Effects Of Branched-Chain Amino Acids Intake During Lacrosse Training On Blood Lactate Level

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Introduction

The aim of the present study was to clarify lacrosse player targeted rating of perceived exertion (RPE), blood lactate level affect in during lacrosse training intake Branched-chain amino acids (BCAA).

Method

This study was designed a randomized, placebo-controlled, double-blind cross over. Nine female college students (Weight:52.9±5.0kg, Height: 160.0±4.6cm, BIM:20.6±1.2 and Body Fat:23.2±1.6%) who enrolled in Physical Education course and also a member of participating in lacrosse club were nominated to participate this study. Nine previously lacrosse players were randomly assigned to either branched chain amino acids (BCAA: FREE FROM BCAA POWDER@ BULKSFPORTS Co. Inc., Miyagi, Japan) or placebo group (PLA). The BCAA contained 3.2g (Ile: Leu: Val=1:2:1) Subjects consumed the supplement just before of supplementation with concomitant middle-intensity training (5mints x 7sets). Subjects took an energy Jelly, a banana and 500 ml water by 2 hours ago of training starting on the day. Blood lactate level was measured 4 times 12-mins interval during goal area training. All participants were measured, RPE, blood lactate level, and Heart Rate (HR).

Results

The results showed no significant differences in RPE, blood lactate level, and HR at intake conditions PLA and BCAA. Body fat and body composition were average as an athlete.

Conclusions

Blood lactate level did not effect intake BCAA during 7v7 small side game in lacrosse. This results indicated that players could take enough protein in a daily meal.

Key

branched-chain amino acids, lacrosse player, training, blood lactate level, college female students’athletes