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Title:
Carbohydrate Ingestion During Exercise Does Not Delay the Onset of Fatigue During Submaximal Cycle Exercise.

Source:

Abstract:
Lacerda, ACR, Alecrim, P, Damasceno, WC, Gripp, F, Pinto, KMC, and Silami-Garcia, E. Carbohydrate ingestion during exercise does not delay the onset of fatigue during submaximal exercise. J Strength Cond Res 23(4): 1276-1281, 2009-The objective of this study was to evaluate the effect of the ingestion of carbohydrate (CHO, in the form of maltodextrin) or placebo (PLAC, in the form of gelatin) on the physical performance of cyclists during submaximal exercise until fatigue on an ergometric cycle. Nine volunteers exercised on 2 separate occasions at least 2 days apart. On each occasion, after 48 hours of a balanced diet, they pedaled at approximately 66% of peak until fatigue. Every 15 minutes, 150 mL of water and 18 capsules, containing either 0.5 g of CHO or PLAC (~0.13 g·kg⁻¹ of body weight), were ingested in accordance with a double-blind, randomized protocol. The results show that after 40% of total exercise time, blood glucose levels in the CHO test returned to baseline levels. However, in the PLAC trial these levels failed to return to baseline levels, remaining lower than levels recorded in the CHO test after 60% of total exercise time. Despite these results, CHO ingestion failed to delay the onset of fatigue (CHO: 91.8 +/- 10.1 minutes vs. PLAC: 93.3 +/- 16.1 minutes; p = 0.87). In practical terms, coaches and trainers should consider that CHO ingestion in previously fed users does not delay the onset of fatigue during submaximal cycle exercise.

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Author Keywords:
maltodextrin; metabolism; blood glucose; physical performance.

References:


