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## The Effects of a Six-Week Weight Loss Program on Cardiovascular Measures and Blood Profile

Jamie M. Blose, Jared M. James, Antonia L. Battaglini, Alexis N. Trumbetti, Anna K. Schade, Katie M. Cooper, Paul K. Stickles, Melissa A. Reed, Selen Razon, Melissa A. Whidden. West Chester University, West Chester, PA

Common physiological adaptations that occur with regular exercise include decreased resting blood pressure and heart rate as well as an improved blood lipid profile. A local gym recruits individuals to participate in a six-week twenty pound weight loss challenge and provides participants with a structured diet and exercise plan. **PURPOSE:** The purpose of this study was to determine if a primarily weight loss driven program would also result in improved resting cardiovascular measures and blood lipid profiles. **METHODS:** Total cholesterol (TC), high-density lipoprotein (HDL) cholesterol, low-density lipoprotein (LDL) cholesterol, fasting plasma glucose (FPG), triglycerides (TG), resting blood pressure (BP), and resting heart rate (RHR) were assessed before and after the six-week program in thirty four sedentary adults ( $M_{age}=38.24$ ,  $SD=9.93$ ). Subjects were required to participate in a vigorous boot camp program a minimum of five days per week for fifty minutes, follow a given and structured diet plan, and drink a gallon of water daily. **RESULTS:** A significant decrease in TC ( $189.2 \pm 6.81$  mg/dL vs.  $173.4 \pm 6.65$  mg/dL,  $P < 0.001$ ) and LDL ( $115.0 \pm 7.25$  mg/dL vs.  $107.0 \pm 6.05$  mg/dL,  $P < 0.05$ ) were seen following the six-week weight loss program. HDL, FPG, and TG levels were not significantly altered by the six-week program neither were RBP nor RHR. **CONCLUSIONS:** These data suggest that a structured six-week weight loss program is effective in reducing TC and LDL. However, the six-week, 30 session weight loss program did not statistically affect resting cardiovascular measures. While this study emphasizes the health-related advantages of incorporating physical activity and a healthy diet into a sedentary lifestyle, more research is required to establish the most beneficial time frame of a successful weight loss program that would improve the cardiovascular system.

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