

**IMPLICATION OF PHYSICAL EXERCISE ON HR (heart rate), AND
DETERMINATION OF THE DEFINITION OF HYPODYNAMY IN STUDENTS***Ergasheva Hilola Erkinovna**Student of the 1st year of the 128 group of medical faculty**Ismatova Marguba Shavkatovna**Scientific supervisor: Ass.-Teacher of the Department of Physiology*

Abstract: Hypodynamia is one of the modern diseases of the 21st century - the century of information technology. Hypodynamia is a violation of human health, due to low movement of muscle mass. The article shows the results of the study of the degree of sedentary behavior of the first-year students of the 128-group of Samarkand State Medical University.

Keywords: hypodynamia, student, physical training, sedentary behavior, heart rate

Introduction: Nowadays, some medical students, aiming only to study, become victims of hypodynamia. Of course it is not all, many of them after entering medical schools realize how necessary it is to do sports in the present and future. The main cause of hypodynamia among students we can say the load in studies, stress, etc. Why exactly the load in studies? After all, no matter how big the program is, a student who thinks about his health and likes to do sports will always find time for physical training. For example, a student or even a schoolboy can get up an hour early and walk to school or to the nearest bus stop, this can replace many morning exercises and prevent hypodynamia to some extent. Many people are lazy, some lack stamina and find different excuses, such as: "I will get tired while I get to school or use up all the energy". But morning walking will help you wake up from sleep and stay awake for your morning classes. And stress is a consequence of overload in studies before and after exams and sessions. Stress is accompanied by anxiety, fear, rapid heartbeat, fatigue, loss of appetite or, on the contrary, weight gain.

But people are happy that in many universities, in particular, and in ours are held various sports competitions, marathons on running. And the winner is awarded with diplomas, prizes, such as household items that students will need. And students are interested to participate in some competition and get a small prize. This also helps students to get a little distraction from their studies and participate in an active life. There are many benefits from playing sports. Doctors have found that 30 minutes after a meal, blood sugar levels increase. For example, walking or a short jog can significantly reduce blood sugar. But to be more effective, it is better to wait 30 minutes, after eating. And there are still many benefits of walking or jogging, improving heart circulation, lung function, weight loss, improves memory, and also the risk of hypodynamia, dementia and Alzheimer's disease.

Until a few years ago, before the perfect development of technology, people did more movements and hypodynamia was not so common. Students used to go to libraries, look for books, get together and read together what is not in the book, study in practice. In this way

they also made small movements. Nowadays, sitting or lying at home, you can find what you need on the internet. Washing machines, elevators, all this contributes to sedentary arms and legs, which develops hypodynamia. The consequences of hypodynamia can be such diseases as obesity, stroke, diabetes, atherosclerosis.

Research objective: To determine the degree of hypodynamia development among students. To determine the index and percentage of sedentary behavior of students.

Materials and methods of research: 15 students of 128-group of the medical faculty, five guys and ten girls took part in the study. The students were 17, 18 years old each. The study was conducted in the Republican Hospital. Each student in a calm state for 30 seconds, measured the pulse on the wrist with two, three fingers, which normally should give 60-100 beats per minute. After the students did some physical exercises, they rested for 1-2 minutes. Then the students were asked to take a calm inhalation and exhalation in a sitting position and their heart rate was measured again. Using the formula $HR \times CHS$, the index was determined.

Results: At rest, heart rate (in 1 minute): more than 90 - in 2 students (13.33%), 90-79 - in 5 students (33.33%), 80-69 - in 8 students (53.33%). Resting breath hold (in seconds): more than 60 - in 2 students (13.33%), 40-59 - in 8 students (53.33%), 30-40 - in 4 students (26.67%), less than 30 - in 1 student (6.67%).

After physical exercise: in boys push-up and girls squat, heart rate is as follows (in 1 minute): more than 90 - in 9 students (60%), 90-79 - in 3 students (20%), 80-69 - in 3 students (20%). Respiratory arrest after physical activity (in seconds): more than 60 - none, 40-59 - in 3 students (20%), 30-40 - in 3 students (20%), less than 30 - in 9 students (60%).

Discussion of the results: According to the results of our study, breath holding at rest for 60 seconds and more than 60 seconds is a good indicator for those who are engaged in sports (2 students - 13.3%). And 40-59 seconds is the best result for those who do not play sports (8 students - 53.3%). 30-40 seconds on the breath is a satisfactory indicator. We should take into account the fact that students are not in good physical shape or are subject to hypodynamia in their lifestyle (4 students - 26.67%). Less than 30 seconds - this indicates that perhaps the student has a chronic disease or other factors that reduce the provision of oxygen to the body (1 student - 6.67%). The results of the study show that more than half of the students in the group do not play sports and are not mobile in everyday life.

Conclusion: It is necessary to study, but we must not forget about a healthy lifestyle, i.e. physical education and proper nutrition. We need to think not only about the present, but also about the future. It is true that after classes many students are tired, and sleepless nights. But it is worth thinking, "What are we studying for?" After all, in order to become good specialists in their field of activity. Isn't that right? But what if our neglect of health can lead to diseases that we may not be able to cure in the future. So we should take a short walk before exercise and a walk in the evening after dinner, which also relieves stress accumulated during the day and improves our mood. Thus, hypodynamia develops in people who are immobile for more than 6 hours a day and mobile for less than 12 hours a week.



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