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### Nutrition and Stress: Finding a Link Between Eating Habits and General Stress & Anxiety

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Nutrition and Stress: Link Between Eating Habits and General Stress and Anxiety Matthew Leconte, Serita Kuang, Lilian Brusic, Eghosa Idahor, Luka Roth, Stephen Cooney Faculty: Dr. Lina Begdache

### Abstract

- Diet has a great impact on physical health. Since the mind and body are connected, this can impact mental health
- We studied the correlation between diet, stress and anxiety
- Does one's eating habits, such as breakfast consumption impact stress/anxiety?
- Does the type of food consumed impact mental health?
- Does higher consumption of premade/processed foods impact mental health/distress?
- Is there a correlation between exercise and mental wellness?
- We surveyed our peers using social media and group chats
- We concluded that there is a correlation between diet quality and mental health
- Consuming breakfast was associated with better mental health
- consuming fast/premade food was associated with lower mental health

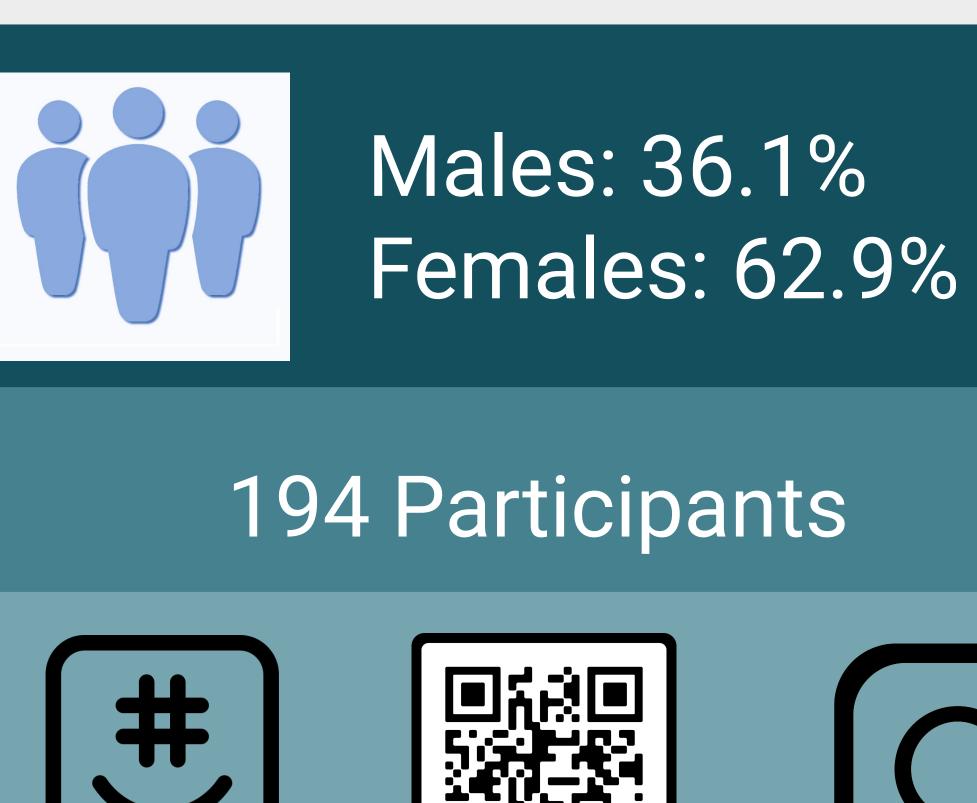
## Introduction

- Fruit and vegetable consumption has been correlated with lower levels of depression (Baharzadeh et al. 2018)
  - high quality diets contain nutrients that support brain function and serotonin production (Baharzadeh et al. 2018)
- People with higher levels of stress are more likely to have unhealthy diets (Schweren et al. 2020)
- People who experienced stressful/traumatic childhoods are more likely to turn to unhealthy diets for comfort (Hemmingson et al. 2018)
- Sugar and processed foods can increase inflammation, which can lead to anxiety/depression (Burrows et al. 2017)
- Consultations with dietitians and adherences to diets similar to the mediterranean diet have been correlated with improved depression (Opie et al. 2018)
- Exercises, such as yoga have been associated with positive physical and mental health (Braun et al. 2021)
- Students with healthier eating habits have been associated with greater academic performance (Burrows et al. 2017)
- The brain uses 20% of daily caloric intake (Lachance et al. 2015)

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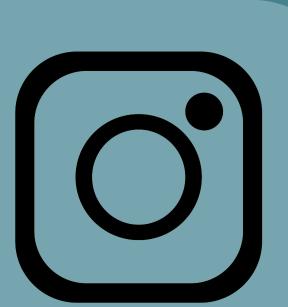
## Methods & Demographics



Groupme



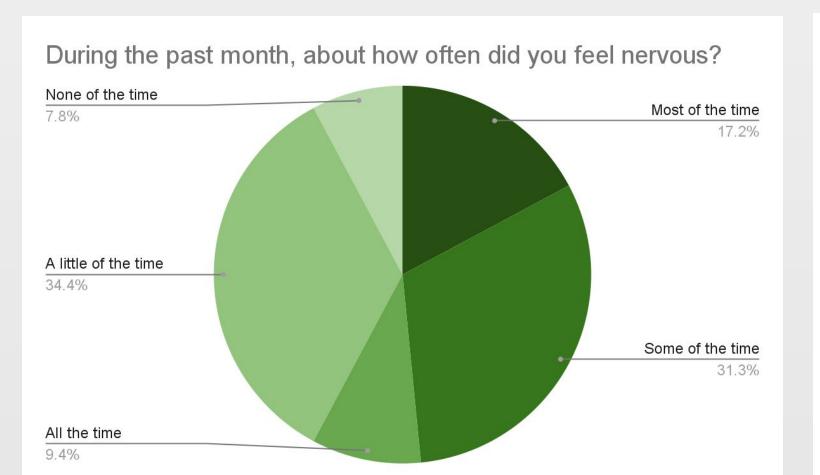
Survey

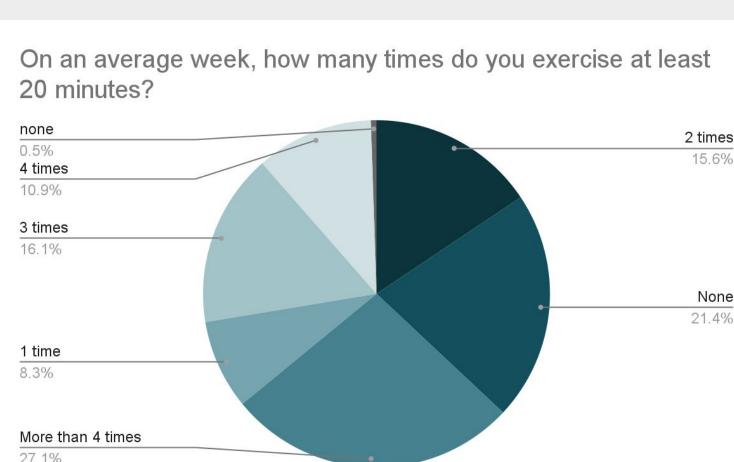


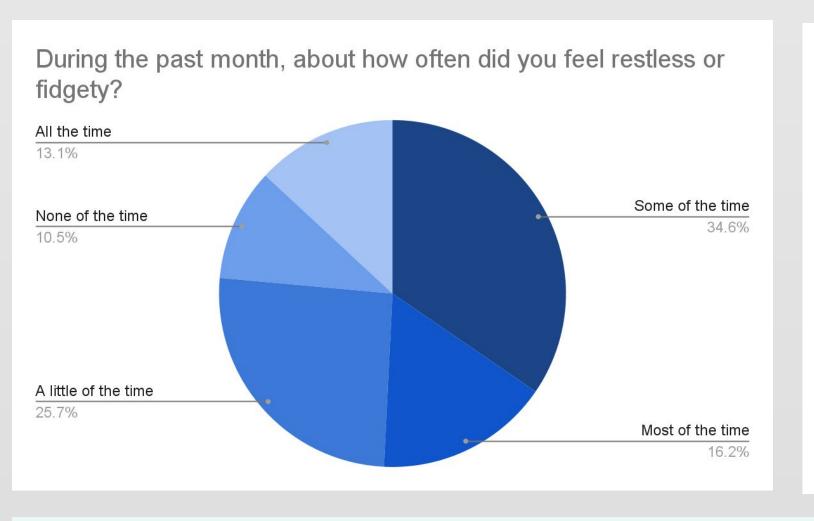
Instagram

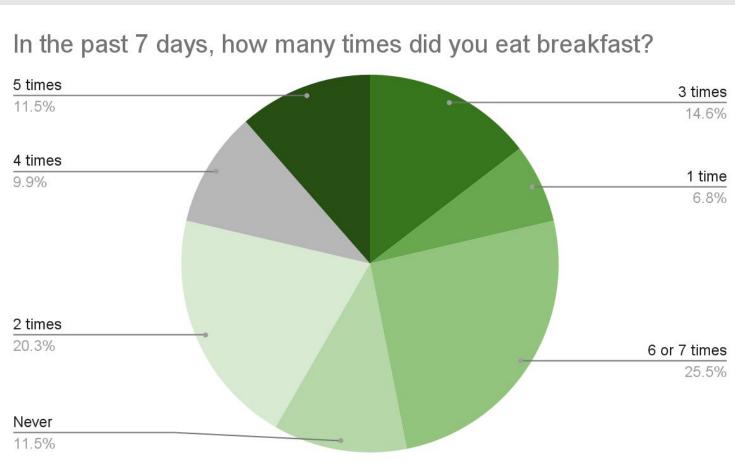
Results converted into a google sheet and analyzed using SPSS version 25.0

## Results









- Negative correlation between eating breakfast and feeling nervous (-0.186\*\*)
- Positive correlation between eating premade/fast food and feeling nervous (0.219\*\*)
- Negative correlation between eating breakfast and feeling fidgety (-0.210\*\*)
- Negative correlation between eating breakfast and feeling depressed/hopeless (-0.155\*)
- Negative correlation between feeling like everything is an effort and eating breakfast (-0.150\*) and exercising p=(-.0143\*)
- Negative correlation between eating breakfast and feeling worthless (-0.209\*\*)
  - \*: P<0.05

\*\*: P<0.01

- Our data corroborates previous findings
- Lower consumption of unhealthy foods, such as fast/premade foods is associated with lower levels of nervousness
- o Potentially due to inflammation caused by vegetable oils used in fast/premade food production/preparation
- These foods are associated with the Standard American Diet, therefore those who follow these diets should consider incorporating more aspects of healthier diets, such as the Mediterranean diet
- Breakfast consumption was associated with lower levels of anxiety/depression/general nervousness
  - This could be due to more adequately fueled brains functioning better than their poorly nourished counterparts
- This data could help spur future research into the usage of diet-centered treatments for mental disorders such as anxiety and depression
- It also informs people that the quality of food they put into their bodies affects them not only physically, but mentally as well
- Educating children on healthy diets, so they can continue such into adulthood is important to ensure future mental wellness
- More resources need to be made available to lower income communities as part of efforts to promote mental health

## References

