**ABSTRACT**

**Title:** Relation between aerobic endurance and static strength of elderly female athletes to selected anthropometric parameters.

**Objectives:** The purpose of this study is to analyse an aerobic endurance, tested by 2 km walk test and static strength tested by prone bridge maneuver and to investigate any existing association to selected anthropometric parameters. These tests were undertaken by elderly female athletes studying U3A at the UK FTVS.

**Methods:** 48 elderly female athletes (age 66,1±2,35, body height 1,67±0,064cm, body weight 69,80±10,42kg, waist circumference 88,82±10,64cm, body mass index (BMI) 25,10±3,62), studying U3V of UK FTVS at the time of taking the part in the research. The original sample of elderly athletes accounted for 86, but elderly athletes over age of 70 and athletes under heart – rate medication were excluded. Male athletes were also excluded for greater group compatibility. Measurement of aerobic endurance was realized by a 2 km walk test at the athletic stadium of UK FTVS according to Mr. Stejskal. Time and heart rate were scanned by sporttesters (PolarS610i). Static strength was measured by isometric method of prone bridge maneuver. Selected anthropometric parameters to the aerobic endurance and prone bridge maneuver were investigated. All data was processed using the Statistic Package SPSS Statistics 22.

**Results:** The results show the sample of elderly athletes are average in terms of aerobic endurance. The aerobic endurance results positively correlate with prone bridge maneuver and negatively correlate with weight and waist circumference. The results of prone bridge maneuver negatively correlate with the weight and waist circumference.

**Keywords:** elderly athletes, physical fitness, prone bridge maneuver, 2 km walk test.