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Optimization of the training plan based on the assessment of the functional state of the athletes

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Annotation: in the stage of Evolution Development, Morpho–functional characteristics of the human body are formed gradually in a consistent way, while in sports where intensive physical exercise is required to be carried out continuously, these heavy loads and their qualitative and quantitative indicators change rapidly. Such rapid change can lead to functional disorders in the human body and cause the origin of various diseases. For this reason, the fixation on heavy physical loads and the identification of functional changes that occur in the body under its influence requires, first of all, the improvement of the adaptation process of the athlete's body, the level of tension and fatigue, the reevaluation of indicators of speed, endurance, working capacity and the perfection of recovery measures.
Keywords: level of physical capabilities, parameters, correlation communication, fat mass

Introduction. Modern sports practice cannot be imagined without functional training. Especially the study of the functional state of the athlete's body is a fan for tomorrow without the latest methods for application. Currently, sports in the world are moving to the scientific and practical sphere on the basis of advanced technologies and innovative approaches. The physical and intellectual potential of a human organism cannot be imagined without deep scientific research. Because, functional training determines the results and achievements of athletes on a global scale. An important scientific problem in the world of sports is the study of the fact that high loads and extreme conditions make people dependent on the level of physical capabilities, the health of the body, and loads affect the body.

The purpose of the study: to develop an optimized training plan option based on the assessment of the functional state of the athletes.

Research methods: the following techniques are used to carry out the solution of the tasks set:

1.
he imposition of highly qualified coaches on the sources of scientific and literary literature.
2.
edogogical observations.
3.
rganization of research.
4.
athematical statistical methods.

Many scientific and methodological literature and sports practices show that the development of “speed-strength” abilities, rapid running, jumping and throwing, affects the formation of a high level of concentration of tension in various phases of Sports mobile games and solo struggles. A number of authors have revealed that in single fights, the qualities of speed-strength of athletes have an important role. (Ryabinin S.P. and

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head., 2007; Federov V.I. and head. 2005). Athletes were found to have a percentage of body muscle water content, fat mass, skeletal muscle mass weight, and the effect of basic substance exchange (kcal) on aerobic and physical performance. The physical fitness of the track and field athletes was determined by special tests and aerobic and anaerobic directional functional substance exchange was detected in the cardiorespiratory apparatus. Based on the functional state of the athletes, the optimal structure of preparatory training was developed and applied to the practice process. In athletics, a high correlation relationship of bioimpidansometric indicators with cardiorespiratory parameters was found. A convincing difference was found between bioimpedansometric indicators such as fat mass (%), skeletal muscle mass (%), body mass index in track and field athletes. In athletics, athletes in sports were found to have unequal changes in gas exchange and hemodynamic parameters, depending on oxygen consumption, when performing an increased load.

In athletics, an increase in oxygen consumption, compared to other sports, occurs with an increase in YUQS at the same time, and this is reflected in the better functioning of the oxygen transport system, which provides a higher level of aerobic capacity. Physiological measures to increase the efficiency of recovery are currently divided into measures that accelerate recovery–pedagogical, psychological, medical and physiological. The first 3 measures are well studied and covered in detail in the literature, there is no complete certainty about physiological measures. Of course they are to some extent aocador with medical and other activities, but they have their own characteristics. The theoretical justification of physiological measures accelerating recovery processes is carried out on the basis of the study of the sports activity of the body and the physiological laws of its functional reserves. Periodic measures are aimed, according to the need, at harnessing the Reserve capabilities of the body in order to promptly restore and increase the working capacity of athletes. Such measures include triggering biologically active points, breathing pure oxygen at normal and high 88 atmospheric pressure, hypoxia conditioning, rubbing, ultraviolet irradiation, heat treatments, as well as the use of biological stimulants and adaptogens that have nothing to do with doping, among others. Some of these measures have been studied and applied to sports practice, while the use of some requires special care, especially when using pharmacological agents. Firstly, some substances that were not previously considered doping are currently transferred to the doping line, and secondly, their regular intake can lead to the end of the body's Reserve capabilities and the emergence of diseases due to a decrease in the body's nospecific endurance.

Plant-derived stimulants and adaptogens (ginseng, Eleutherococcus, Chinese lemon, etc.) are common among biologically active substances being used to accelerate recovery processes and gain Labor aptitude.) in.

Conclusion

The following conclusions were drawn from research on the dissertation " optimization of the training plan based on the assessment of the functional state of athletes:

1. Convincing differences have been found among bioimpedansometric indicators such as fat mass (%), skeletal muscle mass (%), body weight index of athletes in athletics. The skeletal muscle mass (%) of cyclic Guruh athletes is convincingly large compared to athletes of the Attic Group. The mass of fat (%) in athletes of the Attic Group is dominant compared to athletes of the cyclic group.
2. When performing the incremental load in athletics athletes, the unequal nature of gas exchange and hemodynamic parameters was determined, depending on oxygen consumption. In representatives of cyclic sports, an increase in consumption occurs simultaneously with an increase in the number of heart contractions, which is the optimal mode of oxygen transport system, which provides a higher level of aerobic capacity compared to representatives of attic sports.

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3. An abnormal increase in load is more likely to affect heart rate in athletes of the Attic Group than in the cyclic group. Despite the fact that the load strength is convincingly low in the athletes of the Attic Group, the number of heart contractions was found to be the same as that of the athletes of the cyclic guru at the end of the test. This represents a higher level of performance in cyclic group athletes compared to the acyclic Guruh.
4. Linear correlation correlations with the speed-strength parameters of coordination indicators were found in athletes of both groups. Improvements in coordination parameters have a positive effect on the speed-strength qualities of athletes.
5. Anaerobic exchange bias is affected by correlation of bioimpedansometric parameters and indicators such as age, height, weight, “explosive force” and number of initial cardiac contractions. Exposure to these parameters leads to a change in anaerobic substance exchange bias.
6. It was found that a decrease in the amount of water, fat mass and an increase in skeletal muscle, increased explosive strength, maximum oxygen consumption, increased anaerobic metabolism cravings, directly positively affect the aerobic and physical working capacity of athletes.
7. Using bioimpedansometric and anthropometric parameters, an anaerobic substance exchange bubble can be detected.

List of literature used

1. Борзов В. Подготовка легкоатлета-спринтера: стратегия, планирование, технологии / Журнал: «Наука в олимпийском спорте» №1 2014 г. стр 60-74 URL: https://sportnauka.org.ua/magazine_articles. (Дата обращения 24.03.2021)
2. Маркин М.О. диссертация Повышение эффективности стартовых действий бегунов-спринтеров массовых разрядов. / тема диссертации и автореферата по ВАК РФ 13.00.04, кандидат педагогических наук стр. 2014 год.URL: https://www.dissercat.com/content/povyshenie-effektivnosti-startovykh-deistvii-begunov-sprinterov-massovykh-razryadov (Дата обращения 24.03.2021)
3. Булыкин Д.О. Техника стартовых действий в футболе и легкоатлетическом спринте Автореферат. 2007 году стр 1-22
4. URL: https://www.dissercat.com/content/tekhnika-startovykh-deistvii-v-futbole-i-legkoatleticheskom-sprinte (Дата обращения 24.03.2021)
5. Талага, Е. Энциклопедия физических упражнений. М.: Физкультура и спорт, 1998. 412 с.
6. Тер-Ованесян, И.А. Подготовка легкоатлета. М.: Терра- спорт, 2000. 128 с.
7. Сирис, П.З. Отбор и прогнозирование способностей в легкой атлетике. М., 1994. 504 с.
8. Соколов, В.А. Методика тренировки в легкой атлетике. Мн.: Полымя, 1994. 504 с.
9. Озолин, Н.Г. Легкая атлетика : учебник для студентов институтов
10. Karomatovich I. A., Amurllaevich K. A. Functional Training of the Human Body Interrelationship with the Situation //Miasto Przyszłości. – 2023. – Т. 35. – С. 380-382.
11. Karomatovich I. A., Ugli S. M. K. Planning Training Loads of Highly Skilled Height Athletes //Web of Synergy: International Interdisciplinary Research Journal. – 2023. – Т. 2. – №. 4. – С. 394-397.
12. Ibragimov A. K., Khasanov J. M. Scientific and Practical Methodological Basis of the Development of Physical Qualities in Primary Class Children //Best Journal of Innovation in Science, Research and Development. – 2023. – Т. 2. – №. 11. – С. 62-65.
13. Karomatovich I. A. et al. Analysis of the Developmental Process of Approximate (Initial) Activity of Handball Players //Web of Synergy: International Interdisciplinary Research Journal. – 2023. – Т. 2. – №. 4. – С. 481-486.

Proximus Journal of Sports Science and Physical Education
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https://proximusjournal.com/index.php/PJSSPE
ISSN (E): 2942-9943

14. Karomatovich I. A. et al. Methodology of Use of Classified Volleyball Equipment in the Health of Girls Students in Higher Education Institutions //Web of Synergy: International Interdisciplinary Research Journal. – 2023. – Т. 2. – №. 4. – С. 303-307.
15. Ibragimov A. K. Catalog of training tasks for training special endurance of young girl handball players. Academicia: An International Multidisciplinary Research Journal. Year: 2020, Volume: 10, Issue: 11. P: 486-492. DOI: 10.5958/2249-7137.2020. 01410. X.
16. Karomatovich I. A. et al. Stage of Selection and Orientation of Young Athletes in Athletics //International Journal of Formal Education. – 2024. – Т. 3. – №. 1. – С. 52-55.
17. Karomatovich I. A. et al. Features of Development of Movement Coordination in Young Athletics //International Journal of Formal Education. – 2024. – Т. 3. – №. 1. – С. 56-59.
18. Madreymov A., Ibragimov A. Issues of Improving the Attraction of Foreign Investment in the Economy of Uzbekistan //Central Asian Journal of Innovations on Tourism Management and Finance. – 2023. – Т. 4. – №. 8. – С. 1-4.
19. Khaidarov U. R. Technique of Movement of Sprinters' Legs Affecting the Increase in Sprint Speed //Nexus: Journal of Advances Studies of Engineering Science. – 2022. – Т. 1. – №. 6. – С. 49-54.
20. Хайдаров У. Р. 7. УР Хайдаров Обоснование влияния правильной постановки стопы на увеличение скорости бега: УР Хайдаров, АУ Эргашев, РХ Кадиров //Образование и инновационные исследования международный научно-методический журнал. – 2021. – №. 1. – С. 65-74.
21. Кадиров Р. Х., Хайдаров У. Р. ОСОБЕННОСТИ ТРЕНИРОВОЧНОГО ПРОЦЕССА НАПРАВЛЕННАЯ НА СОВЕРШЕНСТВОВАНИЯ СКОРОСТНЫХ КАЧЕСТВ СПРИНТЕРОВ: 10.53885/edinres. 2022.43. 80.022 РХ Кадиров Доцент кафедры Теории и методики физической культуры, к. п. н. УР Хайдаров Магистрант БГУ //Научно-практическая конференция. – 2022. – С. 493-496.
22. Khaydarov U. R. Features of the Training Process Aimed to Perfection Speed Qualities //Web of Scholars: Multidimensional Research Journal. – 2022. – Т. 1. – №. 6. – С. 207-211.
23. Хайдаров У. Р. ЭКСПЕРИМЕНТАЛЬНОЕ ОБОСНОВАНИЕ МЕТОДИКИ РАЗВИТИЯ СКОРОСТНЫХ СПОСОБНОСТЕЙ СПРИНТЕРОВ УЧЕБНО-ТРЕНИРОВОЧНОЙ ГРУППЫ: 10.53885/edinres. 2021.59. 33.029 Хайдаров Улугбек Рустамович Магистрант Бухарского государственного университета Научный руководитель: Кадиров Рашид Хамидович Профессор кафедры Теории и методики физической культурык. п. н. Бухарского государственного университета //Научно-практическая конференция. – 2021.
24. Rustamov A. A., Mansurov O. YOSH VOLEYBOLCHILARNI TAYYORLASHDA JISMONIY SIFATLAR VA HARAKATLI O ‘YINLARNING O ‘RNI //TA'LIM VA RIVOJLANISH TAHLILI ONLAYN ILMIY JURNALI. – 2023. – Т. 3. – №. 5. – С. 291-292.
25. Rustamov A. A. O ‘ZBEKISTONDA UCH BOSQICHLI SPORT MUSOBAQALARINING RIVOJLANISHI //ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ. – 2023. – Т. 18. – №. 5. – С. 96-103.
26. Rustamov A. A., Ikromboyev A. Methodology for Teaching Preschool Children to the Main Types of Movement in the Medium of Action Games //International Journal of Formal Education. – 2024. – Т. 3. – №. 1. – С. 103-107.
27. Asqarovich R. A. YOSH GANDBOLCHILARDA KUZATISH VA DIQQATNI RIVOJLANTIRISH //INTEGRATION OF SCIENCE, EDUCATION AND PRACTICE. SCIENTIFIC-METHODICAL JOURNAL. – 2022. – Т. 3. – №. 9. – С. 148-153.

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https://proximusjournal.com/index.php/PJSSPE
ISSN (E): 2942-9943

28. Rustamov A. A. Development Chronology of Three-Level Sports Competitions in the System of Continuous Education in Uzbekistan //Nexus: Journal of Advances Studies of Engineering Science. – 2022. – Т. 1. – №. 6. – С. 34-39.