

The Effect Of The COVID-19 Pandemic And Quarantine Period On The Physical Activity And Dietary Habits Of College-aged Students

CORBY SIDEBOTTOM¹, SARAH ULLEVIG², KELLY CHEEVER³, TIANOU ZHANG¹

¹Laboratory of Exercise & Sports Nutrition; Department of Kinesiology; The University of Texas at San Antonio; San Antonio TX

²Laboratory of Community Health & Nutrition Research; Department of Dietetics, The University of Texas at San Antonio; San Antonio TX

³Department of Kinesiology; The University of Texas at San Antonio; San Antonio TX

Category: Professional

Advisor / Mentor: Zhang, Tianou (tianou.zhang@utsa.edu)

ABSTRACT

BACKGROUND: The COVID-19 pandemic has led to sudden extreme changes in lifestyle, potentially causing adverse changes in physical activity (PA), sedentary behavior (SB), and dietary habits. It is important to investigate how college students are being impacted by the quarantine periods and campus closures. The objective of the study was to investigate the effects of COVID-19 quarantine on frequency of physical activity, frequency of food consumption and food insecurity among college students. The findings of the study will provide preliminary evidence on dietary, PA, and SB changes induced by the pandemic among college students. **METHODS:** Participants (N = 403) completed a cross-sectional self-report online questionnaire, evaluating the PA, SB, and dietary behaviors before- and during-campus closures (March - May 2020), due to COVID-19. Sociodemographic and descriptive information were also obtained from each participant. A combination of nonparametric statistical tests were used to assess changes in PA, SB, and dietary habits, and between group differences. **RESULTS:** A total of 291 participants met the inclusion criteria (college-aged, 18-24 years). A mean decrease of 1.26, 1.70, 1.57 days/week ($p < .001$) were found for vigorous, moderate, and light-intensity PA, respectively. SB increased by 2.66 hours/day, $p < .001$. A significant number of participants reported increases in meals cooked at home (39.2%) and alcohol consumption (33.2%), $p < .001$. Lastly, the percentage of individuals reporting food insecurity significantly increased during COVID-19, $p < 0.001$. **CONCLUSION:** College-aged students in quarantine significantly decreased PA levels and increased SB. A significant number of students reported negative changes in dietary habits, most notably in alcohol consumption. Food insecurity significantly increased among the current sample. Public health strategies to attenuate the negative changes in lifestyle habits should be implemented during a global pandemic.

Keywords: COVID-19, Physical Activity, Dietary Behavior, College Students