

**TACSM Abstract – *Please do not change any fonts, font sizing, or spacing!***

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## **Aerobic training vs. resistance training in young non-athlete women with hypertension independent of diet.**

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### **ABSTRACT**

Cardiovascular disease, the number one killer of women, is often a result of hypertension and/or a sedentary lifestyle. The objective of this study was to measure the effect(s) of two types of exercise programs, resistance training and aerobic training, independent of diet, on reducing blood pressure for hypertensive women. Voluntary, hypertensive female participants ( $N=6$ ,  $M$  age=20 years) were recruited from the students, faculty and staff who attended Schreiner University's Fall 2013 health fair. In accordance with the American College of Sport Medicine (ACSM) exercise guidelines for hypertensives, one group ( $N=3$ ) participated in a 2-3 days/week full-body resistance training program and a second group ( $N=3$ ) participated in a 3-5 days/week/30-60 min aerobic training program during a four-week period. Blood pressure was measured at the baseline of the study ( $M= 143/96$  mm Hg,  $SD=11.7/9.4$  mm Hg) and at the end of the four-week period ( $M= 134.6/87$  mm Hg,  $SD=10.6/4$  mm Hg). Treatment effects on blood pressure were measured using Repeated Measures ANOVA. Overall, systolic ( $F=9.5, p<.05$ ) and diastolic ( $F=9.9, p<.05$ ) blood pressure significantly reduced, but the type of program did not affect these reductions. Although the training-induced changes were not a result of either type of exercise program, these findings suggest that exercise, independent of diet, can be used as a treatment to lower elevated blood pressure among hypertensive women.