

## **Abstract**

**Title:** Effects of water-based aerobic programme on health-related physical fitness and health-related quality of life level in elderly females

**Objectives:** The aim of this study was to assess the effect of shallow water aerobic programme on changes of health-related physical fitness and health-related quality of life level in elderly females.

**Methods:** 33 women (mean age  $67 \pm 5,2$  years) were eligible for participation for the study. Participants were divided into experimental and control group. The experimental group ( $n = 17$ ) participated in a 6month shallow water aerobic programme once a week 60 minutes. The control group did not participate in the physical program. Body composition, low-back and hamstring flexibility, hand grip strength, upper body and lower body strength, aerobic capacity, dynamic postural stability and health-related quality of life were determined before and after completion.

**Results:** This study has shown that the training programme caused a significant increase in aerobic capacity ( $p = 0,01$ ;  $r = 0,62$ ) and in general health perception ( $p = 0,04$ ;  $r = 0,36$ ).

**Keywords:** physical fitness, water exercise programme, ageing, quality of life