



Relationship Between Weight Status and Lifestyle Behaviors during the COVID-19 Pandemic

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ABSTRACT

COVID-19, or Coronavirus, is a disease that has recently caused a shift in the world and doctors are learning more about it each day. This sickness made its way to the U.S. in 2020 and has since spread to various regions of the world. This pandemic has greatly affected how individuals live their daily lives in how they interact with others, how they work, and how they simply go about their daily routine. More individuals are staying at home more and getting out less, thus potentially impacting their physical and mental health. The purpose of this study is to understand the effect of COVID-19 and assess if participants' weight fluctuated and understand change in lifestyle behaviors and their potential impact on weight. The results will assist the dietetics community in properly addressing potential health concerns as a result of the worldwide Coronavirus pandemic. Problems associated with the virus are expected to include weight gain, lack of physical activity and poor dietary habits throughout the pandemic. Qualitative and quantitative data collection methods were utilized and was collected by compiling direct questions regarding weight status, including how much weight gained or lost, and lifestyle behaviors that may impact weight like preparing meals at home, eating outside of the home, engaging in physical activity, as well as alcohol, tobacco, and/or drug use. Questions were distributed through the researchers' personal Facebook accounts and response data of 118 participants were automatically generated through *Google Forms*. Two participants were excluded from the study, thus producing a total of 116 total participants. 34.5% of participants reported gaining weight during the COVID-19 pandemic whereas 27.6% lost weight. Most participants attributed weight status to their diet [75] and physical activity [72]. More participants [50.9%] report preparing meals at home 6 or more times during the pandemic and only eating out or using delivery services 0-1 times per week. 35.7% of participants report engaging in physical activity 2-3 times per week. 34.5% of participants reported that they engaged in alcohol/tobacco/drug use only 0-1 times per week [34.5%]. The data suggests that weight status, whether lost or gained, was most attributed to diet and physical activity. Most individuals are preparing most of their meals at home and eating out less, as well as maintaining a low-moderate amount of exercise thus potentially influencing individual weight loss and gain, respectively.

BACKGROUND

COVID-19, or Coronavirus, has recently caused a shift in the world while health professionals are learning more about it each day. The widespread virus has not only affected how people interact with the world, but has disrupted everyone's lives in a major way. It is not yet clear how COVID-19 has impacted the nation's weight. However, there is anecdotal evidence suggesting there has been more weight gain during the COVID-19 pandemic, although there are those that report losing weight during this tumultuous time. As systemic life changes have affected all Americans, we would expect to see systemic change in individual's lifestyle behaviors thus affecting their weight status.

OBJECTIVES

The purpose of this study is to understand the effect of COVID-19 in the United States and understand potential changes in lifestyle behaviors as it impacts weight status.

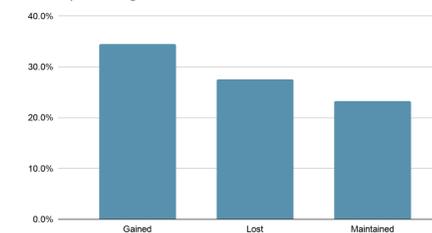
METHODS

The data for the study was collected by compiling direct questions within a survey regarding weight status and lifestyle behaviors that may contribute to changes in weight. Weight status questions assessed if individuals lost or gained weight as well as asked participants to estimate how much weight in pounds they had lost or gained during the duration of the pandemic. Lifestyle behavior questions assessed the number of times per week participants reported preparing meals at home versus eating outside of the home, engaging in physical activity, and assessing alcohol, tobacco, and/or drug use. These quantitative and qualitative methods were compiled using a *Google Forms* survey platform and participants were provided a link through the researchers' personal social media accounts. Implied consent was obtained, and participants were provided with one week to fill out the survey. A total of 118 responses were automatically generated through the survey. Exclusion criteria of this study included pregnant women and individuals under 18 years of age. After the exclusions were considered, there was a total study population of 116 eligible participants.

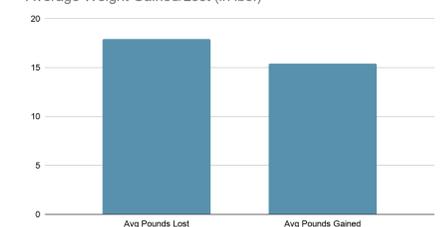
RESULTS

Most participants (34.5%) reported that they experienced a form of weight gain rather than weight loss (27.6%). Although the majority of participants reported weight gain, the average weight loss (17.9 lbs) was greater than average weight gained (15.4 lbs). Majority of participants (65.8%) attributed weight status to their diet and physical activity (63.2%). More than half of participants (50.9%) reported preparing meals at home 6 or more times during the pandemic. Respondents report not going out to eat as frequently or using restaurant delivery applications as 50.9% of participants report eating out or using delivery applications 0-1 times per week. 35.7% of participants reported a low to moderate exercise regimen engaging in physical activity 2-3 times per week. Most participants (34.5%) reported low usage of alcohol/tobacco/drugs 0-1 times per week.

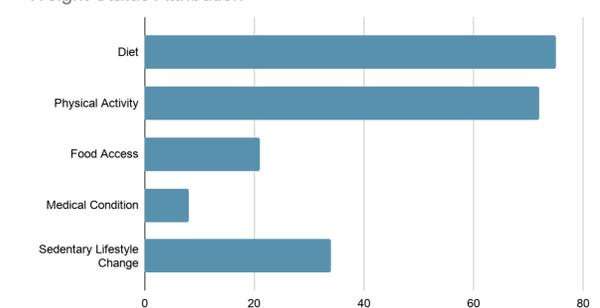
Participant Weight Status



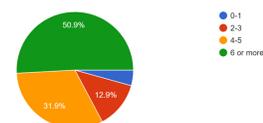
Average Weight Gained/Lost (in lbs.)



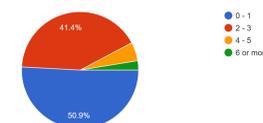
Weight Status Attribution



How many times per week are you preparing your own meals at home during the COVID-19 pandemic? 116 responses



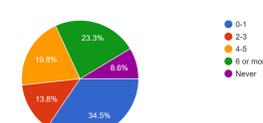
How many times per week are you eating at fast food restaurants, including physically going to other restaurants and using restaurant delivery service applications during the COVID-19 pandemic? 116 responses



How many times per week are you engaging in physical activity during the COVID-19 pandemic? 115 responses



How many times per week are you engaging in alcohol/tobacco/drug use during this COVID-19 pandemic? 116 responses



CONCLUSIONS

Although more participants reported gaining weight, the total and average pounds was more substantial amongst those who reported weight loss. The majority of participants report preparing more meals at home, eating outside of the home less, and engaging in moderate to low amounts of physical activity. This is all to be said, we conclude any reported weight gain could potentially be contributed to decreased physical activity whereas reported weight loss may be attributed to an increase in preparing meals at home with a decrease in eating food from outside of the home. Alcohol, tobacco, and drug use could have played a part in both weight gain and weight loss as respondents reported use on both ends of the spectrum.