

The Influence of Exercise Intensity on Post-Exercise Appetite Response

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Purpose: To investigate the effects of exercise intensity on blood glucose response and hunger during recovery from exercise. **Methods:** Eight (male = 6; female =2), healthy volunteers (age=22.3±2.2 yrs.; BMI=25.3±1.9 kg/m²) completed two exercise conditions performed at self-selected pace: 2-mile run (Run) and a 2-mile walk (Walk) on separate days. Immediately prior to and following the exercise, blood glucose (BG) and lactate (BL) were measured. Upon completion of exercise the subjects sat comfortably for a 1-hr period over which time hunger was assessed every 15 min. Data were analyzed using a 2-way ANOVA with repeated measures (SPSS v. 19). **Results:** Post-exercise hunger was significantly elevated during recovery (p<.05), but no treatment effect was present. BL was significantly increased by RUN; but BG was not different between conditions. **Conclusion:** A fixed distance session of exercise completed under different intensities was not found to elicit differences in hunger sensation over one h of recovery from exercise. It may be that a greater exercise energy deficit would produce different effects on hunger.

Condition	Time (min)	Post-ex BG (mg/dl)	Post Hunger	1 h Hunger*
Walk	35.9±1.4	87.3±4.8	4.3±0.8	6.5±0.8
Run	18.6±1.1 [#]	84.6±6.7	5.2±0.8	7.3±0.8

*Different from Post Hunger (p<.05);[#] different from Walk (p<.05).
