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## **ASSESSMENT OF HAND GRIP STRENGTH IN CORRELATION TO ANTHROPOMETRIC DATA FOR CALISTHENICS PRACTITIONERS**

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The aim of this research was primarily to study individuals practicing calisthenics, but also those outside the target group, mainly for comparison purposes. Calisthenics is a form of physical activity in which body weight is used as resistance. The most common examples of exercises in this type of physical activity are push-ups, sit-ups, or pull-ups on a bar.

The analysis of the results revealed a correlation. To conduct the research, it was necessary to first develop a methodology that allowed for obtaining parameter values, which were then analyzed. Based on the research methodology, the following were established: grip strength of the left and right hand, anthropometric values of the upper body, body composition using the impedance method, and the pressure distribution of the subject on a stabilographic platform. During the measurements, tools such as a dynamometer, a "Tanita" device for impedance analysis, and a "Zebris" stabilographic platform were used. At the end, the subjects were also asked to fill out a questionnaire providing information about previous injuries and illnesses.

The research group consisted of 24 individuals, including 6 who identified as professional calisthenics athletes, while 18 comprised the amateur group. The entire series of measurements was conducted in an attempt to demonstrate the correlation between individuals practicing calisthenics professionally and amateurs who do not engage in calisthenics in a professional or competitive manner. The results of women practicing calisthenics offer unreliable conclusions, as this group of participants was very small, making it impossible to generalize the findings to the broader population. The obtained results were therefore analyzed in terms of the differences between the professional calisthenics group and the amateur group.