

## THE EFFECTS OF THREE DIFFERENT TYPES OF TRAINING IN FUNCTIONAL FITNESS AND BODY COMPOSITION IN OLDER WOMEN

### ABSTRACT

**Aim:** The aim of this study was to assess the effects of three different training protocols with 8 months in functional fitness and body composition of elderly women. **Material and methods:** Eighty community-dwelling elderly women were randomly divided into four groups: (i) control group ( $68.55 \pm 5.24$  years); (ii) multicomponent training group ( $68.70 \pm 6.51$  years), (iii) muscle power training group ( $66.30 \pm 3.87$  years) and finally, (iv) resistance training group ( $67.10 \pm 5.46$  years). A total body scan in dxa equipment assessed the body composition. The functional fitness (ff) was evaluated with the functional fitness test. A multivariate analysis (anova) with repeated measures on each dependent variable allowed to detect differences in each group and time. The bonferroni test allowed to assess the group x time interaction. Anova revealed no significant effect on time x group interception in body composition variables. **Results:** A significant effect on intercept time x group in tests of upper body flexibility in control group ( $p=0.028$ ), multicomponent training group ( $p=0.001$ ) and muscle power training group ( $p=0.002$ ) and lower body flexibility multicomponent training group ( $p<0.001$ ), muscle power training group ( $p=0.003$ ); and resistance training group ( $p=0.002$ ); aerobic endurance in multicomponent training group ( $p<0.001$ ); upper body strength in multicomponent training group ( $p=0.005$ ), muscle power training group ( $p=0.008$ ) and resistance training group ( $p=0.007$ ) and lower body strength in multicomponent training group ( $p=0.045$ ) and muscle power training group ( $p=0.006$ ) were founded. **Discussion:** Our study suggests that, independently of type of training, independent community-dwelling elderly women should improve their functional performance with appropriate exercise programs. **Conclusion:** We can conclude that 8 months training programs did not induce significant changes to body composition. However, changes in ff were observed.

## KEY WORDS

elderly, women, body composition, functional fitness, trainings.

