



Rachel A. Wattick, BS
Graduate Research Assistant
West Virginia University
rawattick@mix.wvu.edu

Rachel A Wattick, BS¹; Rebecca L Hagedorn, BS¹; Melissa D Olfert, DrPH, MS, RDN, LD¹
¹West Virginia University

Introduction

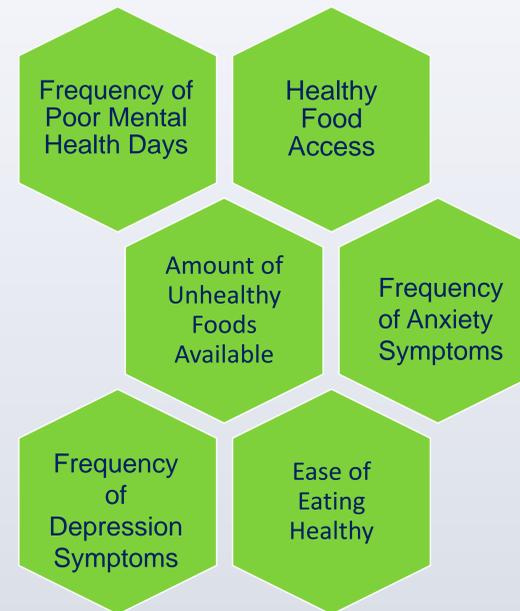
- The campus environment can strongly influence the health of students.
- High rates of food insecurity, or lack of consistent access to a sufficient quantity of affordable, nutritious foods, have been found to be as high as 59% on college campuses¹.
- Food insecurity has been linked to poor mental health²⁻⁵.
- Poor diet quality has been linked with poor mental health^{6,7}.
- Availability of healthy foods may influence the food security status and diet quality of students.
- Determining the student perception of access to healthy foods and how it relates to their mental health status is important to inform how to improve campus health for academic success.

Objective

- To examine the relationship between student perceptions of campus food environment and student reported mental health.

Methods

- A survey was completed by students at a large, Appalachian university via email.
- Students were asked about:
 - Their perception of their on-campus access to healthy foods
 - The amount of unhealthy foods on campus compared to healthy foods
 - Their ease of eating healthy on campus
 - Their experience of mental health symptoms over the past 30 days
- Frequency and Kruskal-Wallis tests were conducted to determine the relationship between food environment perceptions and mental health.



Results

- Responses (n=1956) indicated that:
 - 35% of students disagreed that it is easy to find healthy foods on campus
 - 37% disagreed that it is easy to find fruit and vegetables on campus
 - 44% strongly agreed that there are more unhealthy foods than healthy foods on campus
 - 37% disagreed that it is easy to eat healthy on campus.

Table 1. Significant associations with number of **poor mental health** days.

| Variable | Ease of Finding healthy Foods on Campus | Finding Fruits and Vegetables on Campus | More Unhealthy than Healthy Foods on Campus | Ease of Eating Healthy |
|----------|---|---|---|------------------------|
| P Value | 0.0004 | 0.0054 | .0239 | <0.0001 |

Table 2. Significant associations with number of days with **depression symptoms**.

| Variable | Ease of Finding healthy Foods on Campus | Finding Fruits and Vegetables on Campus | More Unhealthy than Healthy Foods on Campus | Ease of Eating Healthy |
|----------|---|---|---|------------------------|
| P Value | 0.0002 | <0.0001 | .0062 | <0.0001 |

Results

Table 3. Significant associations with number of days experiencing **anxiety symptoms**

| Variable | Ease of Finding healthy Foods on Campus | Finding Fruits and Vegetables on Campus | More Unhealthy than Healthy Foods on Campus | Ease of Eating Healthy |
|----------|---|---|---|------------------------|
| P Value | <0.0001 | 0.001 | 0.004 | <0.0001 |

Mean Number of Days with Mental Health Symptoms



Figure 1. Mean number of days of self-perceived mental health symptoms of students over the previous 30 days.

Conclusion

- These results indicate the strong impact that campus food environments may have on mental health of students.
- Improving healthy food access may improve mental health of students.

Works Cited

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