ABSTRACT

TITLE:	High Intensity Interval Training as a Means to Reduce Symptoms of Metabolic Syndrome
AUTHOR(S):	Fagerlin, Veniece A.; Meyer , Dr. Carrie
PRESENTED AT:	8th Annual Natural & Behavioral Sciences Undergraduate Research Symposium Program, Fort Lewis College, 2013

ABSTRACT: Background: In 2006, 34% of adults in America met the criteria for Metabolic Syndrome (MetSyn), with men and women 40-59 years of age having triple the chance of meeting the criteria than younger adults (Ervin, 2009). Objective: The purpose of this study was to examine the effects of High Intensity Interval Training (HIIT) on the symptoms of MetSyn in women 40-65 years of age. Methods: Volunteers were solicited from Durango and surrounding communities for participation in this study. Participants were randomly assigned to a study group (SG)(n=11) or control (CG)(n=11). All participants were measured for waist circumference (WC), blood pressure (BP), triglycerides (TG), high-density lipoproteins (HDL), and fasting glucose (FG). The SG exercised with body weight only four times a week for six weeks. Each session included three sets, each using the same exercises but with intensity increasing by speed of execution. The CG maintained their lifestyle and attended measuring sessions. Results: Systolic (SBP) and diastolic (DBP) blood pressure did not statistically improve (p=0.089 and p=0.822 respectively); however there was a trend in improving SBP. FG (p=0.621), TG (p=0.313) and HDL (p=0.134) measures did not improve. Waist circumference did not significantly improve (p=0.141) yet there was improvement in the SG means. Conclusion: In this six-week study, HIIT did not significantly reduce the symptoms of MetSyn in women 40-65 years of age.