EFFECT OF RESISTANCE TRAINING ON TOTAL, CENTRAL AND ABDOMINAL ADIPOSY

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ABSTRACT

Despite the clear benefits that resistance training might have in weight management the effects of resistance training on adiposity in sedentary individuals are unsubstantiated. As such, the aim of the study was to determine the effect of resistance training on anthropometric measures of total, central and abdominal adiposity. Twenty-five healthy, sedentary males not on an energy-restricted diet were assigned to a non-exercising control group (CON) (n = 12) or a resistance training group (RES) (n = 13) to determine the effect of 16 weeks of resistance training on anthropometric measures of total, centrally located and abdominal adiposity. Resistance training was prescribed three times weekly using eight exercises for three sets of 15 repetitions at 60% of one-repetition maximum. Resistance training decreased three of the six anthropometric measures of total adiposity and increased body mass and body mass index (BMI). Resistance training had no impact on the measures of centrally located and abdominal adiposity. Body mass and BMI should be used with caution in risk calculations and measures of total adiposity in individuals engaging in resistance training due to this mode of training increasing lean mass (and thus body mass and BMI). Resistance training reduced total adiposity but did not provide an effective stimulus to lower centrally located and abdominal adiposity.

Key words: Body composition; Physical activity; Resistance training.