

The Effect of Elastic-Resistance Training on Postural Control in Sedentary Women

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Abstract : The aim of this study was to determine effects of elastic resistance band training on body composition and postural control in sedentary women. Thirty-four sedentary females participated voluntarily for this study. Subjects' age was 21.88 ± 1.63 years, height was 161.50 ± 4.45 cm, and weight was 59.47 ± 7.03 kg. Participants were randomly placed into one of two groups (Experimental = 17, Control = 17). The elastic resistance training program lasted 8 weeks with 3 sessions per week. Experimental Group performed elastic resistance band training with red color for first 3 weeks, blue color for second 3 weeks and for last 2 weeks. The subjects carried out exercises 3 set, 10-15 repetitions with 15 seconds rest between exercises. The rest between sets was 30 seconds. The subjects underwent a standard warm-up for 10 minutes in every session. The elastic resistance training lasted 40 minutes for each session. After the training, all subjects performed a standard cool down for 10 minutes in each session. After and before 8 weeks training period, all subjects in experimental group and control group participated body composition and postural control measurements. Independent t-Test and Mann Whitney U Test were conducted to compare differences between experimental and control groups. Paired t-Test and Wilcoxon Z Test were used to compare differences between pre and posttests. There is no significant difference between pre and posttests in BMI ($p > 0.05$). After the elastic resistance training, postural control scores and body fat significantly decreased in experimental group ($p < 0.05$). In conclusion, it can be concluded that elastic resistance training improves postural control and body composition in sedentary women.

Keywords : body composition, elastic resistance band, postural control, sedentary women

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