

**Title:** Comparison of balance abilities of gymnasts and members of an attest group

**Abstract:** This thesis deals with a question whether there is a difference between balance abilities of girls who attend themselves to gymnastics and those who do not. The girls compared were of 7 to 9 years of age. To thoroughly understand the term balance and to specify its place in the process of motoric learning, while using the measures gained from the two groups of girls, it was necessary to first gain a theoretical background from kinesiology, physiology and anatomy of relevant organs and systems.

**Aims:** The aim of this work is to find out differences in balance abilities of girl gymnasts and an attest group of non-gymnasts, and to create a summary of theoretical knowledge of balance.

**Method:** The method used was an inter-group comparison of stabilometric parametres gained by dynamografics. The measures thus gained were statistically analysed.

**Results:** The results acknowledged differences in balance abilities of girl gymnasts and an attest group of non-gymnasts.

**Key words:** Balance abilities, posture, stabilometrics, girl gymnastics, physiology of systems and anatomy of organs supporting balance.