THE DEVELOPMENT OF PHYSICAL QUALITIES IN CADETS WITH THE HELP OF CROSSFIT TOOLS AND METHODS

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Abstract: Relevance of the work - the topic of this work is relevant and may be of interest to both a wide range of the public and specialists in this field. That is, those people who are faced with the task of preparing and making themselves strong and resilient.

Keywords: crossfit, cadet, sport, physical training, athlete, immunity, method, system.

The crossfit training system is a program of strength and general physical training in two aspects. Firstly, the program is a key program of strength and general physical training because the fitness developed within the framework of the crossfit system is the basis for any other athletic needs and tasks.

Secondly, it is a "ey" program of strength and general physical training in the literal sense of a central role in relation to something. Most of the work focuses on the main functional axis of the human body, which makes up the "core" and includes flexion and extension of the pelvis and flexion, extension and rotation of the torso. The dominant role of functional training in this regard is due to the simple observation that powerful pelvic extension is necessary and critically important for elite athletic performance. Experience shows that no one without the ability to powerfully extend the pelvis achieves serious athletic results and almost everyone who possessed this ability was an excellent athlete. Running, jumping, punching and throwing — all these movements originate in the "core". The crossfit system begins the development of athletes with the development of the core, which, by the way, also applies to the way muscles are used in functional movements — from the center to the extremities.

Athletes develop immunity to diseases and slow down the aging process to an extent unattainable for "non-athletes". For example, 80-year-old athletes are stronger than "non-athletes" at the age of 25. Athletes have denser bones, a stronger immune system, a reduced risk of coronary heart disease and cancer, and a more stable nervous system than "non-athletes".

Let's talk about the concept of "athlete". This is "a person who is trained and has skills in exercises, sports or games that require strength, dexterity or endurance." In the crossfit system, an athlete is "a person who is trained and develops strength, power,

balance and agility, flexibility and endurance”. The crossfit system model uses the concepts of “fitness”, “health” and “athleticism” as strongly overlapping structures. Preparedness, well-being and pathology (soreness) are measures of the same magnitude of health. There are many measurable parameters, distributed by levels from pathological to healthy (normal) and prepared (better than normal). These include, but are not limited to, blood pressure, cholesterol, heart function, body fat, muscle mass, flexibility, and strength. In general, it seems that all body functions can be characterized by a state of pathology, normality and exclusivity, and the best athletes usually have these parameters high.. It is also worth noting that a healthcare professional supports your health with pills and surgery, which have the possibility of undesirable side effects, whereas a crossfit trainer always achieves good results with “side benefits” rather than negative side effects.

The method of the crossfit system establishes a hierarchy of measures and relationships, which are built as follows:

Nutrition - provides the molecular basis of fitness and health. Metabolic training - develops the efficiency of all three energy systems, including oxidative, glycolytic and phosphagenic systems. Gymnastics - provides the functional ability to control the body and develop a range of motion. Weightlifting and throwing objects - develops the ability to control external objects and power. Sport — provides an opportunity to apply acquired functional skills in a competitive atmosphere with more arbitrary movements and allows you to practice your skills. Examples of exercises in the crossfit system.

Cycling, running, swimming and rowing in endless variations. Weightlifting push, jerk, squats, deadlift, barbell bench press, bench press and power chest lifts. Jumping, throwing and catching a medical ball, push-ups, push-ups on rings and parallel bars, push-ups in a handstand, force exits, body lifts, static holds. The crossfit program regularly uses bicycles, treadmills, rowing machines and ergometers, Olympic sets of weights, rings, parallel bars, mats for free exercises, a crossbar, plyometric boxes, medical balls and jump ropes. There is not a single program that works with such a wide variety of tools, modalities and skills. World-class strength and training within limits can be achieved by training for an hour, six days a week. The intensity of the workout, which most effectively optimizes the physical condition of the body, should last from 45 minutes to an hour. Athletes who train for several hours a day develop skills incompatible with elite strength and fitness indicators. No more than one hour, more does not mean better. There is an almost ubiquitous misconception that stayers are better trained athletes than their counterparts in short-distance disciplines. Triathletes, cyclists and marathon runners are often regarded as the most prepared athletes on earth. Nothing could be further from the truth. Marathon runners train far beyond the healthy development of cardiovascular performance and at the same time lose a lot in strength, speed, and power, usually do not develop coordination,

dexterity, balance and accuracy and have slightly more than average flexibility. This is hardly an example of elite athleticism. The athlete of the crossfit system trains and practices for optimal physical competence in all ten physical indicators (performance, endurance, strength, flexibility, power, speed, coordination, dexterity, balance and accuracy). An excessive amount of aerobic training for a stayer costs a loss of speed, power and strength, and puts his overall athletic competence at risk. No marathon runner is physically fit enough to wrestle, box, pole vault, run short distances, play team sports, work as a firefighter or serve in the armed forces. All of these activities require a level of fitness significantly higher than that required by athletes in endurance sports. This does not mean that being a marathon runner, triathlete, or athlete in any endurance sport is something bad. It just shouldn't be assumed that by training like a long-distance athlete, you will achieve fitness sufficient for many sports at once. In the crossfit system, it is believed that sumo wrestlers, triathletes, marathoners, powerlifters are highly specialized athletes in the sense that their physical fitness requirements are so specialized that they are incompatible with competence in any physical tests. Elite strength and physical fitness are a compromise between all ten physical qualities. Stayers do not implement this compromise.

There are three energy systems to provide energy for all types of human activity. Almost all the changes that occur in the body due to training are related to the demands placed on these energy systems for energy production in the human body. Almost all the changes that occur in the body are somehow related to these systems. Moreover, the effectiveness of a particular training regime can be assessed by its ability to provide an adequate incentive for changes within these three metabolic pathways. During aerobic training, energy is obtained by oxidizing food, that is, the mechanism of energy production depends on oxygen. An activity in which most of the energy is obtained aerobically is called aerobic. As a rule, this is an activity that lasts more than 90 seconds with low or medium intensity. Examples of aerobic exercise include running on a treadmill for 20 minutes, swimming a distance of 1.6 km and watching TV.

During anaerobic training, energy is produced without oxygen. An activity in which most of the energy is obtained in an anaerobic manner is called anaerobic. This is usually an activity that lasts less than two minutes at moderate to high intensity. There are two fundamentally different mechanisms of energy production during anaerobic training: glycolytic and phosphagenic. Examples of anaerobic exercise are represented by running 100 meters, squats, pull-ups.

The main goal here is to examine how aerobic and anaerobic workouts affect physical performance variables such as strength, power, speed, and endurance. It is also worth adhering to the opinion that comprehensive physical training and optimal health condition necessitates the training of each of the physiological systems on a regular basis. It is worth noting that all three energy generation systems are involved

in any activity, although one of them dominates. The interaction of these systems can be complex, but even a simple comparison of the characteristics of aerobic and anaerobic loads can be beneficial.

Aerobic exercise optimizes cardiovascular function and reduces the amount of subcutaneous fat. This is undoubtedly very useful. Aerobic exercise allows you to perform moderate or low power work for a long time. This is valuable in many sports. However, it has been observed that as a result of excessive aerobic exercise, athletes lose muscle mass, strength, speed and power. It is not so uncommon for a marathon runner to have a vertical jump of only a few centimeters, and the figure in the bench press is much lower than the average for most athletes. Aerobic exercise also reduces anaerobic capacity. This is not exactly suitable for athletes or individuals interested in comprehensive physical training and maintaining an optimal level of health.

Anaerobic activity also develops cardiovascular (cardiovascular) performance and reduces the amount of subcutaneous fat. Anaerobic activity is a unique tool for increasing power, speed, strength and muscle mass. Anaerobic training allows you to apply maximum effort in a short period of time. Perhaps most noteworthy is the fact that anaerobic training does not reduce aerobic performance. In fact, properly constructed anaerobic workouts can be used to develop a high degree of aerobic fitness without the loss of muscle mass associated with excessive aerobic exercise.

Basketball, football, gymnastics, boxing, athletics in disciplines up to 1.6 km, swimming within 400 meters, volleyball, wrestling, weightlifting, etc. - all these are sports in which most of the training time is spent in an anaerobic state. Long and ultra-long distances when running, skiing, swimming at distances over 1,500 m are activities that require aerobic training of such a volume that leads to results unacceptable for athletes and individuals interested in comprehensive physical fitness and optimal health. The approach of the crossfit system is to intelligently combine anaerobic and aerobic exercises in accordance with the athlete's training goals. The prescription of the crossfit system regarding training is to comply with the requirements of specificity, progression, variability and recovery for optimal adaptations to loads.

Literatures:

1. Mirzakulov Akrom Gafurzhanovich,.(2022). DYNAMIC ALTERATIONS IN THE STRUCTURE OF PHYSICAL TRAINING OF CADETS OF THE ACADEMY OF THE MINISTRY OF INTERNAL AFFAIRS OF THE REPUBLIC OF UZBEKISTAN. CURRENT RESEARCH JOURNAL OF PEDAGOGICS, 3(04), 124–128. https://doi.org/10.37547/pedagogics-crjp-03-04-22
2. Mirzakulov Akrom Gafurjanovich. (2024). CROSSFIT AS AN INNOVATIVE SYSTEM OF PHYSICAL EDUCATION OF CADETS OF THE MINISTRY OF INTERNAL AFFAIRS OF THE ACADEMY OF THE REPUBLIC OF UZBEKISTAN. PEDAGOGS, 58(2), 200–204. Retrieved from https://pedagogs.uz/index.php/ped/article/view/1374

3. Mirzakulov Akrom Gafurjanovich. (2024). THE USE OF CROSSFIT IN THE PHYSICAL TRAINING OF LAW ENFORCEMENT OFFICERS. PEDAGOGS, 58(2), 205–207. Retrieved from https://pedagogs.uz/index.php/ped/article/view/1375
4. Mirzakulov Akrom Gafurjanovich. (2024). THE EFFECT OF CROSSFIT ON HEART FUNCTION. PEDAGOGS, 58(1), 173–176. Retrieved from https://pedagogs.uz/index.php/ped/article/view/1331
5. Gafurjanovich, M. A. . . (2024). Crossfit as a Direction for Improving the Process of Physical Education in the Internal Affairs Bodies of the Republic of Uzbekistan. Miasto Przyszłości, 110–112. Retrieved from http://miastoprzyszlosci.com.pl/index.php/mp/article/view/3333
6. Mirzakulov Akrom Gafurjanovich, IMPROVING THE PHYSICAL FITNESS OF CADETS OF THE ACADEMY OF THE REPUBLIC OF UZBEKISTAN WITH THE HELP OF CROSSFIT TOOLS AND METHODS , Proximus Journal of Sports Science and Physical Education: Vol. 1 No. 3 (2024)
7. Mirzakulov Akrom Gafurjanovich. (2024). CROSSFIT EXERCISES AS THE MAIN MEANS OF PHYSICAL EDUCATION. PEDAGOGS, 54(2), 4–6. Retrieved from https://pedagogs.uz/index.php/ped/article/view/986
8. Mirzakulov Akrom Gafurjanovich. (2024). IMPROVING THE GENERAL AND SPECIAL PHYSICAL TRAINING OF FEMALE CADETS BY MEANS AND METHODS OF CROSSFIT. PEDAGOGS, 54(2), 7–9. Retrieved from https://pedagogs.uz/index.php/ped/article/view/987
9. Mirzakulov Akrom Gafurjanovich. (2024). METHODS FOR THE DEVELOPMENT OF POWER QUALITIES OF CADET GIRLS THROUGH CROSSFIT TOOLS AND METHODS. PEDAGOGS, 54(2), 10–12. Retrieved from https://pedagogs.uz/index.php/ped/article/view/988
10. IMPROVING THE PHYSICAL FITNESS OF CADETS OF THE ACADEMY OF THE REPUBLIC OF UZBEKISTAN WITH THE HELP OF CROSSFIT TOOLS AND METHODS. (2024). Proximus Journal of Sports Science and Physical Education, 1(3), 83-85. https://proximusjournal.com/index.php/PJSSPE/article/view/32
11. Мирзакулов Акром Гафуржанович. (2024). РАЗВИТИЕ ФИЗИЧЕСКИХ КАЧЕСТВ КУРСАНТОК АКАДЕМИИ МИНИСТЕРСТВА ВНУТРЕННИХ ДЕЛ РЕСПУБЛИКИ УЗБЕКИСТАН С ПОМОЩЬЮ КРОССФИТ. ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ, 40(5), 92–93. Retrieved from https://newjournal.org/index.php/01/article/view/11923
12. Мирзакулов Акром Гафуржанович. (2024). ОСНОВНЫЕ ПРОБЛЕМЫ МЕТОДИКИ КРОССФИТ. ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ, 40(5), 82–84. Retrieved from https://newjournal.org/index.php/01/article/view/11919