SUMMARY

Title: Effect of sauna on muscle tone after physical excersise

Topic definition: This thesis presents a pilot theoretical - empirical two-factor experiment, where the main subject of the experiment is to evaluate the effect of sauna on increased muscle tension after sport and its potential for use in physical therapy and recovery.

Aim of the thesis: To provide a summary of theoretical knowledge related to the subject and to assess the impact of sauna usage on muscle tension occurred after short term maximal anaerobic excercise and compare it with passive rest.

Methods: This thesis will be processed at the Faculty of Physical Education and Sport on 6 individuals, who will be randomly divided into two equally large groups. The first three-person group will be a research one, the second three-member group will be the control group. Afterwards they will be subjected to a Wingate stress test. The experimental group will participate in sauna treatments and the control group in passive rest. Muscle tension will be measured before the load, after the load, and after the sauna / passive rest. Measurements will take place in a kinesiology lab at the Faculty of Physical Education and Sports. Measurements will be done by using a myotonometer and the data will be gathered via an analogue-digital converter and subsequently processed by computer.

Results: During the experiment the predefined hypotheses have not been confirmed. Particularly due to a surprising finding that after a short maximal anaerobic load increased muscle tension may not necesarily occur but contrary, this tension may even decrease. However the question is how the tension and elasticity values will change after longer intervals from load.

Key words: the effects of the sauna, muscle tension, muscle tone, regeneration, anaerobic stress