

## **Abstract**

**Title:** Effect of walking and elastic resistance exercise on selected functional parameters in the elderly

**Objectives:** The aim of this thesis was to evaluate the effect of walking and elastic resistance exercise on selected parameters in the elderly population.

**Methods:** The target group was healthy adults aged 60-80 years capable of independent walking. Subjects were randomly divided into three groups. The intervention of the first group consisted of elastic resistance exercise and controlled walking twice a week/ 1 hour for one month. The intervention of the second group consisted of walking twice a week/ 40 minutes, and the control group performed only the normal activities of the day. The respiratory parameters - vital capacity and FEV1, functional parameters – six-minute walking test and Sit to Stand test, and the distance of the acromion from the bed were evaluated. The measured values were statistically and graphically processed.

**Results:** By comparing the individual tests of the intervention groups of walking with resistance exercise and walking alone, a higher benefit of the combination of exercises was found in almost all parameters.

**Keywords:** FEV1, FVC, 6MWT, Sit to Stand test, elderly, measurement acromion-bed, resistance exercise, walking