

HYPOTENSIVE EFFECT INDUCED BY STRENGTH TRAINING USING THE DELORME AND OXFORD METHODS IN TRAINED MEN

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Abstract

Introduction. The aim of the study was to investigate the hypotensive responses in normotensive trained individuals after strength training (ST) performed using two training methods: DeLorme and Oxford. **Material and methods.** Fifteen normotensive trained men (age: 25.1 ± 3.2 years; height: 1.78 ± 0.01 m; BMI: 24.78 ± 1.4 kg/m²) were examined alternately in crossover with an interval of 72 hours between the DeLorme and Oxford methods. Firstly, 10 repetition maximum (RM) loads were obtained. DeLorme (50%, 70%, and 90%) and Oxford (90%, 70%, and 50%) consisted in the manipulation of 10RM loads so that the subjects performed three sets until failure in the Smith Machine (SM) and the Leg Press 45° (LP). Blood pressure was recorded at rest, post-exercise, and until 60 min post-session at 10-min intervals. **Results.** Both the DeLorme and Oxford methods showed significant intra-protocol reduction in systolic blood pressure (SBP) at 40, 50, and 60 min time points compared to the rest value ($F = 21.848$; $p = 0.0001$). Similar results were noted for diastolic blood pressure (DBP) between rest value and the 60 min time point ($F = 46.113$; $p = 0.0001$). **Conclusions.** The DeLorme and Oxford resistance training methods provided similar hemodynamic responses and similar hypotensive effects. Therefore, these methods can be used as alternatives to manipulate training intensity-volume ratio intra-session with low hemodynamic stress.

Key words: blood pressure, strength training, hypertension, hypotension, male