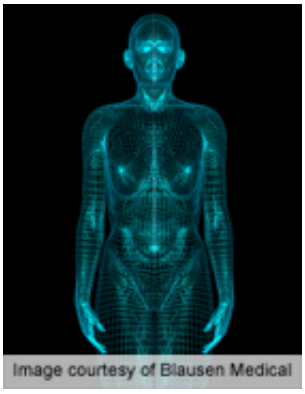
Resistance training improves some inflammatory markers

July 12 2012



Resistance training can reduce visceral fat and alter levels of certain inflammatory markers, according to research published in the July issue of *Obesity Reviews*.

(HealthDay) -- Resistance training (RT) can reduce visceral fat and alter levels of certain inflammatory markers, according to research published in the July issue of *Obesity Reviews*.

Barbara Strasser, Ph.D., M.P.H., of the University for Health Sciences, Medical Informatics and Technology in Hall in Tirol, Austria, and colleagues conducted a literature review to examine the importance of RT on abdominal obesity, visceral fat, and inflammatory response. Twenty-eight studies were identified that evaluated the effects of RT compared with non-exercise controls or aerobic endurance training alone or in combination with caloric restriction.

Overall, the researchers found that, while some trials indicated reductions in visceral fat, the physiological impact was unclear. However, there was good evidence to suggest that RT does slow the rate of visceral fat accumulation over time. Resting serum C-reactive protein levels were significantly reduced with RT, independent of weight loss. RT also tended to improve adiponectin and leptin profiles, but the impact on inflammatory cytokines was unclear.

"In conclusion, although some reports show statistically significant reductions in visceral fat, it is unclear if the magnitude of these changes [is] physiologically meaningful and if they are independent of dietary influence," the authors write. "Hence, long-term RT could be an effective way to prevent or delay abdominal obesity and inflammatory chronic diseases."

More information: Abstract
Full Text (subscription or payment may be required)