

### HEALTH-IMPROVING PHYSICAL EDUCATION IN ELDERLY PEOPLE WHO PRACTICE AMATEUR SPORTS IN THE NORMALIZATION OF PHYSICAL LOADS

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**Annotation:** in this article, several parameters of the individual's heart rate indicator are studied in detail in determining the norm of physical load for practicing health-improving physical education in people over 30 years of age.

Keywords: individual, parameter, frequency, endurance, flexibility, hypokinesia, hypodynamics, enzyme, hormone, biosynthesis.

#### **INTRODUCTION**

Knowing the legal periods that occur in the individual development of a person is one of the main factors when setting a physical load norm for practicing health-improving physical education in people over 30 years of age. The hierarchy of adulthood and old age is continuous without interruption, and the changes in it continue in the form of balkim, undulating forms, in one rhythm and without leaving at the same time. The second period of maturation was relatively accepted as 35-55 years of age in females and 37-60 years in males; while the aging period is 55-75 years in females and 63-77 years in males. There are various scales that look for the aging and aging of the human body there are a number of theories that explain them in detail. In the opinion of scientists studying most of these sochains, aging at the cellular and molecular levels goes slower than aging of one whole organism. One of his theories explaining aging is the widely known Emirati theory.

During the second period of its life, the cells, tissues and systems of the organism are absorbed, and the control processes are decayed. The subtlety of this theory is that a person does not take into account the fact that the organism has the ability to self-regenerate during life activities without being sucked away. The energy reserve of a human organism is genetically determined, which is spent throughout its life. The supposedly combustible will melt as a stalik as a candle holder. The sluggish the activity of movement according to the above theory, the energy consumption will also be correspondingly low, the aging of the organism will be slow and the duration of its life will be longer.

#### LITERATURE ANALYSIS

The theory of self-poisoning explaining aging was put forward by I.I.Mechnikov. According to him, factors that affect the continuity of the life of the body - unfavorable external environment (cold, hot, dust, strong pressure,) conditions, smoking bad habits, drinking a sports drink, giokhvandlik yana Mechnikov believes that microbes in the large intestine are the effects of poisons that are formed as a result of life activity. As a result of their action, poisoning and premature aging of the body occurs.

To prevent this, the scientist recommended increasing fruits and vegetables by reducing proteins in the diet, as well as cleaning the body (one in 1 year). Thus, a number of theories aimed at preventing aging show the authors 'opinions in this area.



Social, economic, medical and external environmental factors affect the rate of aging and determine the life expectancy of people. The average life expectancy of people is not the same in different countries. In better living conditions countries, the average life expectancy will be longer than in others.

#### RESEARCH METHODOLOGY

The result of research in subsequent years suggests that as one grows older, it becomes more difficult for the body to adapt to the effects of external environmental factors, resulting in the occurrence of various diseases in older people, leading to the development of a chronic stress condition in the body.

Scientists suggest that changes in the body during aging are almost identical to changes in stress time. It follows from this that the theory of aging elevation was created by scientists. According to this theory, aging is associated with the activity of the hypothalamic section of the brain, as its activity increases with age, rather than decrease. This leads to the rise of the homeostatic braking step, disruption of metabolism and the development of chronic stress. Based on this theory, it is proposed to apply practical measures (active rest, optimal physical load, biologically active substances,) aimed at improving the chances of adaptation of old people to muxit. Thus, in theories explaining aging, this process is followed by the personal opinions of the authors and links these changes to certain levels of the organism. In fact, however, it is considered a complex biological process, has a polymorphic nature, and it is not possible to explain it for one reason or another very difficult case in short.

Prevention of premature aging, among the factors that slow down aging, the most convenient and harmless is the practice of physical exercise. At this point, the French writer A. In myussé's novel, he described that "exercise replaces many drugs, but not a single drug can replace exercise". Changes and emotional reactions that occur in the body's functions under the influence of exercise have a positive effect on organisms of maturity and old age. These effects only have a positive effect when the character, size, rhythm, intensity of physical exercise is consistent with the satisfaction and personal characteristics of the practitioner. For example, running exercises for someone, rock climbing exercises for whom, dancing exercises for whom, and has a positive effect.

#### **ANALYSIS AND RESULTS**

In the study of the aging process, the physical qualities of the body can be assessed according to their changes. The change in physical qualities makes the individual dependent on himself, and in adulthood and old age, along with physically impaired people, it is possible to meet people with high functionality, for example, in some people muscle strength begins to decrease after 20-25 years, and in others this quality decreases only after 40-45 years. From physical qualities, quickness, flexibility and agility quickly deteriorate compared to strength and endurance. The main factor that keeps track of the deterioration of physical qualities is regular exercise. The sentence "regular" is based on the principles of this science of physical education.

All indicators of the quality of speed within the chemical qualities deteriorate with age, for example, the speed of movement drops the most between the ages of 50-60, and slightly stabilizes between the ages of 60-70, and in older adults after this, the speed of movement slows down significantly.

From this we know that in the age range of 60 - 70 years, a basic level of life activity occurs, bringing a reduced state of movement to the surface. In people who perform regular



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physical loads, the decrease in all indicators of agility occurs at a slower pace. For example, a decrease in agility in 50 - 60 - year - olds compared to the 18-20-year-old rate is 20-40%, while in unvaccinated individuals it is 25-60%.

The maximum value of the strength of different muscle groups is 18-20 years old, and at this level in most halls it stands at 40-45 years old, and when it reaches 60, it decreases by about 25 percent. The greatest decrease in strength in people who do not exercise is between the ages of 40 and 50, while those who do regular exercise are between the ages of 50 and 60. The superiority of satisfied people over unverified people is evident in 50 - 60 years of age and older. For example, hand dynamometry of people engaged in sports or physical education is 40 - 45 kg/m at the age of 75, which corresponds to the average of people aged 40 who are not fit.

In physical qualities, the quality of endurance is maintained longer than in other physical qualities. In most of the studies carried out, endurance attenuation begins at the age of 55, when performing work of medium strength, a high level of aerobic capacity (oxygen conditions) endurance indicator is maintained at the age of 70-75 years. This information is characterized by the fact that people of this age participate in various long-distance runs, swimming, tourist walks. Endurance decreases after 40-45 years of age when performing exercises in anaerobic (oxygen - free conditions). The development of endurance will primarily depend on the circulation, breathing, and full-value functioning of the organs of the blood system. Regular running and swimming exercises significantly delay the decrease in the quality of endurance, rock lifting, work with dumbbells, work with espanders have little effect on the quality of endurance.

Flexibility motion is characterized by the ability of the hardware joints to bend at maximum amplitude. The decrease in the quality of flexibility begins at the age of 15 - 20 years, if not engaged in special chinching exercises. This in turn disrupts the performance of complex movements of various shapes and their coordination (coordination of the body's behavior). In older people, the elasticity indicators of the spine will be significantly reduced. Practicing temper training ensures that the quality of the flexibility is maintained for a long time.

The favorable period for the development of agility quality is the period from 7 to 14 years. The progress of the quality of agility will depend on the fact that the paws especially expand the lower surface of the heel. The earlier these indicators develop, the faster the agility Ham appears. The quality of agility also begins to fade from the age of 18-20, practicing special exercises slows down the weakening of agility and ensures that it is high for many years.

#### **DISCUSSION OF RESEARCH RESULTS**

Physical education is considered the means that ensure the good maintenance of the functional state of the body of elderly people. Functional state of the organism refers to the qualities that ensure any physical work and sports activity. The main functional states associated with movement activity can be indicated by fatigue, chronic fatigue, extreme fatigue, mental emotional tension, monotony, hypoknesia and hypodynamia. All functional states are divided into Type 3: normal (fatigue), borderline (chronic fatigue), and pathological (extreme fatigue). It is known that elderly people get tired quickly and quickly switch to a state of extreme fatigue. Older people will be obsessed with mental emotional experiences, their lives will be monotonous (growing or decreasing) or almost the same. There are many

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cases of hypodynamia, hypoknesia. Under the influence of these factors, the functions of the organs and systems of the body decrease, and energy consumption decreases. Such physiological shifts cause the body to reduce oxygen consumption and the coefficient of its absorption, slow down breathing in tissues, General gas and energy metabolism. The result is a significant decrease in a person's ability to work physically. Regular exercise activities prevent the above disadvantages. From a physiological point of view, the change in the functional state and the decrease in working capacity in older people will depend on many factors, first of all, they slow down the rate of blood flow, the capacity of moving blood decreases, the combination of blood with oxygen decreases, the state of hypoxia in organs and tissues develops. A small supply of glycogen in the muscles and liver leads to a decrease in blood glucose levels, a decrease in oxidative processes and energy metabolism. It is observed that the recovery reactions are slowed down and the body develops changes in blood vessels and tissues related to aging. As a result, a decrease in the indicators and mediated indicators of Labor aptitude indicates an increase in the physiological value of the work performed.

Modern science has advanced to the point that methods for assessing the state of a person's health, physical fitness and durability of flour have begun to be developed. There are health tests adopted in the medical and biological program of UNESCO, which take into account the age, weight, smoking of a person, alcohol consumption, resistance to static loads, the number of heartbeats in a calm state and after dynamic loads, and its recovery. Each indicator is given a certain score, which is added, and the result is calculated and given appropriate recommendations for nutritional properties, activity of movement and special physical conditioning.

All scientists of the world who carry out work aimed at actively living long and preventing aging list physical conditioning in the first place. For example American physiologist A.Within a number of factors studied by Tanni, optimal physical loads are outweighed by other factors. From a physiological-pedagogical point of view, the volume of the physical load at the smallest capacity used to achieve the best result is the optimal load.

The most convenient and reliable information for many when assessing the Optimal health-improving load can be obtained by determining the number of heartbeats (beats/minutes). To determine this, the elbow artery is found near the wrist to the wrists and the vascular oscillation (pulse) is counted for 10 C, increasing the number obtained by six and determining the number of heartbeats per minute. When summarizing the data of most specialists, the average frequency of heartbeats was determined, corresponding to the fact that people of different ages are engaged in health-improving physical education. For example, for 20 - year-old people, the number of heartbeats per minute should not exceed 140, for 30 - young people - 130, at 40 - 125, at 50-120, at 60 and older-100-110. For those who are physically fit, these indicators may be slightly higher.

Health is assessed by determining the role and importance of physical education and sports in preventing premature aging and prolonging active long life, by identifying a number of physiological changes that occur in people who perform regular physical loads. In these people, the combination of blood, tissues and organs with oxygen improves, the development of regional hypoxia is obtained, the metabolic rate rises, and the elimination of unnecessary products of metabolism from the body accelerates. In such people, a high level of biosynthesis of proteins, enzymes and hormones is maintained, which in turn significantly slows down the processes of aging the body. Engaging in adequate physical loads can reduce cholesterol and

lipoproteins levels to prevent ischemic heart disease, atherosclerosis, and obesity. Increased muscle activity ("muscle pump "or" peripheral heart") improves the functioning of the cardiovascular system. Ultimately, the body's resistance to the influence of unfavorable factors of the external environment increases, the chances of developing a number of diseases decrease, mental and physical labor aptitude remain intact.

#### **CONCLUSIONS AND SUGGESTIONS**

Thus, it has been recognized by most researchers that exercise is the most convenient means of maintaining health, preventing premature aging, and among the factors that ensure active longevity. When dealing with physical loadings, they can be assessed by measuring the number of heartbeats per minute for their effect on the body. The volume of the physical load should give the body an invigorating effect, without ask it can cause disease if there are many, and not fruit if there are few. To avoid such situations, everyone should choose a suitable physical load on themselves. When choosing a suitable physical load, the heart rate indicator is used. To determine this, the age of the practitioner (in years) is subtracted from the maximum number of heart beats (220). The number that comes out (180) is the maximum heart rate for the same person. For example: 220-40 = 180 at the beginning of physical activity, a load of 65% of the maximum indicator is used. 180 to 65% 117. So, a 40 - year-old person should be hit at a limit of 115-120 when the frequency of heartbeats is affected by physical loads.

As a result of the adaptation of the body to the effects of physical loads, the number of heartbeats to the effects of initial loading begins to decrease. This weakens the healing effect. For this reason, the physical load increases, gradually increasing the number of heart attacks to 85%.

Dynamic exercise for older people in the selection of physical exercises: walking, running, swimming, cycling, etc. k. - recommended to use. The frequency of engagement can be taken 3-5 times a week, depending on the physical fitness. However, people in old age should not at all cause the body to strain.

In large healthy people, general recommendations on the size of the tensile loads for endurance and muscle strength body composition and the development and maintenance of cardiorespiratory function were created by scientists.

- 1. Frequency of training exercises-3-5 days a week;
- 2. Intensity of work power from the maximum level of 65-85 %;
- 3. Duration of training when performing non-stop aerobic work, the intensity of work is 20-60 minutes;
- 4. The type of exercises are physical exercises in which many muscle groups participate, such as walking, jogging, cycling, swimming dancing and x.z;
- 5. Anaerobic (oxygen-free conditions)resistance exercises of moderate intensity to maintain capacity.
- 8-10 exercises of large muscle groups at least 2 days a week.

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