ABSTRACT
Rates of obesity and physical inactivity continue to rise, particularly among women. PURPOSE: To measure the difference between maximal oxygen consumption between female NCAA Division III college athletes and female non-NCAA Division III athletes. METHODS: Voluntary, female NCAA Division III tennis athletes (N=9, M age=20.1 years) and female non-athletes (N=9, age= M 20.4 years) were recruited by the researcher in Spring 2019. Participants self-reported height and weight to calculate Body Mass Index (M=23.88 kg/m², SD=5.46 kg/m²) and completed the Queen’s College Step Test. Maximal oxygen consumption was determined using Katch and McCardle’s Queen College Step Test recovery heart rate predicted formula. RESULTS: An independent samples T-test determined that there was not a statistically significant difference (t=.068, df=16, p=.947) between athletes (M=37.41 ml/kg/min, SD=3.91 ml/kg/min) and non-athletes (M=37.57 ml/kg/min, SD=6.17 ml/kg/min). CONCLUSION: Although there was no statistically significant difference for maximal oxygen consumption between the athletes and non-athletes, average scores for both groups were classified as “fair”, per ACSM classifications for age and gender. Efforts to improve cardiorespiratory fitness should be considered for college athletes and non-athletes, particularly as rates of hypertension and cardiovascular disease have increased among American adults.