THE EFFECT OF REGULAR SPORTS IN YOUNG PEOPLE ON THE BLOOD SYSTEM.

National University of Uzbekistan named after Mirzo Ulugbek

Student: **Ergasheva Muxlisa G‘ulomjon qizi**

Tel:+998919440504

m.g.ergashova@mail.ru

Annotation: In this scientific article, the effect of regular sports participation of young people in Uzbekistan on the blood system is studied, and because the climate of Uzbekistan is a harsh continental region, regular sports participation of young people, as well as training of the body through physical exercises, development of physical abilities, in the achievement of high performance of athletes in a specially selected type of sport, among these based on this, directions such as studying and analyzing the physical condition of regular sportsmen and studying the effect on the blood system are highlighted in educational institutions.

Key words: strength, speed, endurance, agility, lymphocyte, neutrophil leukocytosis, hemoglobin, glucose, convection, neutrophil

In order for young people to grow up physically fit and healthy, they should regularly engage in the necessary types of sports. However, the effects of regular sports on the human body, the level of exercise, and the level of severity have not been studied to the end. Therefore, we considered it an urgent issue to study the effect of regular sports on the blood system and to recommend the limits of this effect. Sport is an important factor in achieving not only physical, but also spiritual maturity. It builds will, strives for a clear goal, teaches to play with difficulties with patience and endurance. It cultivates confidence in victory, feelings of pride and pride in the human heart.

After the independence of our republic, attention to sports became one of the important issues not only in our time, but also in the times of our ancestors who lived several hundred years ago. At that time, various folk games and competitions were held. So, in the process of eternal education, mankind has tried to develop the so-called "strength", "speed", "endurance", "agility", "flexibility", "joint mobility" and "muscle elasticity" in the process of physical education. "Sparta", "Athena" systems, "Ancient gymnastics", "Olympic Games" or "Pentaylana" of the medieval Greeks, "Pedagogical gymnastics" of the Swedes, "Eber system" of the French, etc. The people determined the direction of physical education of the population of the state. It is possible that our grandfather Jakhongir Amir Temur united his 27 states and had a system of physical education of the Timurids. The soldiers of Chuhki grandfathers were required to have a very high level of physical fitness during their 3-5-7 year military campaigns, physical qualities such as endurance, strength, agility required systematic training.

All these are measures aimed at developing the young generation to be physically strong, resilient and mature. Therefore, it should be our highest goal to educate young people who are always healthy, who will inspire others with their strength and maturity.

Physical exercise and physical work cause a certain amount of changes in blood composition. The depth of these changes depends on the duration and speed of physical activity. Such changes in the blood can be observed before (pre-start reaction) and after physical exercise. First, physical activity leads to an increase in blood-forming elements. The proliferation of these types of leukocytes is called myogenic leukocytosis, and it is of three types.

1. Lymphocytic leukocytosis, in which the number of white blood cells reaches 1000-12000 in 1 mm3 of blood.

2. Primary neutrophilic leukocytosis, in which the number of leukocytes increases to 16,000-18,000 in 1 mm3 of blood.

3. Secondary neutrophilic leukocytosis, white blood cells increase to 30,000-50,000 in 1 mm3 of blood. This condition is observed in very heavy and continuous muscle activity.

Regular exercise leads to an increase in hemoglobin, glucose, fats, and enzymes in the blood. Vigorous exercise increases the amount of certain incompletely oxidized substances in the blood. For example, the amount of lactic acid in 100 ml of blood can reach 200-250 mg. This is 20-25 times more than the norm.

Capillary blood vessels are very thin, and their number is greater in the body where the metabolism is faster. For example, there are twice as many heart muscles per 1 mm2 as compared to body muscles. Blood pressure in capillaries is between 8-40 mm Hg, and blood flow rate is 0.3-0.5 mm/sec. In resting muscles, only a small part of the capillaries are open (that is, blood flows through them), and the rest are closed. For example, at rest, there are 35-65 open capillaries in 1 mm2 of body muscles, and when it begins to shrink, the number of open capillaries reaches 2500-3000.

An increase in the number of open capillaries during physical work is explained by an increase in blood pressure in the arterioles.

In venous capillaries, the pressure is equal to 20-30 mm Hg, and in leg and arm veins it is equal to 5-9 mm Hg. The pressure in the cavernous veins depends on the respiratory movements, if it is lower than the atmospheric pressure during inhalation, it is 2-5 mm wire during exhalation. is equal to the column.

The walls of venous blood vessels are more delicate, and their expansion is 100-200 times greater than that of arterial blood vessels. Therefore, there is a possibility of blood accumulation in the veins. The speed of blood in veins is somewhat lower than in arteries, because it loses its speed before passing through the capillaries. Blood flows twice as fast in the aorta than in the vena cava.

Blood movement in the inferior vena cava and leg veins is difficult because it is against the force of gravity. But there are factors that make it easier. First, there are valves that open upward in the venous blood vessels, secondly, the body muscles

contract, and thirdly, the pressure between the pleural membranes decreases during breathing. These factors facilitate blood flow in the inferior vena cava and leg veins. The effect of the respiratory muscles on blood flow in the veins is called the respiratory pump, and the participation of the muscle activity is called the muscle pump. Performing static exercises (lifting weights) causes an increase in pressure in the veins, and this increases intrathoracic pressure, increasing the pressure in the vena cava. This situation leads to less blood flow to the heart, as a result of which the amount of blood coming out of the heart decreases and the blood supply to the brain deteriorates. That's the difficulty of some strength exercises (lifting weights).

Doing regular sports has accelerated the metabolism in the body of young people, muscle endurance and strength have increased, the respiratory system is well developed, the supply of capillaries has increased, and as a result, the ability to absorb more oxygen from the air has increased, the cardiovascular system has developed and increased in size, and heart endurance leads to high results. reached All this allows you to do physical work for a long time without getting tired. In order to achieve the above results, it is possible to train the body and increase its endurance by systematically, regularly and appropriately engaging in physical exercises and sports from a young age. This will serve as a basis for raising a physically and mentally healthy person in the future. Therefore, it is necessary to develop new programs to increase the interest of young people in sports and to attract them to various types of endurance sports, and to increase the number of sports schools in cities and districts.

REFERENCES

1. Cabinet of Ministers' "Physical education and sports in Uzbekistan "On Development" dated May 27, 1999 No. 271

2. "Development of children's sports in Uzbekistan" of the Cabinet of Ministers of October 31, 2003 on organization of the fund's activities Decision No. 374.

3. I. F. Azimov, S. Sobitov "General and sports physiology training guide". T. 1995.

4. A. N. Aripov and head. Translation. "Physiology practical training guide". Tashkent, Ibn Sina publishing house, 1996.

5. Azimov I.G. Sobitov Sh.S. Physiology. Instruction manual for physical education institutes. T. UzDJTI Publishing Department 1996

6. Azimov I.G', Hamrakulov A.K, Sobitov Sh.S. Practical training in general and sports physiology. T. Teacher, 1992.

7. R. G. Nozdrachev. "Obshiki course physiology of human and animal life". M. High school. 1994

8. B. Z. Zaripov "Age Physiology" Tashkent 1991.