

The Influence of Physical Activity on The Student's Body Blood Circulation and Cardiovascular System

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Grinko Vitaliy*

Department of Physical Education and Sports, Ukrainian State University of Railway Transport, Ukraine

Abstract

Physical activity has a positive effect on the cardiovascular system of the students' body, it is a kind of "antidepressant" reduces the level of stress, promotes better heart activity. The risk of premature death is significantly lower with sufficient motor activity, since movement is an activator of the body's vital processes.

Keywords: Physical activity; Health; Cardiovascular system; Blood pressure; Diabetes

***Corresponding author:** Grinko Vitaliy, Department of Physical Education and Sports, Ukrainian State University of Railway Transport, Ukraine

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Introduction

This work examines the relationship between physical activity, blood circulation and the health of the cardiovascular system. Physical activity is considered an important factor in a healthy lifestyle and is known for its beneficial effects on the cardiovascular system. During physical exercises, the flow of blood into the coronary system increases significantly, the vessels of the myocardium expand, the number of functioning capillaries increases, redox processes increase, which leads to the improvement of trophic processes in the heart muscle. Regular physical activity helps keep the heart muscle strong and working at high efficiency, and blood vessels become more flexible and elastic, which is especially important for blood pressure control. During physical exercise, a person's heart rate increases. This is because muscle tissues require more oxygen and additional substances for their active activity. Accordingly, it is carried out in the body by increasing heart contractions [1,2].

The purpose of the study

To reveal the effect of physical exercises on the blood circulation and cardiovascular system of the body of students of higher education.

Research methods

The method of physical exercise, verbal, visual, analysis of the obtained data.

Presenting main material

When performing physical exercises, heat is generated in the muscles, to which the body responds by increased sweating. During physical exertion, blood flow increases: Blood brings oxygen and nutrients to the muscles, which in the process of vital activity break down, releasing energy. Physical exercises improve trophic processes in the heart and throughout the body. They increase the blood supply of the heart due to the strengthening of coronary blood flow, the opening of reserve capillaries and the development of collaterals, they activate metabolism. All this stimulates regenerative processes in the myocardium, increasing its contractility [3,4]. Let us consider several key aspects of this influence.

Improving heart function

Regular physical activity strengthens the heart muscle, improves its efficiency and ability to pump blood around the body. This reduces the risk of developing heart diseases such as coronary heart disease and heart attack.

Blood pressure control

Physical activity helps lower blood pressure, which is an important aspect of preventing hypertension. This reduces the risk of complications such as stroke and heart disease.

Weight control and diabetes prevention

Physical activity helps maintain an optimal body weight and maintain normal blood sugar levels, which are important for diabetes prevention.

Increasing the elasticity of blood vessels

regular physical activity improves the elasticity of blood vessels, reducing the risk of developing atherosclerosis and other blood circulation disorders.

Improving general health

physical activity contributes to overall improvement of physical and mental health, reducing stress, improving mood and improving sleep quality [5].

Conclusion

Based on the main material, we can draw a conclusion about the positive effect of physical activity on the health of the heart and blood circulation. It improves the condition of the cardiovascular system; lowers blood pressure; reduces the risk of stroke, coronary heart disease, arterial hypertension, breast and colon cancer, diabetes, depression. Prospects for further research consist in improving the means and methods of conducting physical education classes at UkrSURT.

References

1. Buts AM, Shepelenko TV (2007) Disease prevention and relaxation of students' physical condition. Ukrainian State Academy of Railway Transport, Ukraine, p. 136.
2. Shepelenko TV, Shevchenko VP, Luchko OR (2007) Physical education and the basics of a healthy lifestyle for students. Hygienic basics of physical education and sports. Ukrainian State Academy of Railway Transport, Ukraine, p. 16.
3. Grynko VM (2015) Aerobic activities and their possible influence on the level of general and special endurance of students. Scientific journal of the MP Drahomanov NPU 12(67): 42-45.
4. Grinko V, Shepelenko T, Kudelko V, Shaposhnyk A, Slastina O, et al. (2023) Construction of a 15-second dynamic running model for groups with different training programs: Its dynamics and prediction. *Fourrages Journal* 256(11).
5. Shepelenko TV, Buts AM, Bodrenkova IO (2018) Physical education in the formation of a healthy lifestyle. Ukrainian State University of Railway Transport, Ukraine, p. 127.