

**THE EFFECT OF PHYSICAL ACTIVITY OF DIFFERENT INTENSITY ON THE FEMALE ORGANISM**

**Arabboyev Qahramon Tohirjonovich**

Senior lecturer, Kokand State Pedagogical Institute

**Zokirova Feruza Mukhtorjon kizi**

Student of the Kokand State Pedagogical Institute

**Annotation.** The evolutionarily acceptable amount of physical activity is different for men and women. This article describes the influence of the most effective and optimal physical activity on the body of female students involved in physical exercise and sports.

**Keywords:** sports, health, intensive exercise, dosage, optimal regime, bone tissue, menstrual cycle.

Significant work is carried out in our country in order to increase the activity of women in all aspects of the country's economic, political and social life, to comprehensively promote their education and professional skills and employment, to further support entrepreneurial initiatives. In our country, strengthening the health of the population, especially mothers and children, has risen to the level of public policy, making a wide decision on a healthy lifestyle in families and society, creating favorable conditions for the maturation of the needy generation is being carried out consistently and step by step. One of the means of implementing this reform is to involve women in physical education and sports training on a large scale.

Physical education is one of the important components of maintaining human health. Exercise accelerates movement activity and the physiological processes that occur in the body. Exercise does not take the same form for people of different sexes either. An example of this is that women's physical development and body structure are different from that of men. This primarily depends on the different sizes and physiological indicators of the organs. The physical load, which is optimal for an average man, may not be beneficial for the female organism.

Also, when preparing a set of exercises for girls, it is necessary to take into account its initial indicators, its diseases, goals of fogging with physical education and sports and functional and psycho-emotional states associated with various stages of the physiological cycle.

According to scientific sources, muscle mass in men is about 40-45% of body weight, and in women it is about 35%. This can be evidence of men's high ability to work and their tolerance for physical loads. The indicators of adipose tissue in the body of women are higher than in men. While the female organism covers 28% of the total body weight by adipose tissue, in males this causative agent is 18%. In combination with this, there are also great differences between the heart of women and men. The average weight of a male's heart is 300-400 gr, while a female's heart weighs an average of 220 gr. These indicators allow a man's heart to drive large volumes of blood into the aorta. Because women have a lower heart size and weight, each contraction shoots much less blood in the aorta than in men's hearts, but, in women, the rhythm of heart contractions is somewhat faster.

There is a direct relationship between physical loading and the response reactions of the organism. The higher the intensity of the applied load, the more significant the changes in the body. However, over time, the body's response to the same physical load being given to the trained body gradually decreases, meaning that the body adapts to the load.

Physical loading can manifest as a support later, if the organism acquires the characteristic that it initially develops. That is why there is a need to gradually increase the intensity of the physical load.

Physical labor and physical education help to improve the mechanical properties of the bone, such as its resistance to fracture, crushing, stretching and various degrees of damage.

It can increase the level of mobility of the joints through systematic exercise. Under conditions of normal movement activity and physiological activity, the range of motion of the joints is maintained for a long time, the components of which acquire significant strength. The body's attitude to heavy physical

activity is different, and the readiness of a person at this stage can be attributed to his age, gender and other parameters.

Physical activity improves brain health and cognitive function, and reduces the risk of anxiety and depression. We must not forget that intense sports training has a profound effect on all physiological processes. This often leads to depression, poor health, and reluctance to continue working. In a certain sense, this state is similar to a state of physical and nervous exhaustion, and a person is a potential patient of a doctor. Thus, the human body does not have time to recover through excessive physical exertion and causes problems related to the cardiovascular system, musculoskeletal system, and nervous system. Vigorous physical activity negatively affects the structure and function of joints, leading to limitations of movement and a decrease in the range of motion. Frequent lifting of heavy weights can worsen pelvic prolapse and reproductive problems in girls.

Based on the above information, through this article, we aim to study the adaptation of the female body to intensive physical activity, using the analysis of industry sources, our observations and questionnaires.

Physical exercise is a set of specially selected actions used in physical culture and physical education. The difference between physical exercises and simple movements is that they are performed for a specific purpose and are selected separately.

A person's muscular system, which does not engage in physical exercises, weakens and becomes atrophied. An inactive body is like stagnant water that turns moldy. In this case, muscle fibers are replaced by fat and connective tissue and break down. In this case, excess weight accumulates in the body. Today's widespread obesity disease is caused by these factors. According to research, the number of people suffering from obesity increased fivefold from 1975 to 2023. 65% of these figures are women. Although there are many reasons for this, we can point to physical inactivity and inactivity. Exercise is very important in preventing such conditions among women.

The easiest and most convenient form of physical exercise for women is walking. Half an hour or an hour of walking every day is optimal. The benefit of this physical activity for the body is high. There are also effective aspects of walking for the female body:

- Improves blood circulation by increasing blood flow and blood vessels
- Stimulates metabolism. Increases the rate of metabolism, allows you to lose weight even at rest.
- Helps control appetite.
- Reduces the risk of some types of breast cancer and gastrointestinal cancer.
- Regulates bowel function. Regular walking improves the digestive system. It is useful for constipation and reduces the frequency of digestive system diseases.
- Supports sleep mode.
- Regulates blood pressure by reducing the rise in blood pressure during stress.

Under conditions of optimal physical activity, the condition of the main nervous system is normalized. Excitability increases with the increase of inhibition processes, inhibitory reactions develop with pathologically expressed excitability. Endocrine gland (hormonal) activity products and muscle activity products entering the blood cause changes in the humoral part of the body. A number of studies show that moderate and optimal physical exercises stimulate the body's metabolism, endocrine system, and tissue metabolism. They increase enzymatic activity, immunobiological properties, and also contribute to the body's resistance to diseases, have a tonic, trophic, normalizing effect on psycho-emotionality and the body, and form compensatory functions.

Thus, the results of observations show that physical exercise, especially when performed in fresh air, helps to reduce the concentration of cholesterol in the blood. Through exercise and training, muscles become stronger and more resilient, and a person becomes less tired and more active. This is especially important for the heart muscle, which makes the trained heart less prone to disease. However, every useful thing has its limits, crossing which can be dangerous. Modern research shows that physical stress is harmful for both girls and boys. Let's consider this effect in the example of the skeletal system. As mentioned above, exercise has a beneficial effect on bone mineral density - a so-called osteogenic effect.

This is especially important because the amount of bone tissue formed during youth determines bone health in adulthood.

It is important to increase the muscle mass to create an osteogenic effect. The increase in the muscle component during sports causes mechanical stress on the bone tissue, thereby creating an osteogenic environment for the development of bone tissue. According to statistics, girls who exercise above safe levels often experience a number of ovarian dysfunctions: problems with the menstrual cycle, secondary amenorrhea, insufficient luteal phase, etc.

Some studies have shown decreased vertebral bone mineral density in amenorrhoeic female athletes.

One study found that young ballerinas have an increased incidence of scoliosis and stress fractures, and the risk increases with age. Therefore, reduced bone growth during adolescence may predispose to early-onset osteoporosis later in life.

Gynecological problems can be associated with more than just strenuous exercise and heavy lifting. The training load may be moderate, but a woman who does not get the necessary calories from food will lose weight with her body. For a menstrual cycle to occur at all, a girl's body fat should be around 22%. It ensures the normal functioning and activity of hormones in a woman's body. That is, if a girl spends more calories than she gets from food, then she will start losing weight. If you eat more than you expend, you gain extra pounds, or weight. This rule, among other things, is the basis for losing excess weight and gaining muscle mass. A balance is required between energy intake and expenditure in the body.

One of the benefits of physical exercise for the female body is the slowing down of the aging process. We all know that the human body and appearance changes with age. After the age of 40, metabolism slows down in women, hormonal changes occur, and the body becomes less flexible and mobile. This greatly affects the physical and mental condition of a woman. The best cure for all age-related changes is regular exercise. An active woman can maintain her health and shape well into old age.

Based on a number of studies, it can be concluded that both the lack of physical activity and the increase in permissible physical load negatively affect the health of young girls, as well as their psycho-emotional stability and the condition of their body in general. Taking into account the contraindications, characteristics and diseases of girls, physical activity, moderate physical exercises have a beneficial effect on the health and general condition of female students. Simple walks in the fresh air, massage, taking multivitamin complexes, etc. are very useful.

Regular exercise has a beneficial effect on the female body and strengthens the immune system, develops stress resistance, expands functionality and adaptability, and as a result, has a positive effect on the reproductive function of the body. Based on the above, it should be noted that the physiological characteristics of the female body require a special approach to choosing a set of physical exercises. We cannot overestimate the capabilities of the female body and impose excessive physical loads on it.

## References

1. Shermatovna, E. N., & Sodiqjon O'g'li, A. S. (2022). Conditions of inclusive education. Web of Scientist: International Scientific Research Journal, 3, 1-4.
2. Эркабоева, Н. Ш. (2016). FEATURES OF MODERN UZBEK FAMILIES. Ученый XXI века, (4-1 (17)), 36-39.
3. Erkaboeva, N. S., & Kurbanov, M. U. (2022). Scientific Organization and Management of Pedagogical Team Activities. Spanish Journal of Innovation and Integrity, 7, 103-107.
4. Erkaboeva, N., Usmonboeva, M., Irgashova, M., & Khojanazarova, N. (2012). Pedagogical skills: in diagrams and pictures: Methodical manual. Tashkent: TDPU named after Nizami, 14.
5. Эркабоева, Н. Ш. (2016). ОСОБЕННОСТИ СОВРЕМЕННЫХ УЗБЕКСКИХ СЕМЕЙ. Ученый XXI века, (4-1).

6. Erkaboeva, N. S., & Bakhromovna, M. M. (2022). A MODERN APPROACH TO THE FORMATION OF PROFESSIONAL COMPETENCE IN FUTURE DEFECTOLOGISTS. *Galaxy International Interdisciplinary Research Journal*, 10(12), 1723-1725.
7. Эркабоева, Н., Усмонбоева, М., Иргашова, М., & Хўжаназарова, Н. (2012). Педагогик маҳорат: схема ва расмларда. Т.:“Наврўз.
8. Shermatovna, E. N., & Kizi, Y. M. I. (2022). STAGES OF FORMATION AND DEVELOPMENT OF MEDIAMADANIATIN. *Galaxy International Interdisciplinary Research Journal*, 10(12), 272-274.
9. Erkaboyeva, N. S. (2016). FEATURES OF MODERN UZBEK FAMILIES. *Ученый XXI века*, (4-1), 36-39.
10. Erkaboyeva, N. S., & Ugli, A. S. S. (2022). Nclusive education and inclusive society. *Asian Journal of Multidimensional Research*, 11(11), 10-14.
11. Эркабоева, Н. (2005). Янгиланган фикрларнинг моҳияти ва унинг устувор йўналишлари. *Халқ таълими*, 19-20.
12. Erkaboeva, N. S., & Rahimberdiyeva, M. M. (2022). Features of Pedagogical Thoughts at a New Stage of Development of Uzbekistan. *Spanish Journal of Innovation and Integrity*, 7, 53-58.
13. Erkaboeva, N. S., & Musaeva, D. A. K. (2022). FACTORS OF DEVELOPING THE PROFESSIONAL COMPETENCE OF A TEACHER OF A SPECIAL EDUCATION INSTITUTION. *Open Access Repository*, 8(12), 109-111.
14. Shermatovna, E. N., & Sodiqjon O'g'li, A. S. (2022). Conditions of inclusive education. *Web of Scientist: International Scientific Research Journal*, 3, 1-4.
15. Fatima, I., & Erkaboyeva, N. S. (2023). WAYS TO FORM THE QUALIFICATIONS OF THE SPECIAL EDUCATION INSTITUTION IN THE PRIMARY SCHOOL STUDENTS OF SOCIAL STANDARDS. *Galaxy International Interdisciplinary Research Journal*, 11(2), 529-531.
16. Erkaboyeva, N. S., & Elmurodova, O. E. Q. (2023). YOSHLARNI YANGI O'ZBEKISTON SHAROITIDA IJTIMOYIY FAOLLIGINI OSHIRISH ZAMONAVIY PEDAGOGIKA VA PSIXOLOGIYANING DOLZARB MUAMMOSI SIFATIDA. *Academic research in educational sciences*, 5(NUU conference 3), 218-222.
17. Erkaboyeva, N. S. (2023). INSON KAPITALI-IJTIMOYIY DAVLATNING ASOSI SIFATIDA. *Academic research in educational sciences*, 4(KSPI Conference 1), 31-37.
18. Erkaboeva, N. S., & Turdaliyeva, M. I. K. (2022). THEORETICAL PRINCIPLES OF EDUCATION OF NATIONAL ETHICS SKILLS IN EDUCATIONAL INSTITUTION STUDENTS. *Open Access Repository*, 8(12), 352-354.
19. Shermatovna, E. N., & Azamovna, R. G. (2022). USE OF VIRTUAL ENVIRONMENT AND 3D MULTIMEDIA ELECTRONIC TEXTBOOKS IN HIGHER EDUCATION. *International Journal of Early Childhood Special Education*, 14(7).
20. УЗБЕКИСТАН, О. Р. (2021). ТА'ЛИМ ТИЗИМИДА INNOVATSIYA, INTEGRATSIYA VA YANGI TEXNOLOGIYALAR ИННОВАЦИЯ, ИНТЕГРАЦИЯ И НОВЫЕ ТЕХНОЛОГИИ В СИСТЕМЕ ОБРАЗОВАНИЯ INNOVATION, INTEGRATION AND NEW.
21. ГУЛОМИДДИНОВА, Д., РАСУЛОВА, Д., & ЭРКАБОЕВА, Н. (2014). ПОДГОТОВКА МОЛОДЁЖИ К СОЦИАЛЬНОЙ ЖИЗНИ. In *Будущее науки-2014* (pp. 37-39).
22. ЭРКАБОЕВА, Н. НАЦИОНАЛЬНЫЕ ОСОБЕННОСТИ ОБРАЗОВАНИЯ В УЗБЕКИСТАНЕ. К ЧИТАТЕЛЯМ, 618.
23. Norquzieva, D. S., & Abdullaeva, N. R. (2019). PSYCHOLOGICAL ANALYSIS OF AGGRESSIVE BEHAVIOR IN ADOLESCENCE. *Scientific and Technical Journal of Namangan Institute of Engineering and Technology*, 1(6), 490-495.



24. Khamidovna, M. I., Sheralievna, N. D., & Okhunovna, M. D. (2022). CONFLICT MANAGEMENT AND TYPES OF CONFLICTS AMONG MINORS. *International Journal of Early Childhood Special Education*, 14(7).
25. Sheralievna, N. D. (2021). DYNAMICS OF CONSTRUCTIVE BEHAVIOR FORMATION IN PRIMARY SCHOOL STUDENTS. *Galaxy International Interdisciplinary Research Journal*, 9(10), 666-669.
26. Sheralievna, N. D. (2022). FORMATION OF CONSTRUCTIVE BEHAVIOR AS A FACTOR IN THE EFFECTIVENESS OF SCHOOLCHILDREN'S EDUCATION. *Galaxy International Interdisciplinary Research Journal*, 10(12), 1212-1216.
27. Norqo'Ziyeva, D. S. (2021). ILK O'SPIRINLARNI KASBGA YO'NALTIRISHNING AYRIM PSIXOLOGIK MASALALARI. *Scientific progress*, 1(6), 1188-1192.
28. Buronovich, U. B. (2022). THE PLACE OF MODERN PROFESSIONAL QUALITIES OF VIRTUAL TECHNOLOGIES IN TEACHERS OF FUTURE TECHNOLOGICAL EDUCATION IN HIGHER EDUCATIONAL INSTITUTIONS. *Open Access Repository*, 9(11), 37-43.
29. Buronovich, U. B., & Ashirovich, B. T. A. (2022). Examples Of Drawing Up Tests From Drawing And Engineering Graphics. *Journal of Positive School Psychology*, 6(11), 3128-3132.
30. Boronovich, U. B. (2022). THE CONTENT OF THE FORMATION OF MODERN PROFESSIONAL QUALITIES IN FUTURE TEACHERS OF TECHNOLOGICAL EDUCATION IN HIGHER EDUCATIONAL INSTITUTIONS. *Open Access Repository*, 9(11), 16-22.
31. Umrzaqov, B. B. (2023). PEDAGOGICAL NEED FOR THE FORMATION OF MODERN PROFESSIONAL QUALITIES THROUGH VIRTUAL TECHNOLOGIES IN TEACHERS OF FUTURE TECHNOLOGICAL EDUCATION IN HIGHER EDUCATIONAL INSTITUTIONS. *INTERNATIONAL JOURNAL OF SOCIAL SCIENCE & INTERDISCIPLINARY RESEARCH ISSN: 2277-3630 Impact factor: 7.429*, 12(11), 89-93.
32. Umrzaqov, B. B. (2023). MODERN PROFESSIONAL QUALITIES IN FUTURE TECHNOLOGICAL EDUCATION TEACHERS AND THEIR OWN RANGE OF VIRTUAL TECHNOLOGIES. *INTERNATIONAL JOURNAL OF SOCIAL SCIENCE & INTERDISCIPLINARY RESEARCH ISSN: 2277-3630 Impact factor: 7.429*, 12(11), 101-105.
33. Bo'ronovich, U. B. (2022). TECHNOLOGY OF INCREASING WORK PRODUCTIVITY IN TECHNOLOGICAL EDUCATION CLASSES.
34. Umrzakov, B. B. (2022). ORGANIZATION OF EDUCATIONAL PROCESS IN TECHNOLOGICAL EDUCATION CLASSES.
35. Madumarov, T., & Ogli, G. O. R. (2023). FIGHT AGAINST CORRUPTION IN THE REPUBLIC OF UZBEKISTAN (ON THE EXAMPLE OF THE EDUCATION SYSTEM). *Educational sacrifices*, 02-05.
36. Abdullaev, A. N. (2020). THE SOCIAL PHILOSOPHICAL ESSENCE OF THE COEVOLUTION OF SOCIETY AND FAMILY. *Theoretical & Applied Science*, (2), 733-736.
37. Xalimjanovna, A. M. (2022). MANIFESTATIONS OF STRESS IN PROFESSIONAL ACTIVITY AND WAYS TO ELIMINATE IT. *Galaxy International Interdisciplinary Research Journal*, 10(11), 841-844.
38. Makhmudova, N. (2023). THE CONTENT OF THE DEVELOPMENT OF INDEPENDENT COGNITIVE ACTIVITY IN STUDENTS THROUGH SELF-ASSESSMENT. *International Bulletin of Applied Science and Technology*, 3(3), 215-221.