOGICAL TECHNOLOGIES IN THE DEVELOPMENT OF THE SCIENCE OF PEDAGOGY." *Open Access Repository* 9.9 (2023): 103-108.
- 18.Nazirjonovich, Khatamov Zafarjon. "CONCEPT OF RESILIENCE, TYPES OF RESILIENCE, INDICATORS AND METHODS OF ITS DEVELOPMENT." *Open Access Repository* 9.9 (2023): 119-124.
- 19.Nazirjonovich, Xatamov Zafarjon, and Inomov Faxriddin O'rmonjonovich. "Physical Education In Higher Educational Institutions Problems Of Formation Of Professional Skills On The Basis Of Science And Practice Ytegration In The Training Of Teaching Staff." *Journal of Positive School Psychology* (2023): 870-876.
- 20. Араббоев, К. Т. "ОСОБЕННОСТИ АДАПТАЦИИ СТУДЕНТОВ ВЫСШЕЙ ФИЗКУЛЬТУРНО-ПЕДАГОГИЧЕСКОЙ ШКОЛЫ К УЧЕБНОЙ И СПОРТИВНОЙ ДЕЯТЕЛЬНОСТИ." Педагогические науки 5 (2011): 128-131.
- 21.Toxirjonovich, Arabboyev Qaxramon, et al. "THE ROLE OF SPORT IN PEOPLE'S HEALTH." International Journal of Early Childhood Special Education 14.7 (2022).
- 22. Tohirjonovich, Arabboyev Qahramon. "SPECIFIC FEATURES OF THE APPROACH TO STUDENTS IN PHYSICAL EDUCATION LESSONS ON THE BASIS OF THE PRINCIPLE OF INDIVIDUALIZATION." ASIA PACIFIC JOURNAL OF MARKETING & MANAGEMENT REVIEW ISSN: 2319-2836 Impact Factor: 7.603 11.12 (2022): 269-273.
- 23.Arabboyev, Q. T. "SPORTCHILARNI TAYYORLASHDA FUNKSIONAL TAYYORGARLIKNING AHAMIYATI: 10.53885/edinres. 2022.75. 29.012 QT Arabboyev." Научно-практическая конференция. 2022.
- 24.Arabboyev Qahramon Tohirjonovich. (2022). THE IMPORTANCE OF FUNCTIONAL TRAINING IN THE ATHLETE TRAINING SYSTEM. INTERNATIONAL JOURNAL OF SOCIAL SCIENCE & INTERDISCIPLINARY RESEARCH ISSN: 2277-3630 Impact Factor: 7.429, 11(11), 261–264.
- 25.Arabboyev Qakhramon Tohirjonovich. (2022). ADAPTATION OF ATHLETE STUDENTS TO STUDENT LIFE. INTERNATIONAL JOURNAL OF SOCIAL

SCIENCE & INTERDISCIPLINARY RESEARCH ISSN: 2277-3630 Impact Factor: 7.429, 11(11), 272–276.

- 26. Абдуллаевич, Зияев Абдурахмон. "COMPLEX SUPERVISION OF PHYSICAL AND TECHNICAL-TACTICAL PREPARATION OF DISABLED FOOTBALL PLAYERS." *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ* 18.3 (2023): 64-67.
- 27. Абдуллаевич, Зияев Абдурахмон. "ЭФФЕКТИВНОСТЬ И МЕТОДЫ РАЗВИТИЯ ТЕХНИКИ ИГРЫ ЮНЫХ БАСКЕТБОЛИСТОВ С ПОМОЩЬЮ СПЕЦИАЛЬНЫХ УПРАЖНЕНИЙ". ОБЗОР АЗИАТСКО-ТИХООКЕАНСКОГО ЖУРНАЛА МАРКЕТИНГА И МЕНЕДЖМЕНТА ISSN: 2319-2836 Импакт-фактор: 7.603 11.12 (2022): 123-125.
- 28. Абдуллаевич, Зияев Абдурахмон. "COMPLEX SUPERVISION OF PHYSICAL AND TECHNICAL-TACTICAL PREPARATION OF DISABLED FOOTBALL PLAYERS." *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ* 18.3 (2023): 64-67.
- 29. Токсирджонович А. К., Рашитовна М. Г., Назирджонович Х. З., Эркузиевич Р. И., Мухаммедович Дж. В. и Абдуллаевич З. А. (2022). РОЛЬ СПОРТА В ЗДОРОВЬЕ ЛЮДЕЙ. Международный журнал специального образования детей раннего возраста, 14(7).
- 30.Хабибуллоевич, Болтабоев Хамидулло. "THE IMPORTANCE OF TRAVEL AND TOURISM IN FORMING A HEALTHY LIFESTYLE IN PRIMARY CLASS STUDENTS." *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ* 18.8 (2023): 3-8.
- 31.Болтабоев, Хамидулло. "Значение использования административных методов при организации деятельности физкультурно-спортивных организаций". Научно-технический журнал Наманганского инженерно-технологического института 1.2 (2019): 322-330.
- 32.Abduvali, Abdullaev, and Boltaboev Khamidullo Khabibulloevi. "STUDENT YOUTH HEALTHY LIFESTYLE PHYSICAL A NEW LOOK AT CULTURE." Конференции. 2020.
- 33.Болтабоев, Хамидулло Хабибуллоевич. "ВАЖНОСТЬ ПУТЕШЕСТВИЙ И ТУРИЗМА ДЛЯ ФОРМИРОВАНИЯ ЗДОРОВОГО ОБРАЗА ЖИЗНИ УЧАЩИХСЯ НАЧАЛЬНЫХ КЛАССОВ". Научно-технический журнал Наманганского инженерно-технологического института 1.11 (2019): 231-236.