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MOVEMENT ACTIVITY AS A FACTOR IN IMPROVING THE LEVEL OF HEALTH

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Abstract. The publication provides compelling evidence that regular physical activity can reverse the rate of decline in many physical and psychological indicators. Optimal motor activity not only prevents the undesirable consequences of hypodynamia and aging.

Keywords: fitness, program, physical condition

Scientific and technical progress is changing the nature of the requirements for human physical fitness, so new, modern conditions are being put forward to achieve physical improvement of the organism. In the age of technical progress and significant limitation of motor activity, when the load on the nervous and sensory systems increases significantly as a result of automation and computerization of work, and at the same time the cardiovascular and respiratory systems need to provide only "mental" work, physical culture becomes one of the main available means of preserving and developing health, which leads to an increase in the popularity of physical education and health activities among the population [2].

In modern conditions, the role of mental work is steadily increasing, while physical work is decreasing. All this leads to the fact that mental workers do not receive motor loads in the necessary amount during their professional activity. But the human body needs these loads [11], so every year the need to involve broad sections of the population in physical education to improve health and prevent various diseases is growing.

Insufficient physical activity is considered the fourth among the most significant risk factors, causes of death globally (it accounts for 6% of the total number of deaths in the world, 13% - high blood pressure, 9% - smoking, 6% - high glucose level in the blood, 5% - overweight and obesity) [13, 18]. Almost 3.2 million deaths each year are due to insufficient physical activity, and physically inactive individuals have a 20-30% greater risk of death compared to those

who engage in moderate-intensity physical activity for at least 150 minutes per week [10]. This level of physical activity reduces the risk of coronary heart disease by approximately 30%, the risk of diabetes by 27%, and the risk of breast and rectal cancer by 21-25% [1].

At the same time, many specialists convincingly show in their research that all these adverse age-related changes can be smoothed out if you start taking health and preventive measures in time [6].

Healthy physical activity has a positive effect on the economy and society in general. The World Health Organization (WHO) notes that the lack of proper physical activity leads to economic losses of 150-300 euros per person per year [6].

With the aim of disease prevention, the leading countries of the world are implementing national health programs by carrying out measures aimed at mass involvement of the population in regular physical education and sports, which ensures a noticeable decrease in the level of premature mortality. According to official data, in Japan, about 80% of the population, in the USA - 70%, and in Germany - 67%, Canada - 50%, are currently engaged in intensive health training [21]. In Japan, premature mortality is lower than in other countries: in men - by 36% and women - by 41%, in Canada - by 24 and 26%, in France - by 22 and 35%, in the USA - by 24 and 30% respectively [4]. These examples convincingly show the importance of physical activity and sports, their significance in the health of the nation.

The study of factors affecting human health shows that 50% are factors characterizing a person's lifestyle, the most important of which is the observance of a rational mode of motor activity.

It has been shown that regular physical activity can delay the natural aging process by 10-20 years [22]. Optimum motor activity not only prevents the undesirable consequences of hypodynamia and aging, but also stimulates positive morphofunctional transformations in both the cardiovascular system and blood (systolic and minute blood volumes increase, working hypertrophy of the myocardium appears, the volume of circulating blood increases, the capillary expands mesh, the level of hemoglobin increases), as well as in the respiratory organs (CEL increases, respiratory volume, aeration improves). All types of metabolism improve under the influence of regular physical education and health training, which contributes to a decrease in body weight and cholesterol levels in the blood [3, 12, 23].

Studying the problem of preserving and strengthening the health of girls and, in particular, girls of future teachers, we encountered

the problem of hypodynamia - a sedentary lifestyle. There are currently enough reasons that lead to the development of hypodynamia. This is both a long static position (standing, sitting) and a high level of psychological stress. Among persons of this category, regardless of age and gender, the highest level of morbidity, unsatisfactory state of the main physiological systems and the general physical state of the body is noted [5].

Meanwhile, rationally organized physical activity has a huge potential for health effects [2, 9]. The health value of physical activity is significant for all stages of life. At the same time, one should take into account the fact that the development and growth of the organism lasts until 20-25 years, then, around 35 years, the period of flowering of its potential opportunities begins, and then the gradual decrease of the resource of the organism begins. Based on this, the dynamics of the body's natural capabilities also determine the characteristic features of health-improving effects - up to the age of 35, they should have a developing orientation.

At the moment, there is convincing evidence that regular physical activity can change the rate of decline in many physical and psychological indicators. For example, many studies show that in people who are engaged in motor activity for a long time, there is practically no deterioration of the functions of the cardiovascular system for a long period of time - up to several decades or more [7, 25].

Evaluating motor activity, most scientists agree that its level depends on body weight. However, there is controversy about the reasons for this relationship. There is ample evidence that a sedentary lifestyle leads to weight gain. At the same time, excess body weight is the cause of a decrease in motor activity [8].

Excess body weight is one of the consequences of insufficient physical activity. The presence of excess body weight is noted in 35% of the population of economically developed countries [24]. An increase in body weight by 10% leads to an increase in cholesterol concentration by 0.3 mmol/l, every extra 4.5 kg increases systolic pressure by 4.4 mm Hg. century, while the risk of chronic heart failure increases by 5% with an increase in body mass index by 1 kg/m2 [16]. Women are 2 times more likely to be overweight than men, but they have a greater tolerance for fat deposition.

A high body mass index is the cause of more than 1 million deaths annually in the European region [20].

This problem mostly concerns women who are engaged in various types of intellectual activity, including pedagogical workers. At a young age, the negative consequences of hypokinesia and hypodynamia can be leveled off at the expense of the body's natural

reserves of vitality, then at a more mature age they are fully manifested and worsened by age-related involutional changes, bad habits, stress, and irrational nutrition.

It is noteworthy that after studying at the university in the age range of 21-35 years, the body of women retains a high level of motor function training, especially in terms of strength and performance. At this age, there are favorable prerequisites for engaging in various types of fitness (health and sports) and achieving high results in them. The state of health usually does not observe any deviations in this age period. All together leads to the fact that young people refuse to do physical exercises due to lack of time, in the first case, or because of "unnecessity" in the second.

Individually dosed physical activity, according to many authors, is a preventive and rehabilitation tool for various diseases, can compensate for the negative impact of external environmental factors [19]. And the correct organization of such classes contributes to the formation of permanent motivation and the systematic need for the latter [15].

In order to strengthen health, prevent diseases and increase working capacity, regular physical education is required, thus achieved

positive results are lost very quickly after the cessation of classes [14].

The orientation and the most common types of health-oriented motor activity are shown in Table 1.

Table 1

Health effects of different types of physical exercises
Keefe FJ, [17]

Influence	Walking (Scandinavian)	Aerobics	Step aerobics	Swimming	Aquarebika
Disease prevention	+ +	+ +	+ +	+	+ +
Increasing and maintaining the density of bone tissue	+	+ +	+ +	-	+
Improvement in mental state or mood	+ +	+	+	+	+ +
Expanding opportunities for social contacts	+ +	+ +	+	+	+ +
Preservation of functional capabilities in adulthood	+ +	+ +	+	+	+ +
Increasing VO2max	+	+ +	+ +	+ +	+ +
Improved response	-	+ +	+	-	+
Improving balance and coordination	+	+ +	+	+	+
Increasing leg muscle strength	+	+	+ +	+ +	+ +
Improved flexibility	-	+	-	+ +	+ +
Improved posture and control bodies	+	+ +	+	+	+ +

Marking:
+ + significant improvement;
+ Marked improvement;

- little or no improvement.

Conclusion. Therefore, rational motor activity is undoubtedly considered one of the main factors of a healthy lifestyle of a modern person.

Available and effective forms of motor activity, specially organized as part of health-oriented programs, are becoming very relevant due to the complex psychosomatic effect, which contributes to the harmonization of the activity of all body systems of women engaged in sedentary work.

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