

Examination of Sedentary Time, Physical Activity, and Body Mass Index (BMI) in College-Aged Students.

Larouere, B., Winters, C. Slippery Rock University, Slippery Rock, PA.

beth.larouere@sru.edu, carena.winters@sru.edu

Purpose: The purpose of this investigation compared physical activity levels, sedentary time, and BMI in college students who met and did not meet the 150 min/wk of moderate exercise recommendation.

Methods: Data on n=619 students who completed the Student Health Assessment Project (SHAP), a cross-sectional survey of college student health was used for this investigation. Data was collected during the Spring 2011, Fall 2011, and Spring 2012 semesters. This survey consisted of questions related to safety and violence, tobacco, alcohol, and other drug use, diet, exercise, and sleep patterns, sexual behavior, stress, depression, and perceptions about body image. Subjects' height and weight were measured to calculate BMI by researchers using a standard protocol in a private setting. **Results:** The mean age was 19.29 ± 1.47 years, and included 64% females, and 93% Caucasians. According to BMI, 43% of the sample was classified as being overweight or obese with a BMI ≥ 25 kg/m². When assessing physical activity, 64.5% of the subjects did not accumulate the recommended 150 min/wk of PA. It was reported that 12.31 ± 5.04 hours per day was spent in sedentary behavior including napping, lying, sitting, and standing. All measures of physical activity were significantly higher ($p < 0.05$) for those meeting the PA guidelines. There was no difference in BMI ($p = .315$), nor total sedentary time ($p = .403$) between the groups. There was not a relationship between moderate physical activity and total sedentary time ($r = -.042$, $p > .05$). **Conclusion:** Although measures of physical activity were significantly different between those who met or did not meet physical activity guidelines, there was no difference in the sedentary behaviors between groups. Physical activity was not correlated with sedentary time. Therefore, when estimating health risk, sedentary activities such as sitting, lying down, napping, and standing should be measured independently in addition to the measurement of physical activity. Campus wide programming should not only target increasing physical activity but also specific strategies to reduce sedentary behaviors common on college campuses.