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Visfatin, a novel adipokine, is increased in obesity. It is not well known whether resistance training induced change in adipose tissue and blood lipids decrease plasma visfatin; thus, the purpose of this study was to examine the effect of 8 weeks' resistance training on plasma visfatin in middle-aged men. Nineteen healthy middle-aged men (aged  $39.2 \pm 4.6$  years; height  $173.8 \pm 6.5$  cm; BMI  $24.8 \pm 2.8$  kg/m<sup>2</sup>; mean  $\pm$  SD) participated as subjects in this study. The subjects were randomly assigned to training group (n=9) or control group (n=10). Resistance training was performed for 3 days a week at an intensity corresponding to 65–80% of one-repetition maximum, 8–12 repetitions, 2–4 sets for 8 weeks. The results showed that body fat percent, WHR and plasma visfatin were decreased ( $p < 0.05$ ) in the training group. Maximum oxygen consumption, on the other hand, increased significantly ( $p < 0.05$ ) in the training group compared with the control group. Plasma visfatin levels at baseline were positively correlated ( $p < 0.05$ ) with body fat percent and triglyceride concentration. In conclusion, it was seen that 8 weeks resistance training induced change in adipose tissue decreased plasma visfatin in middle-aged men.

**68** EFFECT OF 8 WEEKS RESISTANCE TRAINING ON PLASMA VISFATIN IN MIDDLE AGED MEN

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