

Original Paper

Effect of resistance training on serum interleukin-18 and C-reactive protein in obese men

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Abstract

Background and Objective: Previous studies have reported inconsistent findings about the effect of endurance training on level of interleukin-18 (IL-18) and high-sensitivity C-reactive protein (hsCRP) in obese individuals. This study was performed to determine the effect of resistance training on serum level of IL-18 and hsCRP in obese men.

Materials and Methods: In this clinical trial, eighteen obese men were randomly divided into training and control groups. After 12-hours fasting, height, weight, body mass index, body fat percent, serum level of IL-18 and hsCRP were assessed before and after training period. Resistance training protocol consisted of twelve weeks training, 3 sessions training per week, each session for 60 minutes.

Results: Mean±SD of IL-18 were 323.34±46.57 pg/ml and 239.43±53.75 pg/ml in training and control groups, respectively. Mean±SD of hsCRP was 3.83±3.65 µg/ml and 3.03±2.98 µg/ml in training and control groups, respectively. This difference was not significant.

Conclusion: Performing resistance training for twelve weeks did not significantly reduce IL-18 and hsCRP in obese men.

Keywords: Resistance training, High-sensitivity CRP, Interleukin-18, Obesity

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