



# Mid Atlantic Regional Chapter of the American College of Sports Medicine

Annual Scientific Meeting, November 2<sup>nd</sup> - 3<sup>rd</sup>, 2018  
Conference Proceedings  
International Journal of Exercise Science, Issue 9, Volume 7



## The Influence of Physical Activity, Diet, and Substance Use on Academic Performance

Peter J. Matthews, Oliver W. A. Wilson, Zack Papalia, Michele Duffey, Melissa Bopp, FACSM. Pennsylvania State University, University Park, PA

Physical inactivity, poor diet, and alcohol/substance abuse are common health behaviors among college students. However, little is known about the relationship between these health behaviors and academic performance. *Purpose:* To examine differences in grade point average (GPA) based on physical activity (PA) levels, fruit and vegetable consumption (FVC), and use of alcohol and substances. **METHODS:** Students completed an online survey self-reporting demographics (age, sex, race/ethnicity), PA (min/week of moderate and vigorous PA), FVC (servings/day), use of alcohol and substances (yes/no), as well as GPA. Independent samples ttests were used to examine differences in GPA between those who did/not meet PA and FVC recommendations, and those who did/not use alcohol and substances. **RESULTS:** Data was collected from 3738 participants (women, 57.8%, non-Hispanic white, 77.2%). For all participants, GPA differed significantly between those who did (3.40±.40) and did not (3.36±.48) accumulate 500 weekly MET minutes  $p=.034$ , and those who did (3.42±.40) and did not (3.34±.46) meet FVC recommendations ( $p<.001$ ). GPA also differed significantly between tobacco users (3.26±.41) and non-users (3.40±.42,  $p<.001$ ), as well as cigarette users (3.30±.40) and non-users (3.41±.42,  $p<.001$ ), but not based on alcohol use, for all participants. **CONCLUSION:** Findings indicate that those who utilize substances, are less physically active and display unhealthy eating habits, tend to have poor academic performance. This provides insight to students and campus health professionals regarding how their health behaviors may be affecting their GPA.