

**The Acute Effect of Moderate Intensity Stair-Climbing on Postprandial Blood Glucose**

**NCT Number: Not assigned yet**

**February 24, 2016**

Sample size was determined with G\*power3 based on the results from pilot data of 0, 3 and 10 min stair climbing bouts (32 steps up and down) at self-selected stepping rate following consumption of a 75 g glucose drink. Specifically, with an effect size of  $\eta^2 = .144$  and average correlation among repeated measures for the glucose area under curve of  $r = -.26$  we calculated that a total sample size of  $N = 22$  would be necessary to achieve power  $(1 - \beta) \geq 80\%$  at the predetermined  $\alpha$ . Allowing for an attrition rate of 25% we will enroll a total of 30 participants.

Data will be analyzed with a 4 way repeated measures analysis of variance. The Level of significance will be set a priori at  $\alpha \leq .05$