THE EFFECT OF CARBOHYDRATE MOUTH RINSE ON 10km TIME TRIAL PERFORMANCE IN ENDURANCE TRAINED RUNNERS
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Improvements in cycling time trial (TT) performance by simply mouth rinsing a carbohydrate solution have been reported (1). The purpose of the present study was to determine the effect mouth rinsing a carbohydrate solution on performance during a simulated 10 km treadmill TT. Eight endurance trained male runners (O2 max 66.41 ± 1.92 ml.kg-1.min-1 (mean ± SD)) performed two 10 km runs, on a motorised treadmill, separated by 7 days. Participants rinsed either a 6.4% maltodextrin solution (CHO) or water (PLA) for 5 s, before expectorating the solution into pre-weighed bags. The 10 km performance time was 44s faster during CHO compared to PLA trial (43.79 ± 1.73 min vs. 44.52 ±1.90 min respectively P = 0.038). No difference was observed in speed throughout the time trials (P>0.05), though subjects appear to run faster over the first 3 km in the CHO trial. Heart rate was significantly higher throughout the CHO trial except for the final value (P < 0.05). No difference in the rate of perceived exertion was observed between trials (P > 0.05). In summary, performance benefits observed in cycling from mouth rinsing a carbohydrate solution are also evident during 10 km treadmill running but only appear early in the TT.


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