

## **Abstract**

**Master's thesis topic:** Influence of rheological characteristics of muscle tissue by musculus triceps surae by means of AEK practice

**Author:** Bc. Karel Kupec

**Branch of study:** Physiotherapy

**Disertation Tutor:** PhDr. Petr Šifta, Ph.D.

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**Abstract:** The target of this thesis was find out the effect of agistic-excentric contractions on muscle tension of musculus soleus compared with passive relaxation of musculus soleus. The assumption was, that agistic-excentric contraction reduce muscle tension of musculus soleus after anaerobic load. The contralateral lower limb was control limb for comparison agistic-excentric contraction and passive relaxation.

Muscle tension was measured in laboratory in Faculty of Physical Education and Sport, Charles University: five students were measured. As a measurement method was used myotonometry, which simulated palpation. Measured data were displayed by using an analog-digital convertor and consequently evaluated.

The results of this study found out positive effect of agistic-excentric contraction on muscle tension. Control form of relaxation, passive relaxation, didn't influence muscle tension so significantly. The results support the principle of hypotheses, that agistic-exentric contraction approach affect muscle tension more positive than passive relaxation.

**Key words:** agistic-excentric contraction, rheological properties of muscles, myotonometry, musculus triceps surae