

POSTER PRESENTATION

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# The effects of 8 weeks of heavy resistance training and branched-chain amino acid supplementation on body composition and muscle performance

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From International Society of Sports Nutrition: 10th Annual ISSN Conference and Expo  
Colorado Springs, CO, USA. 14-15 June 2013

## Purpose

This study determined the effects of eight weeks of heavy resistance training combined with branched-chain amino acid (BCAA) supplementation on body composition and muscle performance.

## Methods

Nineteen non-resistance-trained males resistance-trained (3 sets of 8-10 repetitions) four times/week for eight weeks while also ingesting 9 g/day of BCAA or 9 g/day of placebo (PLAC) on exercise days only (half of total dose 30 min before and after exercise). Data were analyzed with separate 2 x 2 ANOVA ( $p < 0.05$ ).

## Results

For total body mass, neither group significantly increased with training ( $p = 0.593$ ), and there also were no significant changes in total body water ( $p = 0.517$ ). Also, no training- or supplement-induced ( $p = 0.783$ ) changes occurred with fat mass or fat-free mass ( $p = 0.907$ ). Upper-body ( $p = 0.047$ ) and lower-body strength ( $p = 0.044$ ) and upper- ( $p = 0.001$ ) and lower-body muscle endurance ( $p = 0.013$ ) were increased with training; however, these increases were not different between groups ( $p > 0.05$ ).

## Conclusion

When combined with heavy resistance training for eight weeks, 9 g/day of BCAA supplementation, half given 30 min before and after exercise, had no preferential effects on body composition and muscle performance.

Published: 6 December 2013

doi:10.1186/1550-2783-10-S1-P25

**Cite this article as:** Spillane et al.: The effects of 8 weeks of heavy resistance training and branched-chain amino acid supplementation on body composition and muscle performance. *Journal of the International Society of Sports Nutrition* 2013 10(Suppl 1):P25.

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