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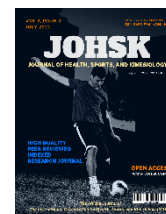
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Eating Habits and Lifestyle Changes of College Students During COVID-19 Outbreak

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Introduction

The epidemic that was a result of the Coronavirus (Cupples, 2019) began in China towards the end of 2019 and has quickly spread throughout the world. To minimize the spread of the virus and keep it as contained as possible, many countries have required residents to quarantine. This epidemic has been a major concern for students of all ages, especially college students. Students that attend universities have been affected more profoundly due to the close quarters of dorms, fraternities, sororities, and close classroom contact. Due to the contagiousness of the virus and the fact that many who are positive can be asymptomatic hundreds can be affected quickly. The pandemic has forced many students to quarantine themselves. This requires that they not leave their homes, rooms, and apartment for a period of up to 14 days.

Purpose

The purpose of this research was to assess how COVID has affected college students and how it has affected their eating habits and lifestyle habits.

Methods

The COVID19 questionnaire was specifically built by using Google Form by the department of Exercise Science of the Georgia College. The questionnaire included 35 questions divided into three different sections: (1) anthropometrics data, (2) lifestyle, eating habits changes, psychological and emotional aspects during the pandemic period, (3) physical activity habits information. All participants were fully informed about the study requirements and were required to accept the data sharing and privacy policy before taking part in the study. The participants completed the questionnaire directly connected to the Google Form. The participants' answers were anonymous and confidential. Descriptive statistics were employed to explore demographic, personal characteristics, and anthropometric parameters of the study sample. Data are represented as numbers and

percentages in parentheses (%) for categorical variables or mean and standard deviation (SD), as well as median and interquartile range in square brackets [IQR] for continuous variables. The Shapiro–Wilk test was carried out to evaluate variables distribution. All the variables had non-normal distribution. The estimated population size is total number of undergraduate students at Georgia College (n= 5,844). Confidence level is 95%. When margin of error is 13%, estimated sample size is 57.

Results

We conducted a survey of Georgia College students and asked them a series of questions related to their health, sex, diet, and how COVID has affected them. We asked them a series of questions that related to their health, age, sex, previous diseases, exercise, diet, and weight gain. We surveyed 58 students both male and female (Table 1). The majority of people surveyed were college students.

In regard to lifestyle changes during the COVID-19 lockdown most of the population sampled stated that their habits did not change, and COVID-19 did not negatively affect their diet and eating habits. Many students did not change their eating habits, or felt that their eating habits improved, to make healthier choices during the COVID-19 pandemic. Prior to the pandemic, 59% of those sampled ate out 1 to 2 times a week. During the pandemic, that percentage decreased to 46% and the number of subjects who ate out no times a week increased from 10.3% of the sample population to 26.3% of the sample population. This is likely as a result of the measures taken by local governments to help curb the spread of COVID. The survey also indicated that 48% of the population are ordering less from restaurants, take-out and delivery and 52% of the sample population's meals were prepared themselves at homes more often. Furthermore, 69% of those sampled either ate the same or less than they did before the pandemic began. Because exercise habits did not change considerably this decrease in consumption of non-homemade food likely contributed to the sample population's perception of their weight, as 63% said that they thought their weight stayed stable, or they had lost weight.

The COVID-19 pandemic lockdown had the biggest impact on the sample population's psychological health as 62.8% of those sampled felt more stressed and 57.6% of those sampled felt lonelier compared to before the pandemic (Table 2). While only 25% of the students found themselves eating more because of stress, 49.3% of the students found themselves eating more than normal due to being bored. Alcohol consumption did not increase significantly during the pandemic.

Table 1. Physical Characteristics and Anthropometrics

Variables	Participants (n=58)
Age (years)	20.7 ± 0.8
Height (cm)	169.0 ± 16.6
Bodyweight (kg)	69.4 ± 13.8
BMI (kg/m ²)	23.6 ± 3.5

Table 2. Emotional State During the COVID-19

Variables	A lot less	Somewhat less	The same	Somewhat more	A lot more
Stress	2 (3.4%)	2 (3.4%)	18 (31.6%)	26 (45.6%)	10 (17.2%)
Loneliness	2 (3.4%)	2 (3.4%)	21 (36.2%)	30 (51.8%)	3 (5.2%)

Note: Values are expressed as number and percentage (n (%)) for categorical variables

Discussion

The survey asked specific questions about diet, health, and exercise. The results were similar to Gallè's study (2020). "There was a study done on Italian undergraduate students and this study indicated that most student's dietary

habits were not affected by the quarantine" (Gallè et al, 2020). In fact, some students felt that it had helped their diet by making healthier choices when possible. For those students that are being provided meals in quarantine and in dining halls, a majority of the food offered is pre-packaged and securely contained options. This helps to reduce the potential spread of the family style options that used to be available. All utensils are typically plastic and in pre-sealed packages. Enforcing these new procedures, is to help ensure the spread slows down or to reduce it as much as possible. Students that are forced to quarantine if following the rules correctly, will have to rely on outside help for meals. If they are on a meal plan, then most universities have implemented a food delivery plan that enables them to get meals from the dining hall. But, for those that live in apartments or off campus it can be more problematic. If students are quarantined, they would not technically be allowed to go to the grocery store and most students cannot afford to have the store delivery option. This has forced many to order fast food or take out and those typically tend to be less healthy and higher in sodium. The main limitation of this study was that the data collected was self-reported. This could lead to misreporting of data. Also, the sample size was small.

Conclusion

When diet and food habits of a population of 58 college students were assessed, few major changes were seen, although psychological health did suffer to an extent. As the COVID-19 pandemic is still ongoing, our data need to be investigated in the future with a larger college population.

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