

不同模式規律運動介入對肥胖者血壓調控成效之評估

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摘要

Effects of different modes of regular exercise training on blood pressure in obese adults

Abstract

The purpose of this study was to determine the effects of aerobic training, resistance training, and combined training on blood pressure in obese adults. Forty obese [body mass index (BMI), ≥ 27 kg/m²] male subjects, aged 18 - 29 years, were randomized into four groups: an aerobic training group (n = 10), a resistance training group (n = 10), a combined training group (n = 10), and a control group (n = 10). The aerobic training was composed of 50 - 70% maximal heart rate (HR_{max}), 60 min/day, 5 days/week. The resistance training was performed for 60 min/day, 5 days/week, at the maximum rate of 50 - 60% of one-repetition (1-RM) during weeks 1 - 4, 60 - 70% of 1-RM during weeks 5 - 8, and 70 - 80% of 1-RM during weeks 9 - 12. The combined training was separated into aerobic training (2 days of a single week; 3 days of a double week) and resistance training (3 days of a single week; 2 days of a double week). All subjects' blood pressure, and components of physical fitness were measured at baseline after 12 weeks of exercise training, and the components of health related fitness were found to be significantly improved ($p < 0.001$). The absolute changes in both blood pressure and the components of health related fitness after the 12-week exercise program were non-significant difference for each training group. In conclusion, our results showed that aerobic, resistance and combined training led to greater improvements in blood and health related fitness.

Keywords: aerobic training, resistance training, combined training, health related fitness, blood pressure.

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