Exercise as a buffer against stress induced overeating
ClinicalTrials.gov #: NCT02936076

Statistical Analysis Plan
9.11.19

Primary Aim: To compare exercise and delayed exercise conditions on stress-induced overeating (measured via smartphone surveys) at 12 weeks.

Analysis plan: Effects of exercise vs. delayed exercise on stress-induced overeating was examined using a longitudinal regression model implemented with Generalized Estimating Equations (GEE's) with robust standard errors. GEE's using a logit link and further adjusted error terms for the clustered nature of the data. Models included specifications of time (a time-varying indicator of day, indexed by monitoring period).

Secondary Aim 1: To compare exercise and delayed exercise conditions on changes in body weight from baseline to 12 weeks.

Analysis plan: Percent weight loss from baseline to 12 weeks was calculated for each participant and independent samples t-test were used to examine whether exercise and delayed exercise conditions differed from one another.

Secondary Aim 2: To compare exercise and delayed exercise conditions on their self-reported perceived stress at 12 weeks.

Analysis plan: A univariate ANOVA, controlling for baseline stress levels was used to assess whether exercise and delayed exercise conditions differed from one another at 12 weeks.