

**CARBOHYDRATE LOADING IN SOCCER PLAYERS AFTER THE GAME.  
EFFECTS ON MOOD, MUSCLE AND PHYSICAL PERFORMANCE**

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**Abstract**

The professional soccer players use to deplete muscle carbohydrate (CHO) at the end of the game. However there are few studies about the effects of early CHO loading after the game in the recovery period.

**Purpose:** To analyse the effects of early CHO loading just after a soccer game in mood, body weight recovery, muscle soreness and physical performance.

**Methods:** In protocol 1, 40 professional soccer players were evaluated just after and 16 hours following a soccer game in double blind protocols. The CARBO group (n = 20) received 1g/kg of a commercial product with a composition of malt dextrin and fructose in the first 30 minutes after the game. The players were weighted just before, just after and 16 hours after the game. The CONTROL group (n = 20) did not receive any CHO source at least 4 hours after the game. Hydration with water was allowed in both groups ad libitum, 16 hours after the game both groups were submitted to the same procedure in terms of CHO loading just after another game and 16 hours after performed a field shuttle test to measure physical performance

**Results:** The results are showed in average +/- SD. Student t test was used to compare the groups.

<b>weight (kg)</b>	<b>Before game</b>	<b>After game</b>	<b>16h after</b>
CARBO group	77.05	75.35*	76.77
CONTROL group	76.70	74.13*	75.28
<b>16 hours</b>	<b>Mood score</b>	<b>Muscle soreness score</b>	<b>Physical performance (meters)</b>
CARBO group	6.6*	8.6*	1,788*
CONTROL group	8.4	11.9	1,626

\* p< 0,5 (t test)

**Conclusion:** The CARBO recovered the body weight 16 hours after the game. The CONTROL group 16 hours after the game remained with a weight still smaller than before. Compared with the CONTROL group the CARBO group showed better mood index, less muscle soreness and better physical performance. We can conclude that the early CHO loading can improve physical and psychological conditions 16 hours after a soccer game.