

Comparison between pilates training and body balance on aerobic power, resting blood pressure, body composition and some physical fitness components in sedentary older women

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The purpose of the present study was to compare between pilates training and body balance on aerobic power, blood pressure, body composition and some physical fitness components in sedentary old women. For this purpose, 20 passive middle-aged women were the volunteers who were randomly divided into two groups of pilates exercises (n = 10) with mean age (49.6) and body balance exercises (n = 10) with mean age (50.1) years were defined. Before and after exercises, queen's college step test was used to measure aerobic power, analog barometer to measure resting blood pressure, waist to hip ratio (WHR) and body mass index (BMI). Also for measuring physical fitness factors (trunk strength swedish swim test, abdominal endurance long sitting test, standing agility burpee test, balance stance stork test: trunk flexibility by goniometer, nerve and muscle coordination with ball throw test to wall) was applied. Then both groups performed 60 minutes of exercises for an 8-week period, 3 sessions per week. The Kolmogorov-Smirnov test was used to ensure that the distribution of data was normal. Correlated and independent t-tests were used to examine intra- and inter-group variability. In-group analyzes showed that both groups improved in all of the hypothesized components except resting blood pressure and nerve and muscle coordination in the pilates group. According to intergroup analyzes, pilates and body balance groups generally had similar effects in the evaluations. **Conclusion:** The results showed that both pilates and body balance exercises can be used to improve some factors of physical fitness, aerobic power, body composition and resting blood pressure.

Keywords : Pilates, Body Balance, Aerobic Power, Physical Fitness, Body Composition, Resting Blood Pressure, Middle Aged.

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