Abstract

Objective: The study investigated the effect of supplementation with maltodextrin (CHO) alone or associated to caffeine during exercise in T2DM subjects. Methods: Eight subjects with T2DM, aged 55±10 years, received CHO (1g/kg) or caffeine (1.5 mg/kg) alone or associated before exercise protocol. The exercise was executed at 40% heart rate (HR) reserve for 40 min, with 10-min recovery. Blood pressure (BP) and perceived exertion scale (Borg) were checked every 2 min. Blood glucose (BG) was checked every 10 min. For statistical analysis, ANOVA test was used and the value was considered statistically significant at p <0.05. Results: The results showed that BP and HR did not change significantly among all treatments. Caffeine promoted a significant reduction in BG of 75 mg/dL (65%, p <0.05) during 40 min of exercise protocol compared to all groups. Conclusion: Supplementation with 1.5 mg/kg of caffeine reduces BG concentration during prolonged exercise in T2DM patients.

Keywords

Keywords, Diabetes mellitus, caffeine, supplementary feeding, exercise.