

Effects of Blood Flow Restriction Paired with Low-Intensity Resistance Training on Muscle Hypertrophy and Strength Gains in Division III Soccer Athletes

Kaitlyn Judd , Christian Morales , Megan White , Kate Wilkie

Advisor: Dr. Stephen J. Ives

Abstract

Introduction: Blood flow restriction training (BFRT) uses a pneumatic cuff to reduce arterial blood flow and venous return, causing muscles to enter an ischemic state, imposing a greater metabolic stress on working muscles. BFRT is paired with low-intensity resistance training, but causes similar muscle hypertrophy and strength gains compared to those of high-intensity training. Purpose: The purpose of this study is to investigate the effects of adding blood flow restriction training to the a -intensity resistance training regimen, on muscle size and strength in

hypertrophy and strength would occur for blood flow restriction paired with low-intensity resistance training and high intensity resistance training, respectively. Methods: Participants

assigned to the blood flow restriction (BFR) or control group (Control). Training sessions occurred -intensity lift, and separate evaluation sessions took place after Week 3 (males and females) and Week 6 (males only), on rest days.

Results: There w