

Effects Of Ingesting Low Glycemic Index Carbohydrate Food For The Sahur Meal On Subjective, Metabolic, And Physiological Response And Endurance Performance In Ramadan Fasted Men

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Purpose: Ramadan fasting has been shown to negatively influence endurance exercise performance. To mitigate this impact, the aim of the present study therefore was to investigate the effects of ingesting low glycemic index (LGI) carbohydrate meal on subjective, metabolic, and physiological responses, and endurance performance in the Ramadan fasted state. Methods: During Ramadan, twelve moderately trained Muslim men, in a randomized and crossover design, ingested as the sahur meal (i.e., last meal before commencement of the day's fast), either a LGI (glycemic index = 37) or a normal, typical (Control or CON; glycemic index = ~57) fried rice meal of equivalent macro-nutrient. At the ~12 h mark postprandial sahur meal, subjects completed a 60-min continuous run (consisting of 30-min at constant velocity followed with a 30-min time-trial). Results: There were no significant differences between the two types of meals for ratings in perceived satiety, fullness, and appetite throughout the 12 h postprandial period. During the constant velocity run, there were no significant differences in metabolic and physiological measures between LGI and CON meal trials. In the time-trial run, distance covered was significantly lower in LGI versus CON meal trial, but with a corresponding lower rating of perceived exertion in the LGI trial. Conclusion: The consumption of a LGI sahur meal did not provide any metabolic, physiological or performance benefits during endurance run performed at 12 h postprandial in the Ramadan fasted state.