

# **The Effect of Curcumin Acute Supplementation on Muscle Damage Indices Following One Session Intensive Eccentric Exercise**

Babak Ghanivand Soltani\*, Babak Nakhostin-Roohi,

**The aim of this study was to investigate the effects of curcumin acute supplementation on delayed onset muscle soreness (DOMS) following one session of eccentric exercise. Method: Ten healthy young men completed a double-blind randomized-controlled crossover trial to estimate the effects of oral curcumin supplementation on squat with fifty percent of 1RM with 720 sets performance and DOMS following unaccustomed heavy eccentric exercise. Curcumin or placebo was taken immediately after squat exercise, separated by 14-d washout. Measurements were made at baseline, and 0, 24, 48 and 72-h post-exercise comprising: (a) plasma marker of muscle damage (CK), (b) total antioxidant capacity (TAC), (c) limb pain (1-10 cm visual analogue scale; VAS), (d) muscle swelling (thigh circumference), (f) range of motion (ROM). Results: CK levels were significantly increased after and 24 hours after exercise (p**

**Keywords : Curcumin, Creatine kinase, TAC**

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