

POST-RESISTANCE EXERCISE HYPOTENSIVE RESPONSES AT DIFFERENT INTENSITIES AND VOLUMES

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Abstract. The purpose of this study was to investigate the effects of resistance exercise intensity and volume on post-exercise hypotensive responses. Ten normotensive men (aged 22 ± 0.8 ; height 173.6 ± 2.4 cm and weight 67.2 ± 3.4 kg) participated in this study. The participants performed four ordered sessions of resistance exercise of SHORT volume (3 sets) at LOW intensity (40% 1RM) [SL] and HIGH intensity (80% 1RM) [SH], LONG volume (6 sets) at LOW intensity (40% 1RM) [LL] and HIGH intensity (80% 1RM) [LH] (stations: standing two-arm curl, hamstring curl, parallel squat, seated lat pull-down and supine bench press). Blood pressure was measured before the exercises (baseline) and at intervals of 10 min for 90 min after exercise. Systolic blood pressure decreased similarly for 60 min after SL, SH, LL and LH exercise trials, whereas post-exercise diastolic blood pressure presented no change after trials. In conclusion, resistance exercise intensity (40 vs 80% 1RM) and volume (3 vs 6 sets) in normotensive men did not influence the magnitude and duration of post-exercise hypotension.

Key words: Hypotension; Resistance exercise; Cardiovascular responses; Blood pressure

HIPOTENZIVNI ODGOVOR NA RAZLIČITI INTEZITET I JAČINU VEŽBI OPTEREĆENJA

Cilj ovog istraživanja bio je da se istraže efekti intenziteta i obima vežbi sa opterećenjem na hipotenzivni odgovor na vežbe. Desetorica normotenzivnih muškaraca (starosti 22 ± 0.8 ; visine 173.6 ± 2.4 cm i težine 67.2 ± 3.4 kg) je učestvovalo u ovom istraživanju. Učesnici su uradili četiri organizovanih sesija vežbi sa opterećenjem KRATKOG obima (3 seta) pri SLABOM intenzitetu (40% 1RM) [SL] i VISOKOM intenzitetu (80% 1RM) [SH], DUGOG obima (6 seta) pri NISKOM intenzitetu (40% 1RM) [LL] i VISOKOM intenzitetu (80% 1RM) [LH] (vežbe: vežbe za bicipse na nogama, istezanja potkolenice, paralelni čučnjevi, lateralna istezanja u sedećem stavu i potisak na klupi u ležećem stavu). Krvni pritisak meren je pre vežbi (referentne vrednosti) i pri intervalima od 10 min sve do isteka 90 min nakon vežbanja. Sistolni krvni pritisak se isto smanjivao 60 min nakon SL, SH, LL i LH vežbanja, dok se dijastolni pritisak nakon vežbanja nije menjao. Možemo da zaključimo da intenzitet vežbanja sa opterećenjem (40 vs 80% 1RM) i obim (3 vs 6 seta) kod normotenzivnih muškaraca nije uticao na jačinu hipotenzije po isteku vežbanja.

Ključne reči: hipotenzija, vežbanje sa opterećenjem, kardiovaskularni odgovor, krvni pritisak

