

THE EFFECTS OF PRE-EXERCISE CORINTHIAN CURRANTS SUPPLEMENTATION ON ANTIOXIDANT RESPONSES

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The use of nutritional supplements before and during a sporting event, especially of a prolonged nature, is very common among competitors and routinely advised by exercise professionals. Corinthian currants have a high carbohydrate content making them a potentially ideal carbohydrate source for prolonged exercise. However, their effectiveness as an ergogenic aid has never been studied. **Purpose:** The aim of the present study was to investigate the effectiveness of corinthian currants as an ergogenic aid during prolonged exercise. **Methods:** Twelve (10 males, two females) healthy individuals (Body Weight: 75.3±10.9 kg, Height: 172.8±8.1 cm, VO₂max: 45.4±5.9 ml/kg/min) participated. Participants were asked to perform in random order one of the following three conditions: 1. Corinthian currants, 2. Glucose, 3. Water. In each condition, participants were asked to cycle for 90min at an intensity corresponding to 70-75% of their predetermined VO₂max followed by an effort to exhaustion. Blood samples were collected before exercise, at 30, 60 and 90 min of exercise, at exhaustion and 1h post exercise. Blood was analysed for total antioxidant activity (TAC) and glutathione (GSH) levels. **Results:** TAC was significantly (p<0.05) increased due to time in all three conditions without a significant interaction being observed. Furthermore, GSH was also significantly (p<0.05) decreased due to time in all three conditions without a significant interaction being observed. **Conclusions:** These results indicate that pre-exercise supplementation with corinthian currants does not result in significant perturbations in the antioxidant system during and following an exhaustive aerobic exercise.