Introduction

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# Abstract

This Research study investigates the effects of stress, especially in the college population, on emotional overeating. Obesity has been at a steady incline in the United States, and it is well known that overeating leads to obesity. But how large of a role does stress play on weight gain, nutritional decisions, and emotional overeating?

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## Introduction

Obesity has been at a steady incline over the past couple of years and is projected to continue that incline in the years to come. It is well known that fast food is a major contributor to obesity; however, that can't be the only cause. Obesity occurs when energy intake is greater than energy expenditure. Therefore, it is logical to suggest that when caloric intake is increased, as a result of overeating, for a prolonged amount of time that obesity will be the result. But what causes people to eat far more than the amount they need to function? One of the culprits is fast food. Fast food is known as hyper-palatable food, these are processed foods which combine fat, carbohydrates, and sodium to enhance the taste without satiating hunger. Another major contributor to overeating is stress and this tends to relate more to emotional overeating. Stress causes the body to release the hormone epinephrine, and if it is continuous levels of stress then cortisol is released. Cortisol has been found to increase a person's appetite, therefore contributing to overeating and weight gain (Harvard Health). College is a very stressful time for people, especially freshmen who are just starting out on their own. There is something known as the freshmen 15, which is when freshmen gain a significant amount of weight, whether it's partying, not eating nutritious food, or stress-induced overeating. Stress is a leading cause of emotional overeating which can lead to weight gain and unhealthy nutritional choices. For my research project I will be investigating the questions; How many college-aged students feel like stress has caused them to emotionally overeat? And what type of food do they reach for when/ if they are eating to deal with stress?

## Methods

#### **Research Method**

For my Primary Research study, I conducted a survey amongst college age students. The survey was conducted using google forms and distributed via my snapchat story as well as my Instagram story. The reason I utilized snapchat as a way to distribute my survey was because it was an easy way to ensure lots of responses and the target audience for the survey, college-aged students, is what my snapchat consists of. In order to get a sufficient amount of responses, I also utilized my Instagram because I had a larger following on Instagram. The list of questions included in my survey consist of the following:

#### Script

- What's your assigned sex at birth?
- How old are you?
- What academic year of college are you currently in?
- Do you feel like since starting college you have been more stressed?
- Do you feel like you have gained weight since being enrolled in college?
- Do you ever use food as a coping method for stress?
- When you feel stressed what are your go to foods to eat?
- Do you eat more than you did prior to college?
- How has your diet changed since being in college?.

Once I collected the desired number of responses, I was able to turn that data into charts and

graphs. I Then used those statistics and visuals to answer my research questions and provide

insight into drawing a conclusion to my research questions.

#### Limitations

Originally when I posted the link to my snapchat story I didn't receive as many responses

as I had originally hoped for. I soon realized the timing I had posted the link was not ideal, as it

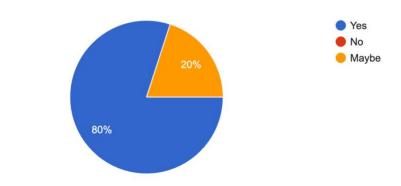
was a Friday night. Most college kids are not wanting to spend their Friday nights taking surveys

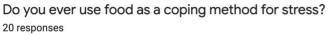
on their eating habits. To correct this, the next morning I posted it to my Instagram story. I still

didn't get as many responses, but more than I would have gotten if I had just used the initial responses.

## Results

When analyzing the results of my survey, there were several different conclusions that could be made and applied to the overall research questions. Something worth note is that out of the 20 responses I collected, most of them were from female participants. The ages of the participants varied from 18-22, which is college aged- students. 35% of responses were freshmen in college, 25% sophomores, 10% juniors, 25% seniors, and 5% grad students. 100% of the participants answered yes to the question "Do you feel like since starting college you have been more stressed". Responses to the question "Do you feel like you have gained weight since being enrolled in college", resulted in 60% saying yes and 40% saying no. The next question in the survey is pictured below:





The open-ended question "when you feel stressed what are your go to foods to eat" gained a variety of different responses. Most of these responses were either snack foods, surgery foods) especially chocolate, or foods high in carbohydrates. Except for one outlier response who said when they are stressed, they try to eat something healthy because they want to control everything and be perfect. The other open-ended question, "How has your diet changed since

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being in college?" showed that since being in college most of the participants eat a less balanced diet, eat for convenience, eat more snacks. A couple responses said that they eat healthier, are too busy to eat, and have more consistent meals. The final survey question to report, "do you eat more than you did prior to college?" resulted in a 50/50 tie of yes to no responses.

## Discussion

Based on background research, as well as, my primary research survey responses, there seems to be a consensus that stress in college-aged students leads to overeating. The main reason I was interested in using college-aged students in my survey was because of the significant increase in stress when entering college. This is proven by the 100% response of "yes" to the survey questions, "do you feel like since starting college you have been more stressed?". 60% of the participants voted yes to the questions, "do you feel like you have gained weight since being in college?" This question is somewhat partial, and open to the individual's interpretation of themselves and how they see themselves. But even so, it is well known that when energy intake is greater than energy expenditure, the result is weight gain. Therefore, if people are overeating and taking in more calories than they use, they are going to gain weight. The next question, "do you ever use food as a coping method for stress?" is the main source of responses used to answer my first research question. The responses to that survey question were 80% yes and 20% maybe. This shows that people are aware of the fact they use food as a coping mechanism for stress, and when combined with the high levels of stress indicated by the first question's responses, we can conclude that people are most likely overeating as a result of prolonged episodes of stress.

As for my second research question, "What type of food do people reach for when/ if they are eating to cope with stress?" the conclusion based on the responses is that people tend to

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go for foods high in carbs, sugars, or snack foods. A couple repeated foods mentioned were chocolate, bread, snack foods, fast food, and sweets. The last survey questions were, "how has your diet changed since being in college?". These responses provide further insight into how stress plays a role in dietary choices. Many people said they snack more, eat less healthy and more convenient meals, and have less variety in meals. However, there were a couple responses saying they ate less than before college, or they eat healthier than they did before. Regardless, the consensus shows that stress leads to unhealthier diet choices, typically sugary, snack foods, or foods high in carbohydrates.

### References

Chao, A., Grey, M., Whittemore, R., Reuning-Scherer, J., Grilo, C., & Sinha, R. (2015).
Examining the mediating roles of binge eating and emotional eating in the relationships between stress and metabolic abnormalities. *Journal of Behavioral Medicine, 39*(2), 320-332. <u>https://link.springer.com/article/10.1007/s10865-015-9699-1</u>

Harvard Health. (2021, February 15). *Why stress causes people to overeat*. https://www.health.harvard.edu/staying-healthy/why-stress-causes-people-to-overeat

Klatzkin, R., Nolan, L., & Kissileff, H. (2022). Self-reported emotional eaters consume more food under stress if they experience heightened stress reactivity and emotional relief from stress upon eating. *Physiology & Behavior, 243*, 113638.

https://doi.org/10.1016/j.physbeh.2021.113638

Michels, N., Sioen, I., Ruige, J., & De Henauw, S. (2017). Children's psychosocial stress and emotional eating: A role for leptin? *The International Journal of Eating Disorders*, 50(5), 471-480. <u>https://doi-org.proxy.lib.odu.edu/10.1002/eat.22593</u>

Tan, C., & Chow, C. (2014). Stress and emotional eating: The mediating role of eating dysregulation. *Personality and Individual Differences*, 66, 1-4. https://doi.org/10.1016/j.paid.2014.02.033

Weight loss: Gain control of emotional eating. (2020, December 9). Mayo Clinic. <u>https://www.mayoclinic.org/healthy-lifestyle/weight-loss/in-depth/weight-loss/art-</u> <u>20047342?reDate=23022022#:%7E:text=Emotional%20eating%20is%20eating%20as,di</u> <u>srupt%20your%20weight%2Dloss%20efforts</u>.

- Wijnant, K., Klosowska, J., Braet, C., Verbeken, S., De Henauw, S., Vanhaecke, L., & Michels,
   N. (2021). Stress Responsiveness and Emotional Eating Depend on Youngsters' Chronic
   Stress Level and Overweight. *Nutrients, 13*(10)http://dx.doi.org/10.3390/nu13103654
- Wilson, S., Darling, K., Fahrenkamp, A., D'Auria, A., & Sato, A. (2015). Predictors of Emotional Eating During Adolescents' Transition to College: Does Body Mass Index Moderate the Association Between Stress and Emotional Eating? *Journal of American College Health*, 63(3), 163-170. DOI: <u>10.1080/07448481.2014.1003374</u>