

Eccentric resistance training reduces both non-response to exercise and cardiovascular risk factors in adult with overweight or obesity L'entraînement excentrique en force réduit les facteurs de risque cardiovasculaire d'adultes en surpoids ou obèses avec

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© 2018 Elsevier Masson SAS Objectives: The aim of this study was to compare the effect of concentric or eccentric resistance training on different cardiovascular risk factors and the prevalence of non-response to exercise. Materials and methods: Twenty two overweight or obese men were divided into two exercise groups and underwent concentric (CRT) or eccentric resistance (ERT) training respectively, that consisted in squats developed with the help of a Russian belt. Each protocol was performed in four sets of eight repetitions, developed three times per week for four weeks. Results: CRT reduced waist circumference (WC) from 111.1 ± 4.30 to 109.4 ± 4.69 cm and systolic pressure (SP) from 119.7 ± 6.41 to 117 ± 5.32 mm Hg. ERT reduced the WC from 110.5 ± 4.69 to 104.4 ± 4.05 cm and SP from 121.2 ± 4.74 to 116.9 ± 5.18 mm Hg. ERT had greater effect reducing WC value compared to CRT (-3.5% and -11.7% for CT and ET respectively). Additionally, CRT and ERT increased the VO₂ peak from 29.5 ± 2