
INDICATORS OF MAXIMUM CONTRACTION STRENGTH OF FINGER FLEXOR MUSCLES OF JUNIOR SCHOOL AGE STUDENTS

Madina A. Kholmiraeva

Associate Professor, Phd In Biological Sciences, Andijan State University, Uzbekistan

Mushtari A. Kushaqboeva

Researcher, Andijan State University, Uzbekistan

ABSTRACT: The indicators of physical development of children of junior school age are also evaluated by hand dynamometry. Through this functional indicator, it determines the general state of health of the human body, as well as the degree of manifestation of adaptation mechanisms to external environmental conditions. In particular, the study of the dynamics of the functional indicators of the children's organism depending on the factors of the external environment allows to directly assess the health status of the category of children and also to develop a complex of regional standards/measures in this direction.

KEYWORDS: Hand dynamometry, functional, dynamometer, physical development, statistics.

INTRODUCTION

In order to determine the level of physical development in students of junior school age, the value of hand strength (kg/m) was determined using the dynamometry method.

The observation work was carried out among the school-aged boys of the general education school No. 17 of the public education department of the Ulug'nor district of the Andijan region. The average value of the maximum contraction force of the flexor muscles of the fingers of the right hand of children of junior school age is $6.2 \pm 0.0.1$ kg/m at the age of 7, $8.8 \pm 0.0.3$ kg/m at the age of 8, $10.4 \pm 0.0.1$ kg/m at the age of 9, $11.3 \pm 0.0.4$ kg/m was determined at the age of 10. The difference between average indicators: 2.6 kg/m between 7-8 years old, 1.6 kg/m between 8-9 years old, 0.9 kg/m between 9-10 years old. When the differences between the ages are analyzed statistically, the difference between 7-8, 8-9 years is not statistically significant. The difference between the ages of 7-10 is statistically significant ($r < 0.01$).

The average index of the maximum contraction force of the muscles of the flexors of the fingers of the left hand of children of junior school age is $6.1 \pm 0.0.1$ kg/m² in 7-year-old children, 7.5 ± 0.0 kg/m² in 8-year-old children, and 9 in 9-year-old children. $10.4 \pm 0.0.3$ kg/m, at the age of 10 it was equal to $10.8 \pm 0.0.3$ kg/m.

When comparing the average indicators, the difference between 7-8 years old is 1.4 kg/m, between 8-9 years old is 1.9 kg/m, between 9-10 years old is 1.4 kg/m, equality was observed. When the differences between the ages are analyzed statistically, the difference between 7-8, 8-9 years is not statistically significant. The difference between the ages of 7-10 is statistically significant ($r < 0.01$).

COCLUSION

It was observed that the value of the maximum contraction force (kg/m) of the finger flexor muscles of children of junior school age (7–10 years) increases linearly with the increasing age of the students. Therefore, the analysis of the obtained results corresponds to the data presented in the existing literature.

REFERENCES

1. Antorpova M.V., Khripkova A.G. Adaptation of the body of students to educational physical activity. M.: - 1982.
2. Sadikov B.A., Kochkarova L.S. Kurbanov Sh.K. Physiology of children and adolescents. Tashkent:, -2005.
3. Bezrukikh M.M. Regulation of the chronotropic function of the heart in schoolchildren of grades I-IV during training sessions.
4. Age features of the physiological systems of children and teenagers. M.: - 1981.