

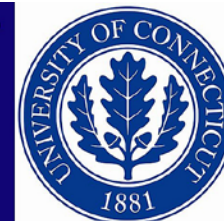
UCONN ABSTRACT

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INFLUENCES OF A DIETARY SUPPLEMENT IN COMBINATION WITH AN EXERCISE AND DIET REGIMEN ON ADIPOCYTOKINES AND ADIPOSITY IN WOMEN WHO ARE OVERWEIGHT

MS Fragala¹, WJ Kraemer¹, R Hesslink², JS Volek¹, BA Spiering¹, DL Hatfield¹, JL Vingren¹, JY Ho¹, CE Forsythe¹, MJ Puglisi¹, JM Anderson¹, and CM Maresh¹

¹Human Performance Laboratory, Department of Kinesiology, University of Connecticut, Storrs, CT, 06269



The influence of a proprietary blend of modified cellulose and cetylated fatty acids (Max WLX™, Max International, LLC, Salt Lake City, Utah 84047) on adipocytokine and regional body composition responses to a weight loss program was examined. Twenty-two women (Supplement group (S) (n=11): age= 36.8±7.2 y; weight=87.1 ±6.2 kg; % body fat= 43.4±4.1); Placebo group (P) (n=11): age = 38.3±6.8 y; weight = 86.9±4.7 kg; % body fat=44.3±2.0) completed an 8-week placebo-controlled, double-blind study consisting of a caloric restricted diet and cardiovascular exercise. Body composition and serum insulin, leptin, and adiponectin were assessed at pre-, mid, and post- intervention. From pre- to post- intervention, significant decreases ($p<0.05$) were observed for body weight (S: 87.1±6.2 to 77.9±5.1 kg; P: 86.9±4.7 to 82.7±3.8 kg) ($p<0.05$ S vs. P), % body fat (S: 43.4±4.1 to 36.1±3.6; P: 44.3±2.0 to 40.6±1.2) ($p<0.05$ S vs. P), leptin (S: 28.3±3.5 to 16.2±2.6 ng·ml⁻¹; P: 29.4±3.2 to 19.9±1.1 ng·ml⁻¹) ($p<0.05$ S vs. P), and insulin (S: 7.3±0.8 to 5.1±0.2 mU·L⁻¹; P: 7.7±0.9 to 5.1±0.3 mU·L⁻¹). Serum adiponectin increased ($p<0.05$) (S: 12.2±2.4 to 26.3±3.0 µg·ml⁻¹; 12.6±2.0 to 21.8±3.1 µg·ml⁻¹) ($p<0.05$ for S vs. P). Supplementation with a proprietary blend of modified cellulose and cetylated fatty acids during an 8-week weight loss program exhibited favorable effects on adipocytokines and regional body composition.