

# ABSTRACT

**Title:** Using a tensiomyograph to measure girls in sport aerobics

**Objectives:** The goal of my bachelor thesis is perform a functional muscle diagnosis with a focus on the quadriceps femoral muscle in a team of sport aerobics girls using TMG. Based on a general analysis of the training load, evaluate the effect of the training on the functional status of the femoral muscle and deduce general training recommendations.

**Methods:** This bachelor thesis is a case study. Research is done qualitatively, mapping a small number of respondents. The actual measurements on the tensiomyograph, the analysis of the results and the recommendations of the measurement were performed on five selected individuals.

**Results:** The task of the thesis is a description of a device called tensiomyograph, about which known documents had to be searched and translated exclusively from abroad. The second task, the output of this work is the results of measuring five respondents from the TMG and the analysis of the two-month competitive season, on the basis of which a recommendation was made leading to the elimination of the imbalances, through strength exercises, resp. stretching exercises.

**Keywords:** Sports aerobics, training load, motion apparatus, tensiomyograph, muscle