

Effects of a pedometer walking program on obesity and metabolic parameters in adults with abdominal obesity

ABSTRACT

A twelve-week controlled intervention study was conducted to evaluate the effects of a pedometer walking program on obesity and metabolic parameters among adults with abdominal obesity. Subjects were recruited into either a physical activity (PA) group or a control group. The PA group (n = 28) received an intervention to increase their steps per day with a goal of 10,000 steps/day; meanwhile, the control group (n = 28) did not receive any intervention. At post-intervention, there were no significant changes in steps per day or caloric intake in any of the groups. Within the PA group, there was a significant increase in body fat percentage (p = 0.01), hip circumference (p = 0.019) and high density lipoprotein cholesterol (HDL; p = 0.029). A significant reduction in waist-hip ratio (p = 0.007) and diastolic blood pressure (p = 0.016) was also observed in the PA group. The PA group, when compared to the control group, had significantly greater changes in systolic blood pressure (p = 0.014), diastolic blood pressure (p = 0.026) and HDL (p = 0.035). The results suggest that the walking program improved some metabolic parameters in abdominally obese adults.

Keyword: Pedometer walking program; Abdominal obesity; Physical activity intervention; Obesity; Metabolic parameters