

## Assessment of motor activity of mature age women in the republic of Sakha (Yakutia)

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## Abstract

**Objective of the study** was to assess the physical activity of mature women living in urban and rural areas of the Republic of Sakha (Yakutia).

**Methods and structure of the study.** An international questionnaire for assessing physical activity (International Questionnaire on Physical Activity - IPAQ), developed by international WHO experts, was used, taking into account the types of physical activity performed by a person during the last week. Currently, the IPAQ, as well as its improved version (GPAQ), as an internationally comparable indicator for assessing the level of physical activity of the population, is used in more than 130 countries around the world [12, 13].

The survey was conducted using Google Forms (https://forms.gle/wm84Lcvn6A7qmUbU8) with the participation of 736 women living in the central regions of Yakutia.

Results and conclusions. Based on the results of the study, a deficit in physical activity was identified among women living in urban and rural areas of the Republic of Sakha (Yakutia):

- 71.4% of women aged 18-39 years and 29.7% of women aged 40 to 65 years living in urban areas;

- in 67.9% of women aged 18-39 years, in 35.2% aged 40-65 years, and also in 25% of women over 65 years old living in rural areas.

Keywords: assessment of physical activity, physical inactivity, mature women, Republic of Sakha (Yakutia).

**Introduction.** A person is in a potentially dangerous physical and social environment, to which he is forced to continuously adapt (adapt). In this case, physical activity acts both as a means and as a result of adaptation [1].

Optimal physical activity can be defined as an area of "stable states located between the minimum and maximum levels of physical activity and providing a training effect," and the training effect should be noticeable, allowing for an increase in physical performance, and have a healing effect for the human body [9].

In optimal volumes, regular physical activity makes it possible to increase the efficiency of the

cardiorespiratory system, improves the adaptive potential of a person, which leads to more effective resistance of the body to adverse environmental factors. Based on this, it can be argued that physical activity is an effective non-drug factor in the health of the population, increasing the general and nonspecific immune status, enhancing adaptation processes in the human body [5, 6].

Requirements for the structure and intensity of physical activity should contribute to the formation in the body of such a number and such adaptive functional systems that would ensure the necessary level of vital activity and health indicators in the expected conditions. The basis for constructing a model of motor activity should be the requirements objectively imposed on a person, both by the nature and conditions of his habitat, and by the requirements for psychophysiological readiness for future life activity [2].

The study of the characteristics of motor activity of citizens of working age made it possible to establish that a person in everyday life uses approximately 25% of his absolute capabilities [10, 8].

Each region of Russia has natural and climatic features that influence physical activity, physical development, and public health. According to promising estimates in the 21st century. Climate change will impact human health with a very high degree of certainty, mainly exacerbating existing problems [3, 14].

The specificity of physical activity of the population of the Far East is "due to a deficit of natural physical activity" as a consequence of special natural and climatic conditions, and the modern system of physical education is not effective enough to minimize the negative impact of the living environment [11].

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**Results of the study and discussion.** According to the survey results, only 7.6% of women devote time to daily organized physical activity; 3.4% engage in physical exercise six days a week; A little more than 5% devote time to physical activity four to five times a week; 20.9% of women say they exercise three times a week; 15.4% train twice a week; 41.3% engage in physical education and sports activity no more than once a week.

It was found that the duration of intense physical activity: for 32.2% of respondents lasts less than 10 minutes; 10-20 minutes in 19.5%; 17.3% of women move intensively for 20-40 minutes; 12.9% perform intense physical activity for 40-60 minutes; 17.9% of women surveyed claim that such a load lasts 1 hour or more.

The study revealed that 15% of women do daily low-intensity physical activity, 4-9% do this for four to six days, 13-15% of respondents do this on average two to three times a week, the rest do it less.

31.1% of respondents do daily walking, 11-16% do it five to six days a week, about 6% of respondents have the opportunity to engage in this type of activity four days a week, 6-9% manage to walk two to three days a week. , and 18.2% of survey participants indicated that they manage to walk only once a week. At the same time, the duration of walking for 39.2% takes less than 20 minutes, about 30% spend 20 to 40 minutes walking, 6.7% of women walk for 1-1.5 hours, and walk for more than 1.5 hours 9.6% of respondents.

The survey made it possible to determine the length of time women spend in a sitting position. We found out that during the day 6.1% sit for less than 1 hour, 8.1% sit in a sitting position for 1-3 hours, 11.1% sit for 3-4 hours, 12.3% sit in a sitting position for 4-5 hours. for 5-6 hours - more than 12%, 6-7 hours - more than 9% of respondents, more than 12% of women spend 7-8 hours in a sitting position and, according to 27.3% of respondents, they are forced to be in this position for more than 8 hours (Fig. 1, 2).



Figure 1. Deficit of physical activity in women living in rural areas



Figure 2. Deficit of physical activity in women living in urban areas



**Conclusions.** An analysis of the degree of physical activity of women living in urban and rural areas of the Republic of Sakha (Yakutia) revealed a deficit of physical activity:

- 71.4% of women in the age range of 18-39 years and 29.7% of women aged 40 to 65 years living in urban areas;

- 67.9% aged 18-39 years, 35.2% aged 40-65 years, as well as 25% of women over 65 years old living in rural areas.

Based on the information obtained, it can be argued that mature women living in urban areas experience deficits in physical activity to a greater extent compared to rural women; more pronounced values are observed in the age range of 18-39 years.

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