Modern American Journal of Linguistics, Education, and Pedagogy
ISSN (E): 3067-7874
Volume 01, Issue 08, November, 2025
Website: usajournals.org

DECREASE OF MOVEMENT ACTIVITY IN THE HUMAN ORGANISM AND ITS CONSEQUENCES IMPORTANCE OF PHYSICAL EDUCATION HYGIENE

Abdukadirov Rustam Shopulatovich
Senior Lecturer, Faculty of Physical Education, Oriental University
abdukadirovrustam@icloud.com

Abstract
Hypodynamia is a condition associated with a decrease in motor activity, which has a negative effect on the human body. The main negative consequences of hypodynamia are impaired cardiovascular function, increased blood pressure, metabolic changes and other pathologies. This article analyzes the importance of physical education hygiene, its role in the prevention of these diseases, and the results of scientific research.

Keywords: Physical activity decline, hypodynamia prevention, physical education hygiene, MET energy expenditure, regular exercise, healthy lifestyle policy, cardiovascular health, Uzbekistan state programs.

Introduction

The decline in physical activity in the human body is becoming a global problem in society. Lack of physical activity leads to an increase in various diseases and negatively affects the general health of the population. This issue is also relevant in the Republic of Uzbekistan, and measures are being taken to prevent problems through decrees and resolutions adopted by the head of state. The Decree "On the Widespread Introduction of a Healthy Lifestyle and the Development of Mass Sports", adopted by the President of the Republic of Uzbekistan in 2020 , is aimed at increasing the level of physical activity [1]. One of the main goals of this decree

[1] Decree of the President of the Republic of Uzbekistan, 2020, "Widespread introduction of a healthy lifestyle . "

Modern American Journal of Linguistics, Education, and Pedagogy
ISSN (E): 3067-7874
Volume 01, Issue 08, November, 2025
Website: usajournals.org

is to popularize regular physical education and sports among the population. The following tasks are set out in the decree: Creating opportunities for every citizen to engage in sports. Construction of sports facilities and walking paths in public places. Promoting physical education hygiene among the population. The 2021 Decree of the President of the Republic of Uzbekistan pays special attention to increasing the physical activity of young people and attracting them to sports. This decision is important for preventing hypodynamia among young people and forming their healthy lifestyle. **Resolution of the Cabinet of Ministers of 2022: "Measures to increase the physical activity of the population"** The number of physical education classes has been increased in all educational institutions. Special programs have been developed for physical exercises in the workplace. Conditions have been created for playing sports in public places. **The "Healthy Generation" concept (2023)** provides for the organization of mass sports events in order to increase physical activity among all segments of the population, including children and the elderly. Implementation of measures aimed at preventing hypodynamia by **combating hypodynamia and increasing physical activity. Raising awareness among the population:** To increase citizens' interest in a healthy lifestyle by promoting the importance of physical education hygiene. In Uzbekistan, the decrease in physical activity in the human body and its negative consequences are recognized as one of the urgent problems at the state level. Presidential decrees and Cabinet resolutions are an important step in the fight against hypodynamia and are aimed at ensuring a healthy lifestyle in society. The promotion of physical education hygiene and the development of sports infrastructure play an important role in improving the health and physical activity of citizens.

Negative consequences of hypodynamia . Decreased motor activity has a negative effect on the cardiovascular system. Studies show that daily physical exercise: Lowers blood pressure. Increases the endurance of the heart muscle. Improves blood circulation, providing energy to the heart cells. Hypodynamia is one of the main factors in the development of hypertension. Physical activity has proven itself in numerous scientific studies as a preventive method against hypertension.

Modern American Journal of Linguistics, Education, and Pedagogy
ISSN (E): 3067-7874
Volume 01, Issue 08, November, 2025
Website: usajournals.org

The importance of physical education hygiene Physical education not only stimulates movements, but also helps to organize them correctly. For this, it is necessary to adhere to the following principles. Performing physical exercises 3-5 times a week improves energy metabolism in the body and reduces stress. As scientific studies have shown, regular aerobic exercise improves blood circulation.

Exercising in the fresh air or playing sports has a positive effect not only on the muscles, but also on the respiratory system. For example, studies conducted in Japan have found that exercise in a quiet natural environment reduces the level of stress hormones.

To maximize the results of physical activity, it is important to pay attention to nutrition. Experts emphasize the need to balance the amount of carbohydrates and proteins.

For example, a 2019 Harvard University study found that 30-40 minutes of moderate exercise per day reduces the risk of diseases associated with physical inactivity by 20-30%. A 2020 Harvard University study found that people who exercise regularly for 150 minutes a week had a 10-15% lower blood pressure. Studies in Bulgaria also show that people who exercise actively have a stronger immune system. Lack of exercise can lead to metabolic syndrome, a disorder in the metabolism of carbohydrates and fats. Exercise normalizes metabolism by improving insulin sensitivity and balancing blood fat and sugar levels. Lack of exercise leads to reduced bone mineral density, osteoporosis, and muscle weakness. **Regular exercise** is recommended to prevent the above diseases by engaging in 150-300 minutes of moderate-intensity physical activity per week. These can include: Brisk walking. Running. Cycling or swimming. **Strength training and muscle stimulation .** Daily exercise activates the cardiovascular system, strengthens the heart muscle and improves blood circulation. **Follow the correct regimen and hygiene rules.** Following the following hygiene rules during exercise will help to strengthen health: Exercise in rooms with good air circulation. Follow the hydration regimen. Regular rest and recovery. **Research results** Oxford According to a study conducted by the University of Toronto, daily physical exercise reduces the prevalence of diseases associated with physical inactivity by 30-50% .

Modern American Journal of Linguistics, Education, and Pedagogy
ISSN (E): 3067-7874
Volume 01, Issue 08, November, 2025
Website: usajournals.org

Estimating energy expenditure based on a person's activity level MET (Metabolic Equivalent of Task) is a value used to estimate energy expenditure based on a person's activity level. Its main function is to determine the amount of energy expended by the body during types of physical activity. 1 MET is the amount of energy expended by a person in a resting state (for example, sitting). It is approximately equal to **1 kcal/kg/h .**

Energy expenditure is calculated using the MET value using the following **formula** :

Calories burned = MET × weight (kg) × activity time (hours)

The MET indicator is used to compare the energy expenditure of different types of physical activity .

MET indicator	Types of physical activity
1 MET	Quiet position (sitting, watching TV).
3 METs	Fast walking or light exercise
6 METs	Riding a bicycle at a moderate speed.
9 MET	Fast running or strenuous exercise

MET values help estimate how many calories a person burns in their daily activities .

Type of activity	Running (8 METs).
Human weight	70 kg
Running time	1 hour.

Calorie expenditure = 8×70×1 = 560 kcal.

An activity equivalent to 500-1000 MET-minutes each week is sufficient for a healthy life.

MET is a convenient and accurate method for assessing the body's energy expenditure. It not only helps to determine the effectiveness of physical activity types, but also helps to properly plan exercises and has a positive effect on health.

As part of studies on the study and prevention of hypodynamia, tests can be conducted in various directions. The process of conducting them depends on the purpose of the study and the tasks set. Below are the various tests used in studies on hypodynamia and the methods for conducting them:

There are various methods and tests used to **assess physical activity levels , the most widely used of which is** the International Physical Activity Questionnaire

Modern American Journal of Linguistics, Education, and Pedagogy
ISSN (E): 3067-7874
Volume 01, Issue 08, November, 2025
Website: usajournals.org

(IPAS). This method helps to assess the main criteria for determining physical activity levels.

Procedure for taking the International Physical Activity Questionnaire (IPAQ) test

The data collection questions ask about the following physical activities that participants performed during the week.

High level of activity	Exercises that require a lot of effort (running, strength training in the gym).
Moderate activity	Cycling, brisk walking, light exercise.
Lower level activity	Simple walking, housework

The content of the questions asks participants about the following aspects of weekly physical activity:

Type of activity	What exercises were performed?
Continuity	Time spent performing each exercise (in minutes).
Regularity	How many times is it done in a week?

When calculating the scores, the participants' physical activity level is calculated using the MET (Metabolic Equivalent of Task) indicator based on the results of the questionnaire:

MET minutes/week formula	
High level of activity:	8 METs × minutes × day.
High level of activity = 8 × 60 × 7 = 3360	
Moderate activity:	4 MET × minutes × day.
Medium activity = 4 × 30 × 7 = 840	
Lower level activity:	3.3 MET × minutes × day.
Lower level activity= 3.3 ×25×7=577.5	

The participants' physical activity levels are classified according to the scores obtained **during the evaluation of the results .**

Modern American Journal of Linguistics, Education, and Pedagogy
ISSN (E): 3067-7874
Volume 01, Issue 08, November, 2025
Website: usajournals.org

High level of activity:	Every week	3000 METs or higher.
Moderate activity:	Every week	Up to 600-3000 METs.
Lower level activity:	Every week	Below 600 METs.

A personal physical activity plan is designed to meet the individual's needs. It takes into account a person's age, physical condition, daily activity level, health status, and goals. Below is a general plan chart based on physical activity levels:

1. Weekly plan with low activity level (to prevent hypodynamia).
Purpose: Increase activity, stimulate muscles, strengthen immunity.

Table 1

Monday	15-20 minutes of brisk walking
Tuesday	20 minutes of light stretching or yoga exercises
Wednesday	30 minutes walk
Thursday	10-15 minutes of morning physical education, small squats or arm curls
Friday	15 minutes of exercise bike or light jogging
Saturday	40 minutes of walking or active recreation (games) in nature.
Sunday	Free activity (deep breathing exercises or running).

Moderate activity level (to build muscle and endurance) Weekly plan:
Goal: Increase muscle strength, strengthen endurance, normalize weight .

Table 2

Monday	30-40 minutes of aerobic exercise (cycling, brisk walking).
Tuesday	20-30 minutes of strength training (squats, planks, arm exercises).
Wednesday	40 minutes of running or similar physical activity (ball games).
Thursday	Yoga or stretching, 15-20 minutes (to provide rest for the cardiovascular system).
Friday	30-40 minutes of intense cardio exercise (interval running, step aerobics).
Saturday	Active recreation (tennis, cycling or swimming in the pool).
Sunday	Light exercise (walking or exercising in the fresh air) to help the body recover.

Modern American Journal of Linguistics, Education, and Pedagogy
ISSN (E): 3067-7874
Volume 01, Issue 08, November, 2025
Website: usajournals.org

Active level (for athletes and active lifestyles) Weekly plan:

Goal: Maintain high physical performance, increase endurance and strength.

Table 3

Monday	60 minutes of strength training (squats , sit-ups, weight lifting).
Tuesday	Cardio exercises (40-45 minutes of running, interval training).
Wednesday	Yoga and exercises aimed at muscle recovery.
Thursday	40-60 minutes of functional training (team sports or games).
Friday	A combination of aerobic and strength training (cycling, gymnastics).
Saturday	60 minutes of dynamic exercises (swimming, active games).
Sunday	Rest or take a light walk (to restore the system).

General recommendations:

1. Medical advice: It is recommended to consult a doctor before exercising, especially if you have cardiovascular or other chronic diseases.

2. Drink water: Don't forget to drink water during and after your workouts.

3. Proper nutrition: For physical activity to be effective, a balance of protein, carbohydrates, and fats must be maintained.

4. Intensity: The level of exercise should be appropriate for your physical condition; the increase should be gradual.

5. Relaxation and recovery: Rest is also important to consider after exercise to allow your muscles to recover. If you have a specific sport in mind (such as a high-impact sport), your plan will be geared toward that goal. It's important to make physical activity a part of your life.

Conclusion

Hypodynamia poses a serious threat to the human body. Physical education hygiene, regular exercise and increased activity in lifestyle play an important role in preventing these problems. Scientific research shows that by increasing their daily activity, each person can not only improve their health, but also ensure a long and high-quality life. In Uzbekistan, the decrease in motor activity in the human body and its negative consequences are recognized as one of the urgent problems at the state level. Presidential decrees and Cabinet resolutions are an important step in the fight against hypodynamia and are aimed at ensuring a healthy lifestyle in society. The promotion of physical education hygiene and the

Modern American Journal of Linguistics, Education, and Pedagogy
ISSN (E): 3067-7874
Volume 01, Issue 08, November, 2025
Website: usajournals.org

development of sports infrastructure are of great importance in improving the health and physical activity of citizens.

This article presents a research-based scientific approach as well as practical recommendations.

REFERENCES:

1. O‘zbekiston Respublikasi Prezidentining farmoni, 2020 yil, "Sog‘lom turmush tarzini keng joriy etish".
2. Vazirlar Mahkamasining qarori, 2022 yil, "Aholining jismoniy faolligini oshirish".
3. O‘zbekiston Respublikasi Prezidentining 2021 yildagi "Yoshlar o‘rtasida sportni rivojlantirish" farmoni.
4. Sog‘liqni saqlash vazirligi ma’lumotlari, 2023
5. Rossiya tibbiyot ilmiy markazi. Yurak-qon tomir kasalliklari profilaktikasida jismoniy tarbiya ahamiyati
6. World Health Organization (WHO). Physical Activity Guidelines.
7. Harvard Medical School. The Benefits of Exercise in Cardiovascular Health.
8. Oxford University. Physical Activity and Prevention of Chronic Diseases.
9. Muidinov M. R, Technical Training In Belbogli Kurash Wrestling Through Coordination Exercises Development. Mental Enlightenment Scientific – Methodological Journal, 2024 vol (05), 106-115.
10. Muydinov M.R. The importance of mobile technologies in enhancing technical and tactical preparation in belt wrestling. Multidisciplinary Journal of Science and Technology VOLUME-4, ISSUE-12 INDIA. 17-23.