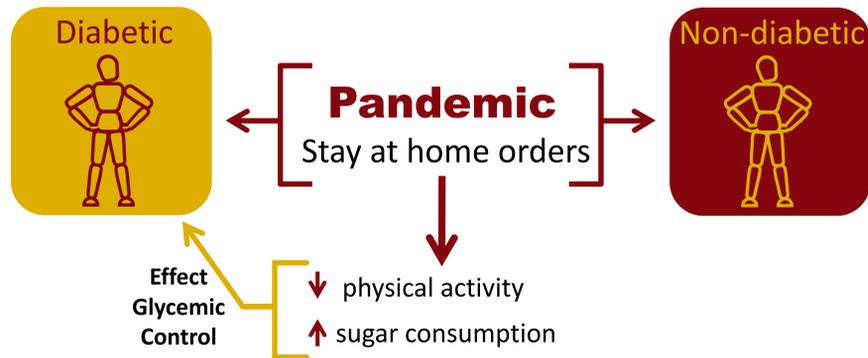


Health Behaviors of College-aged Diabetic Students during COVID-19

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Background

COVID-19 has compelled world leaders to implement new regulations designed to slow the spread of the pandemic, including mandated social distancing, mask wearing, and stay-at-home orders. These stay-at-home orders have led to changes in lifestyle habits. In studies of lifestyle changes that occurred during the initial stay-at-home orders in 2020, adults reported increased consumption of both number of meals and number of foods high in sugar. Physical activity levels also decreased. This suggests that individuals diagnosed with diabetes might have had increased difficulty maintaining proper glycemic control during the pandemic. Based on studies by Colleen Conley, students in the first two years of college generally experience a decrease in physiological functioning and cognitive-affective strategies. This may make them especially sensitive to the lifestyle changes resulting from COVID-19. However, there have been few studies focused specially on the college-aged population.



Purpose

The current study aims to determine any differences that the COVID-19 pandemic has had on the lifestyle behaviors of college-aged students with diabetes and college-aged students who do not have diabetes.

Methods

Participants were asked to complete an online, anonymous, Qualtrics-based survey that asked questions about lifestyle changes that have occurred during the pandemic. Questions focused on changes in sleep, weight, sugar consumption, total food consumption, and physical activity.

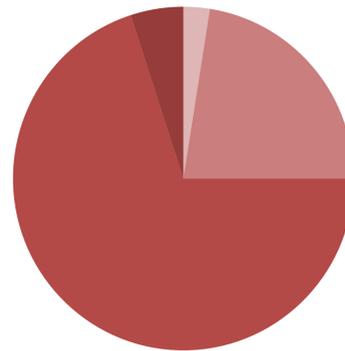
References

1. Ammar, A. *et al.* Effects of COVID-19 Home Confinement on Eating Behaviour and Physical Activity: Results of the ECLB-COVID19 International Online Survey. *Nutrients* **12**, (2020).
2. Di Renzo, L. *et al.* Eating habits and lifestyle changes during COVID-19 lockdown: an Italian survey. *J Transl Med* **18**, 229 (2020).

Results

- 58 participants responded to the survey, with 2 respondents self-identifying as having been diagnosed with diabetes.
 - The data presented below represent the 56 respondents that did not self-identify as having diabetes.

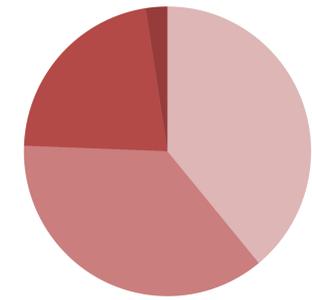
Change in Activity Level



■ Not Changed ■ Increased ■ Decreased ■ Other

“During the COVID-19 Pandemic, my activity levels changed”

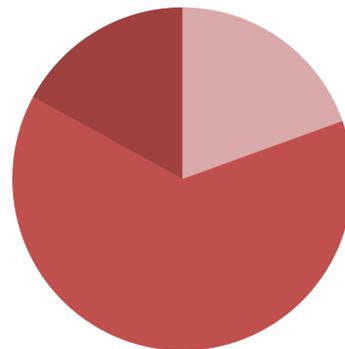
Change in Weight



■ Not Changed ■ Increased
 ■ Decreased ■ Other

“During the COVID-19 Pandemic there was a change in my weight”

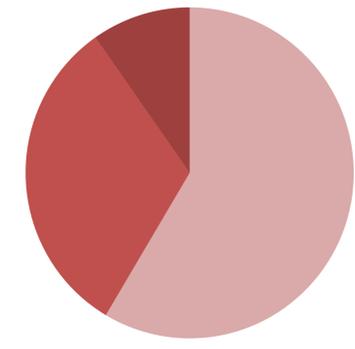
Change in Sleep Hours



■ Not Changed ■ Increased ■ Decreased

“During the COVID-19 Pandemic, the hours I slept changed”

Change in Sugar Consumption



■ Not Changed ■ Increased ■ Decreased

“During the COVID-19 Pandemic the amount of sugary foods I ate increased”

Implications for Research and Practice

- There were 2 Loyola Students that took the survey and reported a diagnosis of diabetes. Given the small population size and limited resources of outreach there was a lack of representation of diabetic students.
- Those with diabetes are at increased risk for infections and are impacted greater with changes in lifestyle habits. The survey found a decrease in physical activity and a slight increase in sugar consumption. These factors may make it more difficult for diabetics to manage glycemic control thus increasing infection susceptibility. There is a need for further research into how the pandemic has affected those with diabetes.

Conclusion

The change in day-to-day life and activities resulting from the pandemic were shown in the majority of participants reporting a change in their overall health perception, and health behaviors such as activity level, sleep, and eating habits. However, due to the small sample size and lack of diabetic student's further research is needed to investigate how the pandemic can affect those with diabetes and their glycemic control more than non-diagnosed college-aged students.