# Towson University Hunger Survey Spring 2023

A survey on student's access to food, food security, and the effects of these factors.

**Faith Borras** 

**Towson University FoodShare** 

**July 2023** 



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Towson University: A survey on student's access to food, food security, and the effects of these factors.

Faith Borras AmeriCorps VISTA Towson University FoodShare Program

**July 2023** 

#### **Abstract**

This survey was conducted by the FoodShare program's 22-23 AmeriCorps VISTA with the assistance of the Director of Assessment, Evaluation, and Strategic Planning. The survey aimed to assess the level of food security among Towson University's undergraduate population, determine the most affected populations, evaluate the impact of food security on student's academic, mental, and physical well-being, and analyze the current methods of accessing food assistance.

The survey's findings highlight the issue of food insecurity within the Towson University community. Approximately 54% of Towson students were found to experience food insecurity, with a disproportionate impact on the African American and Black population. The survey revealed that food insecurity significantly impacts student's social interactions, academic performance, and physical well-being, ultimately affecting their goal of graduation.

The survey report serves as a tool to inform campus stakeholders and the community about the extent of the problem and garner support for meaningful change. Moving forward, the survey findings will guide future basic need security programming at Towson University.

The survey report concludes with a call to action, urging the university community to address the issue through the provided recommendations. By providing necessary resources and support, Towson University can create an environment that fosters equity and inclusivity, ensuring every student can thrive academically, mentally, and physically.

#### Introduction

Food insecurity presents a challenge in numerous college communities, causing a negative impact on students' educational attainment and overall success. Towson University recognizes this issue within our own community, as evidenced by our program, the FoodShare. This oncampus program is aimed to alleviating food insecurity among Towson University students so they can work towards graduation.

The FoodShare program operates a client-choice pantry, implements educational programming that enhances students' culinary and financial literacy skills, and creates connections to other internal/external resources.

In order to gain a comprehensive understanding of the scope of food insecurity among our undergraduate population, the FoodShare program collaborated with the Director of Assessment, Evaluation, and Strategic Planning to develop a survey titled "Towson University: A survey on students' access to food, food security, and the effects of these factors." This survey serves as a tool, highlighting the food insecurity on- campus and its impact on our students' well-being and academic pursuits.

By conducting this survey, we looked to inform campus stakeholders and the community about the magnitude of the problem and garner their support to drive meaningful change regarding hunger issues within our university. The survey will be beneficial in strategically shaping our future food security programming, ensuring targeted and effective initiatives to address our students' needs. The survey also included the United States Department of Agriculture's U.S. Adult Food Security Survey Module to conduct a food security screening.

This survey report outlines the objectives and methodology used within the survey. It reviews the outcomes and implications of the survey results, shedding light on the level of food security, identifying the demographics most affected by food insecurity, assessing the impact on

students' academic, mental, and physical well-being, and examining the current methods used by our undergraduate population to access food assistance.

By analyzing these aspects, we aim to understand the challenges faced by our students and foster a supportive environment that promotes their overall well-being. Through the collaborative efforts of the university community, we can work towards eradicating food insecurity and ensuring that all students have the resources they need to succeed.

## **Aims and Objectives**

The goals for this survey were to:

- 1. Assess the level of food security among our undergraduate population.
- 2. Determine the demographic groups within our undergraduate population that are most affected by food insecurity.
- 3. Evaluate the academic, mental, and physical impact of food security on our undergraduate student population.
- 4. Analyze the current methods by which the undergraduate population accesses food assistance.

#### **Literature Review**

This literature review offers a comprehensive and insightful analysis of the issue of food security among college students. Drawing upon the findings from four previous research studies, 1) The Food Access & Student Well-being Study (Maryland Counseling Center Research Unit et al., 2019), 2) The Food Security Survey of Higher Education Students in Utah (Weber State University et al., 2021) 3) Hunger on Campus: The Challenge of Food Insecurity for College Students (National Student Campaign Against Hunger and Homelessness et al., 2016), and 4) The Hope Center Student Basic Needs Survey (The Hope Center for College, Community, and Justice, 2021), this review serves as a foundational resource that informed our survey methodology and help argue the necessity for our research.

"The Food Access & Student Well-being Study" conducted by University of Maryland in September 2019 offers valuable insights into the prevalence and impact of food insecurity among college students, with a specific focus on the University of Maryland. As our institution is in the same state, this survey is relevant for our understanding of statewide food security. Similarly, the research conducted in 2019 by Utahns Against Hunger, "The Food Security Survey of Higher Education Students in Utah", also explored the food security situation of higher education students, providing population-specific findings that could be relevant. The study titled "Hunger on Campus: The Challenge of Food Insecurity for College Students" from 2016 conducted by Students Against Hunger offers a broader perspective on the issue at a national level. The final piece of literature, The Hope Center Student Basic Needs Survey conducted in 2021 presents a comprehensive assessment of the basic needs challenges encountered by college students nationwide, including food insecurity. The findings of these studies are briefly mentioned below.

#### The UMD Food Access & Student Well-being Study highlighted the following:

- 1. High prevalence of food insecurity: The study reveals that a significant proportion of college students at the University of Maryland experience food insecurity, with 37% of students reporting food insecurity.
- 2. Impact on academic performance: Food insecurity has a negative effect on student's academic performance, including lower GPA, increased likelihood of course withdrawal, and difficulty concentrating in class.
- 3. Mental and physical health consequences: Students experiencing food insecurity are more prone to anxiety, depression, and various health issues.

#### The Food Security Survey of Higher Education Students in Utah highlighted the following:

- 1. Financial barriers: The research highlights financial challenges as a major contributor to food insecurity among college students in Utah. High tuition costs, limited financial aid, and high living expenses contribute to financial strain and limited food access.
- 2. Insufficient access to affordable food options: Many college campuses in Utah lack affordable and nutritious food options, exacerbating the food security problem. Limited access to affordable grocery stores and healthy meals on campus further compound the issue.

# The study Hunger on Campus: The Challenge of Food Insecurity for College Students Survey highlighted the following:

- 1. Widespread issue: Food insecurity affects college students from diverse backgrounds and across various institutions throughout the United States.
- 2. Stigma and barriers to assistance: Students facing food insecurity often experience shame and stigma, which may deter them from seeking assistance through government programs or on-campus resources.

#### The Hope Center Student Basic Needs Survey highlighted the following:

- 1. The prevalence of food insecurity: A significant proportion of college students across the United States experience food insecurity, with rates ranging from 36% to 42%.
- 2. Trade-offs between basic needs: Students often face difficult choices between paying for food, housing, and educational expenses, leading to compromised nutrition and well-being.

The findings from The Food Access & Student Well-being Study, The Food Security Survey of Higher Education Students in Utah, The Hunger on Campus Survey: The Challenge of Food Insecurity for College Students, The Hope Center Student Basic Needs Survey all display the issue of food insecurity among college students. These studies not only show the alarming rates of food insecurity but also shed light on its implications for academic performance, mental and physical well-being, and the obstacles students may meet in accessing affordable and nourishing food choices.

Towson University's commitment to addressing food insecurity is exemplified through its established FoodShare program, which has been actively operating since 2016. This initiative strives to alleviate food insecurity within the Towson University community. Nonetheless, it is worth noting that a comprehensive assessment or screening of students had not conducted prior to this survey. In our pursuit to contribute to the existing body of knowledge and address this critical issue within our own population, we utilized the valuable insights garnered from pieces of the pieces of literature mentioned above. By leveraging the findings, we were able to effectively shape our survey questions and build a case for our research.

### The Survey

#### **Procedures**

The survey was administered electronically through email to a randomized sample of 2000 undergraduate students. The sample was generated by our Director for Institutional Research. The survey ran from May 5, 2023, to May 18, 2023. When the survey closed, we collected the following demographic information for each student participant from our university database: age, year classification, ethnicity/race, college/major, part-time/full-time status, on-campus/off-campus residency, transfer/non-transfer status, in-state/out-of-state residency, and international student status. All students who completed the survey were eligible for a chance to win one of two \$50 gift cards to our on-campus bookstore.

#### **Measures**

This survey aimed to conduct a food security screening of our population, identify the most affected populations, investigate the effects of food insecurity on students, and analyze students' current food access. As a result, a combination of quantitative and qualitative research methods were utilized. The survey predominantly consisted of multiple-choice questions, with a few open-ended questions for numerical responses. It was structured into four sections: Background Information, Current Food Access, Impacts of Food Access, and the Food Security Screening Module.

Majority of the survey questions were derived from previous studies, including:

- 1) The Food Access & Student Well-being Study (University of Maryland Counseling Center Research Unit et al., 2019)
- 2) The Food Security Survey of Higher Education Students in Utah (Weber State University et al., 2021)
- 3) Hunger on Campus: The Challenge of Food Insecurity for College Students (National Student Campaign Against Hunger and Homelessness et al., 2016)
- 4) The Hope Center Student Basic Needs Survey (The Hope Center for College, Community, and Justice, 2021)

Additionally, we included specific questions pertaining to our university resources, such as awareness of our campus hunger task force and/or meal swipe donation program, which were relevant to the information requested by the Maryland Higher Education Commission.

To screen our population for food insecurity, we utilized the USDA U.S. Adult Food Security Survey Module, a 10-item instrument. We followed the evaluation guidelines provided by this tool to analyze our student's food security status, categorizing them as having either very low, low, marginal, or high food security. In line with the USDA's description, households with high or marginal food security were considered food secure, while those with low or very low food security were classified as food insecure. Consequently, when presenting the survey results, we categorized our students into these two groups: food secure versus food insecure.

#### **Participants**

This survey focused on undergraduate students enrolled at Towson University. A randomized sample of 2000 undergraduates were selected to receive the survey. From this initial sample, we obtained a partial response rate of 4.2%, with 84 students initiating the survey. We had a completion response rate of 2.4%, as 48 students successfully completed the entire survey. For our analysis, we chose to only include respondents with a 100% completion rate. Therefore, our results are based on the data provided by the 48 students who finished the survey in its entirety. Among the sample of 48 students, the average age was 21 years. The breakdown of students by class standing revealed 14 seniors, 13 juniors, 12 freshmen, 8 sophomores, and 1 unspecified undergraduate student. Additional demographic information is presented in Table 1.

Table 1. Demographic and descriptive information

Race/Ethnicity	% Of population (n = 48)
Black or African American	41.67%
White	39.58%
Hispanic or Latino	10.42%
Two or More Races	4.17%
Asian	2.08%
U.S. Nonresident	2.08%
Attendance	
Full Time	97.92%
Part Time	2.08%
Matriculation	
First-Time	64.58%
Transfer	33.33%
Other Undergrad	2.08%
Housing Status	
Off Campus	56.25%

Residency       91.67%         Non-Maryland Resident       8.33%         College	On Campus	43.75%
Non-Maryland Resident         8.33%           College         27.08%           College of Science and Mathematics         27.08%           College of Liberal Arts         20.83%           College of Health Professions         18.75%           College of Fine Arts and Communication         16.67%           College of Business and Economics         12.50%           College of Education         2.08%           Non-Degree         2.08%           Class Level         Senior           Junior         27.08%           Freshman         25.00%           Sophomore         16.67%           Other Undergrad         2.08%           Employed         ***           Yes         64.58%           No         33.33%           Prefer not to answer         2.08%           Hours worked per week         11.20 hours per week           21-25 hours per week         16.67%           22-30 hours per week         6.25%           6-30 hours per week         6.25%           6-610 hours per week         10.42%           0 hours per week (unemployed)         33.33%           N/A         12.50%           Household size         34. people         39.58		
Non-Maryland Resident         8.33%           College         27.08%           College of Science and Mathematics         27.08%           College of Liberal Arts         20.83%           College of Health Professions         18.75%           College of Fine Arts and Communication         16.67%           College of Business and Economics         12.50%           College of Education         2.08%           Non-Degree         2.08%           Class Level         Senior           Junior         27.08%           Freshman         25.00%           Sophomore         16.67%           Other Undergrad         2.08%           Employed         ***           Yes         64.58%           No         33.33%           Prefer not to answer         2.08%           Hours worked per week         11.20 hours per week           21-25 hours per week         16.67%           22-30 hours per week         6.25%           6-30 hours per week         6.25%           6-610 hours per week         10.42%           0 hours per week (unemployed)         33.33%           N/A         12.50%           Household size         34. people         39.58	Maryland Resident	91.67%
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College of Fine Arts and Communication       16.67%         College of Business and Economics       12.50%         College of Education       2.08%         Non-Degree       2.08%         Class Level       29.17%         Junior       27.08%         Freshman       25.00%         Sophomore       16.67%         Other Undergrad       2.08%         Employed       208%         Yes       64.58%         No       33.33%         Prefer not to answer       2.08%         Hours worked per week       16.67%         21-25 hours per week       16.67%         21-25 hours per week       12.50%         26-30 hours per week       6.25%         6-10 hours per week       10.42%         0 hours per week (unemployed)       33.33%         N/A       12.50%         Household size       34.4 people         3-4 people       39.58%         1-2 people       33.33%         5-6 people       25.00%         6+ people       20.08%         Households with dependents       47.92%		20.83%
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Prefer not to answer       2.08%         Hours worked per week       16.67%         21-25 hours per week       12.50%         26-30 hours per week       8.33%         5 hours or less per week       6.25%         6-10 hours per week       10.42%         0 hours per week (unemployed)       33.33%         N/A       12.50%         Household size       39.58%         1-2 people       39.58%         5-6 people       25.00%         6+ people       2.08%         Households with dependents       33.33%         No dependents in the household.       33.33%         1-2 dependents       47.92%	Yes	64.58%
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11-20 hours per week       16.67%         21-25 hours per week       12.50%         26-30 hours per week       8.33%         5 hours or less per week       6.25%         6-10 hours per week (unemployed)       33.33%         N/A       12.50%         Household size       39.58%         3-4 people       33.33%         5-6 people       25.00%         6+ people       2.08%         Households with dependents       33.33%         No dependents in the household.       33.33%         1-2 dependents       47.92%	Prefer not to answer	2.08%
21-25 hours per week       12.50%         26-30 hours per week       8.33%         5 hours or less per week       6.25%         6-10 hours per week (unemployed)       33.33%         N/A       12.50%         Household size         3-4 people       39.58%         1-2 people       33.33%         5-6 people       25.00%         6+ people       2.08%         Households with dependents         No dependents in the household.       33.33%         1-2 dependents       47.92%	Hours worked per week	
26-30 hours per week       8.33%         5 hours or less per week       6.25%         6-10 hours per week       10.42%         0 hours per week (unemployed)       33.33%         N/A       12.50%         Household size         3-4 people       39.58%         1-2 people       33.33%         5-6 people       25.00%         6+ people       2.08%         Households with dependents         No dependents in the household.       33.33%         1-2 dependents       47.92%	11-20 hours per week	16.67%
5 hours or less per week       6.25%         6-10 hours per week       10.42%         0 hours per week (unemployed)       33.33%         N/A       12.50%         Household size         3-4 people       39.58%         1-2 people       33.33%         5-6 people       25.00%         6+ people       2.08%         Households with dependents         No dependents in the household.       33.33%         1-2 dependents       47.92%	21-25 hours per week	12.50%
6-10 hours per week (unemployed) 33.33% N/A 12.50%    Household size 3-4 people 39.58% 1-2 people 33.33% 5-6 people 25.00% 6+ people 2.08%    Households with dependents 33.33% 5-6 people 33.33% 5-6 people 35.00% 6-7 people 35.00	26-30 hours per week	8.33%
0 hours per week (unemployed)       33.33%         N/A       12.50%         Household size         3-4 people       39.58%         1-2 people       33.33%         5-6 people       25.00%         6+ people       2.08%         Households with dependents         No dependents in the household.       33.33%         1-2 dependents       47.92%	5 hours or less per week	6.25%
N/A       12.50%         Household size       39.58%         3-4 people       39.58%         1-2 people       33.33%         5-6 people       25.00%         6+ people       2.08%         Households with dependents       33.33%         No dependents in the household.       33.33%         1-2 dependents       47.92%	6-10 hours per week	10.42%
Household size         3-4 people       39.58%         1-2 people       33.33%         5-6 people       25.00%         6+ people       2.08%         Households with dependents         No dependents in the household.       33.33%         1-2 dependents       47.92%	0 hours per week (unemployed)	33.33%
3-4 people       39.58%         1-2 people       33.33%         5-6 people       25.00%         6+ people       2.08%         Households with dependents         No dependents in the household.       33.33%         1-2 dependents       47.92%	N/A	12.50%
1-2 people       33.33%         5-6 people       25.00%         6+ people       2.08%         Households with dependents         No dependents in the household.       33.33%         1-2 dependents       47.92%	Household size	
5-6 people 25.00% 6+ people 2.08%  Households with dependents  No dependents in the household. 33.33% 1-2 dependents 47.92%	3-4 people	39.58%
6+ people 2.08%  Households with dependents  No dependents in the household. 33.33%  1-2 dependents 47.92%	1-2 people	33.33%
Households with dependents33.33%No dependents in the household.47.92%	5-6 people	25.00%
No dependents in the household. 33.33% 1-2 dependents 47.92%	6+ people	2.08%
1-2 dependents 47.92%	Households with dependents	
·	No dependents in the household.	33.33%
3-4 dependents 18.75%	1-2 dependents	47.92%
	3-4 dependents	18.75%

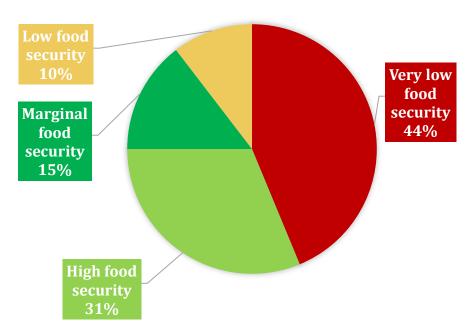
Socioeconomic Status	
Low SES	45.83%
Middle SES	20.83%
High SES	6.25%
N/A	27.08%
Food Security Level	
Very low food security	43.75%
Low food security	10.42%
Marginal food security	14.58%
High food security	31.25%
Indicated that they struggled to get/pay for the following during the	
last 12 months:	
Food	43%
Rent/Mortgage	23%
Utilities	25%
Clothing	18.75%
Medicine/Healthcare	25%
Other	16.66%

# **Results**

# **A. Food Security Screening**

Figure 1.1 USDA Food Security Screening – Four Level Summary





**Table 2.1 USDA Food Security Screening – Four Level Summary** 

Food Security Level	Number of Students
Very low food security	21
High food security	15
Marginal food security	7
Low food security	5
Total	48

Figure 1.2 USDA Food Security Screening – Overall Summary

#### TOWSON UNDERGRADUATE FOOD SECURITY: OVERALL SUMMARY

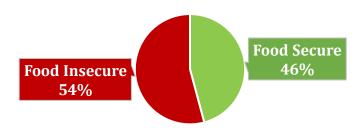


Table 2.2 USDA Food Security Screening – Overall Summary

Food Security Level	Number of Students
Food Secure	22
Food Insecure	26
Total	48

There were 48 student participants in this survey. Out of these students, 22 are classified as food secure, while 26 are classified as food insecure. This shows that a slightly larger proportion of Towson University students are facing food insecurity compared to those who are food secure.

When looking at the full distribution food security levels, we observe that the majority of students fall into the very low food security category, with 21 students experiencing major challenges in accessing adequate and/or consistent food resources. This indicates that a significant portion of the student population is struggling with the most severe form of food insecurity.

Continuing, 15 students are classified as having high food security, which indicates that they have a stable and reliable access to food, further indicating a more secure food situation. However, it is important to note that the number of students with high food security is lower than the total number of food secure students, highlighting that not all food secure students fall into the high food security category.

Additionally, there are 7 students categorized as having marginal food security, indicating occasional limitations regarding their food access. The remaining 5 students fall into the low food security category, signifying a compromised food situation, though not as severe as those with very low food security.

The table data shows the diverse food security levels among our student population, with many students facing challenges in accessing sufficient and reliable food resources. This reveals the need to support and address food insecurity among students, ensuring their overall well-being and academic success.

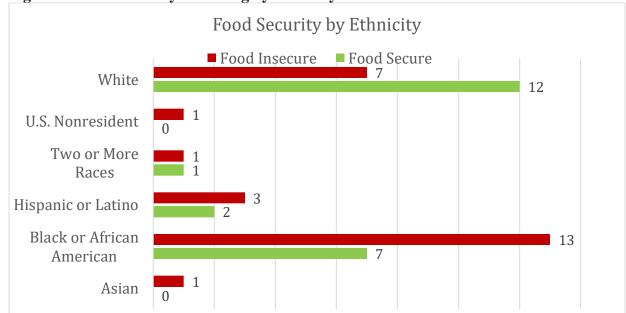


Figure 1.3 Food Security Screening by Ethnicity

Figure 1.3 provides a breakdown of the food security status among different racial and ethnic groups within a population. It displays the composition of the population that took this survey and their food security. Figure 1.3 is narrated below.

- Among the Asian population, the single student who took the survey was classified as food insecure.
- In the Black or African American group, seven students were classified as food secure, and thirteen students were categorized as food insecure.
- Within the Hispanic or Latino population, two students were reported as food secure, while three students were categorized as food insecure.
- For the Two or More Races category, one student was classified as food secure, while one student was reported as food insecure.
- Among the U.S. Nonresident population, no students were classified as food secure, while one student was categorized as food insecure.
- The white population had twelve food secure students and seven students were reported as food insecure.
- The "Race/Ethnicity Unknown" category did not have any reported participants.

The survey sample size was small, with some ethnicities/races represented by only one student, limiting the generalizability of the findings. However, some notable highlights can be observed. The Black or African American group showed the highest prevalence of food insecurity, indicating a significant food security disparity within this group that calls for targeted interventions. In contrast, the white population had the highest number of food secure students,

but the presence of food insecurity within this group highlights the ongoing concern. The limited responses from U.S. Non-Residents and Asians being food insecure suggest the potential existence of specific challenges faced by these populations. Further research is needed to better understand food security within different racial and ethnic groups. Nonetheless, the findings do highlight a need for targeted support to address food insecurity and ensure equitable access to food resources for all student populations.

#### **B.** Background Information

**Table 3.1 Employment** 

Employment	Food Secure (n=22)	Food Insecure (n=26)
Unemployed	57.96%	23.08%
Employed	42.31%	76.92%
5 hours or less per week	0%	7.69%
6 - 10 hours per week	9.09%	11.53%
11 - 20 hours per week	13.64%	19.23%
21 - 25 hours per week	9.09%	26.92%
26 - 30 hours per week	4.55%	7.69%
Prefer not to say	5.94%	3.86%

The table above (3.1) provides a breakdown of the employment status and working hours of both groups: the food secure and the food insecure.

In terms of employment status, a higher percentage of students in the food secure group are unemployed (57.96%) compared to the food insecure group (23.08%). Meaning, a larger proportion of the food insecure group (76.92%) is employed, while only 42.31% of the food secure students are employed. These findings suggest that food security status plays a significant role in seeking employment, with a higher likelihood of being employed if one is struggling with food security.

Looking at the hour worked per week, Among the food secure students, the distribution of working hours is quite diverse. The majority, comprising 13.64%, fall within the range of 11 to 20 hours per week. This suggests that a significant proportion of food secure students maintain food security with part-time employment, allocating a moderate amount of their time to work. Additionally, 9.09% of the food secure group work between 21 and 25 hours per week, potentially resulting in improved financial stability and food security.

In contrast, the food insecure group exhibits a different pattern in terms of working hours. A substantial proportion of 26.92% work between 21 and 25 hours per week, indicating that a significant number of food insecure students have a high level of employment commitment. This finding suggests that while working more hours, these students still face challenges in achieving

food security, highlighting the complex nature of food insecurity and the existence of other underlying factors.

It is also worth noting that a notable portion of the food insecure group, 7.69%, work 5 hours or less per week, which is the only category in which the food secure group reports zero percent. This observation suggests that students working minimal hours are more likely to experience food insecurity, potentially due to limited income opportunities.

In conclusion, the data presented in the table highlights the relationship between employment status, working hours, and food security. The findings suggest that food security status influences employment-seeking behavior, with a higher likelihood of being employed among the food insecure group. While part-time employment can contribute to food security for some students, it is evident that the number of hours worked alone is not a guarantee of food security.

Table 3.2 Students self-report of inability to pay for basic need expenses

Need	Food Secure (n=22)	Food Insecure (n=26)
Food	13.63%	69.23%
Rent/Mortgage	13.63%	30.76%
Utilities	13.63%	34.61%
Clothing	4.54%	30.76%
Medicine/Healthcare	18.18%	30.76%
Other	9.09%	23.07%
Prefer not to answer	4.54%	3.84%
Not applicable	54.54%	19.23%

The table above provides an analysis of student's self-reported inability to pay for basic need expenses, categorized by their food security status.

In terms of food, a significantly higher percentage of food insecure students (69.23%) reported being unable to afford food compared to food secure students (13.63%) which is to be expected. This simply confirms the challenge of food insecurity among the surveyed population.

When it comes to rent/mortgage and utilities, a higher proportion of food insecure students (30.76% and 34.61% respectively) reported being unable to meet these expenses compared to their food secure counterparts (13.63% for both). This suggests a greater financial burden and housing insecurity among food insecure students.

Regarding clothing and medicine/healthcare, other notable disparities are observed. A higher percentage of food insecure students (30.76% for both) reported inability to afford clothing and medicine/healthcare expenses compared to food secure students (4.54% and 18.18%). This indicates a potential lack of access to necessary clothing and healthcare services for a significant portion of food insecure students.

In terms of other expenses, such as transportation or personal care items, a higher proportion of food insecure students (23.07%) reported difficulty in affording them compared to

food secure students (9.09%). This suggests a wider range of financial challenges faced by food insecure students. It is also worth noting that a considerable percentage of food secure students (54.54%) reported their inability to pay for basic needs as "Not applicable," compared to the 19.23% who were food insecure, indicating a relatively higher level of financial stability within the food secure group.

In conclusion, the table highlights significant disparities in the ability to afford basic need expenses between food secure and food insecure students. Food insecurity emerges as a particularly prevalent issue, with most of the food insecure students reporting difficulty in affording food. However, it is crucial to consider all basic need resources when designing future student support initiatives in order to achieve the best outcomes. These findings emphasize the urgent need for targeted support and interventions to address basic need insecurity among students, ensuring equitable access to essential resources for a more stable higher education experience.

Table 3.3 Loans amounts to date.

Loan amount	Food Secure (n=22)	Food Insecure (n=26)
\$0	72.72%	34.62%
\$1 - \$5,000	9.09%	34.62%
\$5,001 - \$10,000	0%	15.38%
\$10,001 - \$15,000	4.54%	3.85%
\$15,001 - \$20,000	4.54%	3.85%
\$20,001 - \$25,000	0%	3.85%
\$25,001 - \$30,000	0%	3.85%
\$30,001 - \$35,000	0%	3.85%
\$35,001 - \$40,000	0%	3.85%
\$55,001 - \$60,000	0%	7.69%
N/A	9.09%	7.69%

Table 3.3 titled "Loans amounts to date" provides an overview of the distribution of loan amounts among food secure and food insecure students.

Many foods secure students, accounting for 72.72%, reported not having any loan amount. This indicates a higher proportion of students who managed to finance their education without relying on loans for financial support. On the other hand, among food insecure students, only 34.62% reported not having any loan amount. This suggests that a significant portion of food insecure students had to rely on loans to finance their education.

When examining specific loan amount ranges, it is interesting to note that while 9.09% of food secure students reported loan amounts in the range of \$1 - \$5,000, the same percentage was observed among food insecure students. This suggests that a comparable proportion of students from both groups required smaller loan amounts within this range.

In the higher loan amount ranges, such as \$5,001 - \$10,000 and above, the data indicates a higher prevalence of food insecure students applying for loans. For example, 15.38% of food insecure students reported loan amounts between \$5,001 - \$10,000, while none of the food secure students fell within this range. This suggests that food insecure students are more likely to seek larger loans to finance their education.

In conclusion, the table highlights the differences in loan amounts between food secure and food insecure students. Food insecure students were more likely to rely on loans to finance their education, with a higher prevalence of larger loan amounts within specific ranges. These findings emphasize the financial challenges faced by food insecure students and the importance of providing adequate financial support and resources to ensure equitable access to education.

**Table 3.4 Household Income** 

Household Income	Food Secure (n=22)	Food Insecure (n=26)
\$0 - \$20,000	15%	33%
\$20,001 - \$40,000	0%	16%
\$40,001 - \$60,000	15%	5.00%
\$60,001 - \$80,000	0%	12.00%
\$80,001 - \$100,000	5%	8%
\$100,001 - \$120,000	0%	4.16%
\$120,001 - \$140,000	15%	0%
\$140,001 - \$160,00	5%	0%
\$160,001 - \$180,000	0%	0%
\$180,001 - \$200,000	0%	0%
\$200,001 - \$220,000	0%	0%
\$220,001 - \$240,000	0%	0%
\$240,001 - \$260,000	5%	0%
\$260,001 - \$280,000	0%	0%
\$280,001 - \$300,000	5%	5.00%
Not Sure	30%	12.00%
Prefer not to answer	5%	5.00%

The above table (3.4) provides insights into the household income distribution among food secure and food insecure students.

Among food insecure students, a larger proportion (33%) belong to the \$0 - \$20,000 household income range. This indicates a higher prevalence of food insecurity among students from lower-income households. Moreover, 16% of food insecure students fall into the \$20,001 - \$40,000 income range, further emphasizing the challenges faced by students from moderate-income backgrounds.

It is also noteworthy that there are no reported instances of food insecurity among students in the higher household income ranges (\$120,001 and above). This suggests that students from higher-income households have a lower likelihood of experiencing food insecurity.

That said, among food secure students, 15% belong to the household income range of \$0 - \$20,000, indicating that a portion of food secure students still come from lower-income households. Additionally, 15% of food secure students fall into the \$40,001 - \$60,000 income range, suggesting that some students from moderate-income households also experience food security.

There were no reported instances of food insecurity among students in the higher household income ranges (\$120,001 and above). This suggest that students from higher-income households may have a lower likelihood of experiencing food insecurity.

Furthermore, the table includes categories such as "Not Sure" and "Prefer not to answer," which provide insights into the uncertainties or preferences of students regarding their household income. It is important to consider these responses when interpreting the overall picture of food security among students.

Overall, the table reviews the relationship between household income and food security among students. It highlights the higher prevalence of food insecurity among students from lower-income households and the connection between socioeconomic status and food insecurity.

Household Size	Food Secure (n = 22)	Food Insecure (n = 26)
1 - 2 people	13%	50%
3 - 4 people	55%	27%
5 - 6 people	27%	23%
6 + people	5%	0%

**Table 3.5 Student Household Size** 

The table "Student Household Size" provides valuable insights into the relationship between household size and food security among students. Among students from households consisting of 1-2 people, only 13% were classified as food secure, while a significant majority of 50% were categorized as food insecure. This suggests a higher prevalence of food insecurity within smaller households or the students who may have less support around them.

Conversely, households with 3-4 people had the highest proportion of food secure students at 55%, indicating a relatively better food security status within this household size category, potentially due to more support and resources available within these households. However, it's important to note that even within this category, 27% of students were still classified as food insecure, highlighting the persistence of food insecurity even in medium-sized households.

Among households with 5-6 people, there was a relatively balanced distribution between food secure and food insecure students, with 27% reported as food secure and 23% categorized as food insecure. These findings suggest that the determinants of food security extend beyond

household size and the availability of support. Multiple factors, such as income, access to resources, and individual circumstances, likely contribute to the complex nature of food security within households of this size.

In summary, the table underscores the varying degrees of food security within different household sizes among students. It highlights the higher prevalence of food insecurity in smaller households (1-2 people) and suggests that larger households (3-6+ people) may have relatively better food security. However, the persistence of food insecurity across all household sizes indicates the need for comprehensive approaches to address the multifaceted nature of food security among students.

**Table 3.6 Dependents in Students Household** 

Number of Dependents in Household	Food Secure (n = 22)	Food Insecure (n = 26)
None	22%	42%
1 -2 dependents	54%	42%
3 - 4 dependents	22%	16%

Table 3.6 "Dependents in Student's Household" presents the distribution of food secure, and food insecure students based on the number of dependents in their household. It provides insights into the potential relationship between household dependents and food security status.

Among students with no dependents in their household, 22% were classified as food secure, while a higher proportion of 42% were categorized as food insecure. This suggests that even without dependents, many students still face challenges in accessing sufficient food resources.

Most of the students reported having households that have 1-2 dependents. Of these households, the majority of 54% were food secure and 42% of students in this group were still food insecure, indicating that having 1-2 dependents in your household does not guarantee food security for all. For those with households with 3-4 dependents, 22% were food secure, and a smaller proportion of 16% were food insecure. This indicates a relatively higher food security status within this household category. Overall, the table highlights that the number of dependents in a household is associated with varying degrees of food security. While having no dependents or a higher number of dependents may increase the risk of food insecurity, it is not a definitive determinant. Other factors such as income, access to resources, and support systems likely play crucial roles in determining the food security status of students and households.

#### C. Current Food Access

Table 3.7 Student usage of on-campus food pantry

Used Campus Food Pantry? (FoodShare)	Food Secure (n = 22)	Food Insecure (n = 26)
Yes	10%	24%
No, but I am aware of the program.	45%	46%
No, this is the first time I have heard of the program.	45%	30%

The table above presents the distribution of students based on their usage and awareness of the Campus Food Pantry program, also known as FoodShare, along with their food security status.

Among the food secure students, only 10% reported utilizing the Campus Food Pantry program, indicating a relatively low utilization rate among this group. In contrast, 24% of the food insecure students reported using the Campus Food Pantry, suggesting a higher reliance on this program for accessing food resources.

Interestingly, a significant proportion of both food secure and food insecure students (45% in each group) reported being aware of the program without actually utilizing it. This suggests that while students are aware of the availability of the Campus Food Pantry, they may have other means of meeting their food needs or could be hesitant to utilize the program for various reasons.

Moreover, 45% of food secure students and 30% of food insecure students indicated that this was their first-time hearing about the Campus Food Pantry program. This finding highlights the need for improved awareness and outreach efforts to ensure that all students, regardless of their food security status, are informed about the available resources and support.

In summary, the table illustrates that while some food secure students utilize the Campus Food Pantry, the majority are aware of the program without utilizing it. However, more food insecure students rely on the Campus Food Pantry, indicating its importance in providing essential food resources. Enhancing awareness and addressing potential barriers to utilization can contribute to better supporting student's food security needs.

Table 3.8 # of times students are visiting the on-campus food pantry per month

# Of times using Campus Food Pantry (FoodShare) per month	Food Secure (n = 2)	Food Insecure (n = 6)
Less than once a month	0%	16%
Once a month	50%	16%
Twice a month	50%	16%
Three times a month	0%	0%
Four times a month	0%	50%

Table 3.8 provides insights into the frequency of student's visits to the on-campus food pantry (FoodShare) per month and their corresponding food security status. Among the food secure students, half of them visit the food pantry once a month, while the other half visit twice a month. On the other hand, among the food insecure students, the visits are more varied. Some visit the pantry less than once a month, once a month, or twice a month, each accounting for 16% of the group. Interestingly, none of the food secure students reported visiting the pantry three times a month, while 50% of the food insecure students visited four times a month.

These findings suggest that food insecure students tend to visit the on-campus food pantry more frequently, potentially reflecting their greater reliance on the pantry as a resource to meet their food needs. In contrast, food secure students show more variation in their visit frequency, with a significant proportion visiting once or twice a month.

Understanding these patterns can inform the planning, operations, and allocation of resources within the pantry to effectively support student's food security needs on campus.

**Table 3.9 Student's Awareness of State/Federal Assistance Programs** 

Student's Awareness of State/Federal Assistance	Food Secure (n	Food Insecure
Programs	= 22)	(n = 26)
Supplemental Nutrition Assistance Program (SNAP -	68%	84%
formerly known as food stamps)		
Special Supplemental Nutrition Assistance Program for	32%	53%
Women, Infants, and Children (WIC)		
Earned Income Tax Credit (EITC)	27%	26%
Federal Work Study	50%	69%
Other	9%	3%

The table "Student's Awareness of State/Federal Assistance Programs" provides valuable insights into the awareness levels of food-secure and food-insecure students regarding various assistance programs. The findings highlight significant differences in awareness between the two groups.

It is noteworthy that both food-secure and food-insecure students showed considerable awareness about the Supplemental Nutrition Assistance Program (SNAP). However, the awareness level was notably higher among food-insecure students, with 84% of them being aware of the program compared to 68% of food-secure students. This indicates that food-insecure students are more likely to be familiar with SNAP, which aligns with their heightened need for assistance in accessing nutritious food.

Regarding the Special Supplemental Nutrition Assistance Program for Women, Infants, and Children (WIC), a larger proportion of food-insecure students (53%) reported awareness compared to food-secure students (32%). This suggests that food-insecure students, particularly those belonging to vulnerable groups like women and infants, are more aware of the specific assistance programs designed to address their unique needs.

In terms of the Earned Income Tax Credit (EITC), the awareness levels were relatively similar between food-secure (27%) and food-insecure (26%) students. This indicates that both groups have a comparable understanding of this tax credit program, which provides financial support to low- to moderate-income students and families.

The Federal Work Study program, which can potentially qualify students for a student SNAP exemption, was more widely known among food-insecure students (69%) compared to food-secure students (50%). This suggests that food-insecure students are more informed about employment opportunities that can help them secure additional support through SNAP.

Lastly, when it comes to other assistance programs not specifically mentioned, 9% of food-secure students and only 3% of food-insecure students reported general awareness. While these percentages are relatively low, it indicates that some students are familiar with additional assistance programs beyond the ones specifically mentioned in the table.

Overall, the findings highlight a moderate level of awareness among students regarding state/federal assistance programs. The higher awareness levels among food-insecure students across most programs suggest a greater reliance and need for these programs among students experiencing food insecurity. Increasing awareness and improving access to these assistance programs can play a pivotal role in addressing food insecurity among students and providing them with the necessary support to meet their nutritional needs.

Table 3.10 % of students who have previously applied for above programs

Student has previously applied for the Public Assistance Programs	Food Secure (n = 22)	Food Insecure (n = 26)
Yes	10%	50%
No	90%	42%
Prefer not to say	0%	8%

The table "Student has previously applied for the Public Assistance Programs" provides valuable insights into the application patterns of food-secure and food-insecure students for the mentioned assistance programs. The data reveals a notable disparity in application rates between the two groups. Among food-secure students, only 10% reported having applied, while a substantial majority of 90% indicated no previous application. In contrast, among food-insecure students, a significantly higher proportion of 50% reported having applied, with 42% indicating no prior application. Additionally, a small percentage (8%) of food-insecure students chose not to disclose their application status.

These findings underscore the importance of raising awareness and understanding of public assistance programs for both food-secure and food-insecure populations. The higher application rate among food-insecure students suggests a greater reliance on and awareness of these programs to meet their needs. In contrast, the lower application rate among food-secure students may indicate a relatively higher level of financial stability or access to alternative resources.

To address the disparities and bridge the gap between these groups, it is crucial to enhance program accessibility and reduce barriers to application. Proactive measures should be taken within the institution to increase awareness, improve program accessibility, and eliminate barriers, ensuring equitable access to public assistance programs. This concerted effort will contribute to bridging the gap between food-secure and food-insecure populations, ensuring that all students in need can receive the necessary support to address their food security challenges and successfully graduate.

Table 3.11 Barriers that have kept students from previously applying for above programs

Barrier to applying	Food Secure (n	Food Insecure
	= 20)	(n = 11)
Income guidelines	6%	5%
Lack of knowledge/understanding about programs or	10%	8%
eligibility requirements		
Embarrassment or stigma	2%	0%
Complicated application process	1%	4%
Other	7%	0%

The table "Barriers that have kept students from previously applying for above programs" provides insights into the barriers faced by both food-secure and food-insecure students who have not applied for public assistance programs. It is important to note that this question was specifically asked to students who indicated that they haven't previously applied for these programs.

Among food-secure students who haven't applied for public assistance programs, income guidelines were reported as a barrier by 6% of respondents. This suggests that some food-secure students may have perceived their income to be above the program eligibility criteria, thus hindering their application. Additionally, 10% of food-secure students cited a lack of knowledge or understanding about the programs or eligibility requirements as a barrier. This highlights the need for improved outreach and education to ensure that eligible students are aware of the programs and their qualifications.

Similarly, among food-insecure students who haven't applied, 5% identified income guidelines as a barrier. This indicates that some food-insecure students may also perceive their income to be above the program thresholds, potentially resulting in their decision not to apply. Additionally, 8% reported a lack of knowledge or understanding about the programs or eligibility requirements as a barrier. This underscores the importance of providing clear and accessible information to ensure that food-insecure students are aware of the available assistance.

It is worth noting that very few students mentioned embarrassment or stigma as a barrier, with only 2% of food-secure students and none of the food-insecure students indicating this as a hindrance. Similarly, a small percentage of students mentioned a complicated application process as a barrier.

The "Other" category captures additional barriers mentioned by students. Among food-secure students, 7% reported other barriers, while none of the food-insecure students indicated any other barriers. These unspecified barriers may include factors such as logistical challenges, time constraints, or personal circumstances that have prevented students from applying for public assistance programs.

Overall, the table highlights some common barriers faced by both food-secure and food-insecure students who have not previously applied for public assistance programs. These barriers

include income guidelines and a lack of knowledge or understanding about the programs. Addressing these barriers requires targeted efforts to improve awareness, provide clear information, and simplify the application process. By reducing these barriers, more eligible students can access the support they need to address food insecurity.

Table 3.12 - Local Resources/Activities students are aware of

Local resources or activities students are aware of	Food Secure (n = 22)	Food Insecure (n = 26)
On-campus Food pantry	17%	20%
Campus contact to assist with connections to food resources	2%	1%
Campus contact for SNAP application assistance	5%	1%
Campus Hunger-Free Task Force	2%	1%
Meal-swipe sharing program (if there is an on-campus dining and student meal plan option)	11%	14%
None of the above	5%	5%

The table "Local Resources/Activities students are aware of" provides insights into the awareness levels of food-secure and food-insecure students regarding various local resources and activities.

Regarding on-campus resources, 17% of food-secure students and 20% of food-insecure students were aware of the on-campus food pantry, indicating a similar level of awareness regardless of food security status. In terms of campus contacts for assistance, such as connecting to food resources or receiving SNAP application assistance, a small percentage of both food-secure (2% and 5%, respectively) and food-insecure (1% and 1%, respectively) students reported being aware of these resources. Similarly, a small percentage of both food-secure and food-insecure students (2% and 1%, respectively) were aware of the Campus Hunger-Free Task Force, which suggests limited overall awareness of this specific campus initiative. Regarding the meal-swipe sharing program, 11% of food-secure students and 14% of food-insecure students were aware of these programs if available on campus, indicating a slightly higher awareness level among food-insecure students. Lastly, 5% of both food-secure and food-insecure students reported being unaware of any of the resources mentioned or activities.

These findings suggest there is much room for improvement in raising awareness about available local resources and activities among both food-secure and food-insecure students. Enhancing communication channels, providing clear information, and actively promoting these resources may help increase awareness and access for students facing food insecurity.

Table 3.13 - How student became aware of the above resource/activity

How student became aware of the above resource/activity	Food Secure	Food Insecure
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	(n = 22)	(n = 26)
Professor/Staff	23%	3%
Social Media	40%	23%
Word of Mouth	36%	26%
Campus Website or Newsletter	54%	42%
Sign/Banner/Flyer	27%	35%
Other	4%	7%
I wasn't previously aware of these resources/activities	9%	23%

The table above (3.13) presents data on how participants became aware of a specific resource or activity, categorized into two groups: "Food Secure" and "Food Insecure." The numbers in the table represent the percentages of participants within each group who discovered the resource or activity through various channels.

Firstly, when it comes to the "Food Secure" group, the most prominent sources of awareness are the campus website or newsletter (54%) and social media (40%). This suggests that these channels play a crucial role in disseminating information to individuals who already have food security. Additionally, word of mouth (36%) and professors/staff (23%) also appear to be effective channels in reaching this group.

However, the "Food Insecure" group has a different distribution of awareness sources. Although the campus website or newsletter (42%) and social media (23%) are still significant channels, their impact is somewhat reduced compared to the "Food Secure" group. Word of mouth (26%) and professors/staff (3%) also play a role but to a lesser extent. Interestingly, the percentage of participants in the "Food Insecure" group who were not previously aware of these resources/activities is notably higher (23%) compared to the "Food Secure" group (9%).

The data also reveals that some participants in both groups became aware of the resource or activity through sign/banner/flyer (27% for "Food Secure" and 35% for "Food Insecure"). While this channel seems to have a similar impact across both groups, it is not as prevalent as the campus website or social media. Lastly, a small percentage of participants in both groups reported other means of awareness (4% for "Food Secure" and 7% for "Food Insecure"). Without further details, it is difficult to determine the specific nature of these alternative channels.

In conclusion, the table highlights the different channels through which participants became aware of a particular resource or activity. The "Food Secure" group relies heavily on the campus website or newsletter and social media, while the "Food Insecure" group shows a relatively higher reliance on word of mouth and a higher proportion of participants who were not previously aware of these resources/activities. Understanding these patterns will help to inform our strategies and effectively reach and support individuals in need of food security resources.

Table 3.14 - % of student's who have attempted to access the above resources

Attempted to access the above resources/activities	Food Secure (n = 22)	Food Insecure (n = 26)
On-campus Food pantry	10%	11%
Campus contact to assist with connections to food resources	0%	0%
Campus contact for SNAP application assistance	0%	0%
Campus Hunger-Free Task Force	0%	4%
Meal-swipe sharing program (if there is an on-campus dining and student meal plan option)	0%	8%
None of the above	90%	77%

The table above depicts the utilization of various resources and activities aimed at addressing food security among both food secure and food insecure individuals.

Among the respondents categorized as food secure, a mere 10% reported availing themselves of the on-campus Food pantry, while 11% of the food insecure participants indicated utilizing this particular resource. The utilization rate of the Food pantry remained relatively low for both groups, which highlights the existing need for further attention.

Regarding seeking assistance for connecting to food resources, applying for SNAP (Supplemental Nutrition Assistance Program), and accessing a Hunger-Free Task Force on campus, respondents from both the food secure and food insecure categories reported a usage rate of 0%. This absence of engagement with these resources implies a lack of awareness and involvement among the surveyed individuals, regardless of their food security status.

A notable observation arises in relation to the meal-swipe sharing program, where none of the food secure respondents reported utilizing this program. In contrast, 8% of the food insecure participants mentioned accessing the meal-swipe sharing program. This suggests that individuals experiencing food insecurity may be more inclined to take advantage of such programs if made available. However, it also implies that food secure students may not be contributing to this program as frequently as they could.

Most respondents from both groups, encompassing 90% of food secure participants and 77% of food insecure participants, stated that they did not access any of the listed resources or activities. This finding highlights a substantial gap in awareness, engagement, or availability of support services within our undergraduate population.

In conclusion, the results underscore the pressing need to enhance awareness and accessibility of resources and activities aimed at addressing food insecurity on campus. Major efforts should be undertaken to promote the utilization of the on-campus food pantry, facilitate connections to food resources, provide assistance with SNAP applications, and foster the Hunger-Free Task Force. Additionally, given the relatively higher usage rate among food insecure participants in the meal-swipe sharing program, it is crucial to explore expanding these initiatives as a priority. The findings of this table accentuate the significance of improving support systems within the campus community

Table 3.15 - % of student's who have attempted to access the above resources

Did the above resources meet the student's needs?	Food Secure (n = 2)	Food Insecure (n = 6)
No, but nearby community resources were available	0%	33%
No, there were not enough available resources on-campus or in the surrounding community to meet my need	0%	33%
Yes, on-campus resources were sufficient	100%	33%

Table 3.15 presents the responses regarding the utilization of resources and the evaluation of their sufficiency by both food secure and food insecure students.

All the food secure participants reported that on-campus resources were sufficient to meet their needs. In contrast, only 33% of the food insecure participants expressed satisfaction with the on-campus resources. This suggests that while on-campus resources were effective for some food insecure students, a significant portion still faced challenges in accessing adequate support.

Continuing, none of the food secure participants reported that nearby community resources were necessary to meet their needs. In contrast, 33% of the food insecure participants indicated that although the above resources were insufficient, nearby community resources were available to help fulfill their needs. This further suggests that while food secure students found on-campus resources sufficient, a portion of food insecure students had to rely on external community resources.

Similarly, none of the food secure participants reported a lack of available resources oncampus or in the surrounding community to meet their needs. However, 33% of the food insecure participants felt that there were insufficient resources both on-campus and in the surrounding community. This highlights a gap in resource availability in the Towson area for a good portion of food insecure students, indicating the need for further support and expansion of resources that will address these needs.

Overall, the findings from this table suggest that while on-campus resources are generally meeting the needs of food secure students, there are areas for improvement in supporting food insecure students. Addressing the insufficiency of resources and exploring collaborations with nearby community resources may help bridge the gap and provide more comprehensive support to food insecure students on campus.

Table 3.16 - Food assistance services utilized by student in the past 12 months

Food assistance services utilized by student in the	Food Secure (n	Food Insecure (n
past 12 months	= 22)	= 26)

SNAP	0%	23%
WIC	4%	3%
Off-Campus Food Pantries	4%	7%
Church affiliated assistance	0%	15%
Private Organization assistance	0%	7%
Local Soup Kitchens	0%	0%
Free Food Events	18%	46%
Other	0%	0%
Not applicable	77%	38%

Table 3.16 provides an analysis of the food assistance services utilized by both food secure and food insecure students in the past 12 months.

Among the food secure participants, none reported utilizing SNAP (Supplemental Nutrition Assistance Program) benefits, while 23% of the food insecure participants indicated using this service. This indicates a significant disparity in the utilization of SNAP, with a higher proportion of food insecure students utilizing this assistance program.

In terms of the Women, Infants, and Children (WIC) program, 4% of food secure participants reported utilizing it, while only 3% of food insecure participants indicated the same. This suggests a relatively low utilization rate for both groups, but a slightly higher utilization rate among food secure students. This was the only program that food secure students reported utilizing more than food insecure students.

When it comes to off-campus food pantries, 4% of food secure participants reported utilizing them, compared to 7% of food insecure participants. This indicates a slightly higher utilization rate among food insecure students, but overall, a lower engagement with off-campus food pantries for both groups.

Regarding church-affiliated assistance, private organization assistance, and local soup kitchens, none of the food secure participants reported utilizing these services. However, 15% of food insecure participants mentioned accessing church-affiliated assistance, while 7% reported utilizing private organization assistance. No participants from either group reported utilizing local soup kitchens.

Interestingly, free food events showed the biggest notable difference in utilization rates between the two groups. While 18% of food secure participants reported attending free food events, a higher proportion of food insecure participants (46%) mentioned utilizing this resource. This suggests that free food events may be more accessible and beneficial to students in general, and a common resource utilized by food insecure students.

No participants from either group reported utilizing other forms of food assistance, and 77% of food secure participants and 38% of food insecure participants marked "not applicable" to indicate that they did not utilize any of the listed services.

Overall, the findings indicate variations in the utilization of food assistance services between food secure and food insecure students. It appears that SNAP, WIC, and free food events are the most utilized food assistance resources among our undergraduate population.

Table 3.17 - Times per month that student is accessing food resources

Times per month that student is accessing food	Food Secure (n =	Food Insecure (n =
resources	5)	16)
Less than once a month	60%	43%
Once a month	0%	0%
Twice a month	40%	19%
Three times a month	0%	19%
Four times a month	0%	13%
More than four times a month	0%	6%

The survey report analyzed the data provided in Table 3.17, focusing on the frequency of students accessing food resources. The students were divided into two groups: "Food Secure" and "Food Insecure."

Among the food-secure students, it was found that the majority (60%) accessed food resources less than once a month. None of the food-secure students reported accessing food resources only once a month. A smaller proportion (40%) accessed food resources twice a month, while none of them accessed it three or four times a month. Additionally, none of the food-secure students accessed food resources more than four times a month.

Similar to the food-secure students, none of the food-insecure students accessed food resources once a month. In contrast, among the food-insecure students, a significant portion (43%) accessed food resources less than once a month. A notable proportion (19%) accessed food resources twice a month, while another 19% accessed them three times a month. A smaller percentage (13%) accessed food resources four times a month, and only 6% accessed them more than four times a month.

The findings show that food-insecure students have a higher need and dependence on accessing food resources compared to their food-secure counterparts but with varying needs. Most of the food-insecure students accessed food resources less than once a month, with some accessing them on a more frequent basis indicating a varied need. This highlights the challenges, irregularly, and increased vulnerability faced by food-insecure students in ensuring regular access to adequate nutrition.

Table 3.18 - Times per month that student is accessing food resources

Student perception of SNAP Qualification	Food Secure (n = 22)	Food Insecure (n = 26)
I am unsure if I would qualify for	45%	61%
SNAP.		
No, I would not qualify for SNAP.	55%	23%
Yes, I would but I have not applied	0%	11%
for it.		
Yes, I receive SNAP benefits.	0%	5%

The table above presents the results of student's perception of their SNAP (Supplemental Nutrition Assistance Program) qualification.

Among the food-secure students, it was found that 45% were unsure if they would qualify for SNAP benefits. This suggests that a significant portion of food-secure students may have some uncertainty or lack of knowledge regarding their eligibility for SNAP assistance. On the other hand, 55% of food-secure students stated that they would not qualify for SNAP benefits. This indicates that a majority of food-secure students are educated on the fact that they more than likely do not meet the eligibility criteria for SNAP assistance.

In the case of food-insecure students, a higher percentage (61%) reported being unsure if they would qualify for SNAP benefits. This indicates a greater level of uncertainty among food-insecure students compared to their food-secure counterparts. Additionally, a smaller proportion (23%) of food-insecure students stated that they would not qualify for SNAP benefits, suggesting that a significant number of them may be unaware of their eligibility status.

None of the food-secure students reported receiving SNAP benefits while 5% of food-insecure students reported to receiving benefits.

In summary, the table reveals that there is a considerable level of uncertainty and lack of awareness regarding SNAP qualification among both food-secure and food-insecure students. This highlights the need for enhanced education and outreach efforts to ensure that eligible students, especially those who are food-insecure, are aware of their potential eligibility for SNAP benefits.

Table 3.19 - Where student is accessing majority of groceries and/or prepared foods

Where student is accessing majority of groceries and/or prepared foods	Food Secure (n = 22)	Food Insecure (n = 26)
Grocery Stores	77%	42%
Off-campus dining sites	18%	11%
Local food pantries or grocery distribution sites	9%	11%
On-campus dining sites	36%	42%
Household members	31%	26%
Convivence Stores	9%	19%

Table 3.19 presents data on the primary sources from which students access the majority of their groceries and/or prepared foods.

Grocery stores emerged as the most prominent access point for both food secure and food insecure students. A significant proportion of food secure students (77%) reported relying on grocery stores for their groceries and prepared foods. However, this proportion was notably lower among food insecure students, with only 42% indicating grocery stores as their primary source.

Following behind, on-campus dining sites were reported as a primary source for a considerable proportion of both food secure (36%) and food insecure (42%) students. These facilities appear to play a significant role in meeting the dietary needs of students on campus, particularly for food insecure individuals. The off-campus dining sites were identified as more of a secondary source for obtaining groceries and prepared foods. While 18% of food secure students relied on off-campus dining sites, the proportion was slightly lower for food insecure students at 11%.

Local food pantries or grocery distribution sites were mentioned as an access point by a small percentage of both food secure (9%) and food insecure (11%) students. This indicates that these resources play a modest role in meeting the food needs of students, regardless of their food security status.

Convenience stores were identified as an access point by a relatively small percentage of students. Only 9% of food secure students and 19% of food insecure students reported relying on convenience stores for their groceries and prepared foods.

Finally, a notable portion of both food secure (31%) and food insecure (26%) students indicated that household members were their primary source for accessing groceries and prepared foods. This finding suggests that students often rely on their family or household members for support in meeting their food needs.

In summary, Table 3.19 highlights that while grocery stores are the primary source for both food secure and food insecure students, there are differences in the utilization of other access points. Off-campus dining sites, local food pantries or grocery distribution sites, on-campus dining sites, household members, and convenience stores exhibit varying degrees of importance as sources for student's groceries and prepared foods, influenced by their food security status. These findings shed light on the diverse strategies employed by students in accessing food resources and emphasize the need for targeted interventions to address food insecurity among the student population.

Table 3.20 - Does student have a meal plan?

Does student have a meal plan?	Food Secure (n = 22)	Food Insecure (n = 26)
Yes	50%	46%
No	50%	53%

The table presents data on whether students have a meal plan, categorized by their food security status.

Interestingly, the data reveals an equal distribution between food secure and food insecure students regarding the possession of a meal plan. Exactly 50% of food secure students reported having a meal plan, while a slightly lower proportion of 46% was observed among food insecure students. This suggests that having a meal plan does not necessarily guarantee food security, as many food-insecure students also have a meal plan.

Conversely, when considering the absence of a meal plan, the data shows a slightly higher proportion among food insecure students. Approximately 53% of food insecure students reported not having a meal plan, while an equal proportion of 50% was observed among food secure students. This indicates that a larger percentage of food insecure students rely on alternative methods to obtain their meals, such as cooking at home or finding food from other sources.

Overall, the data suggests that while having a meal plan may provide some level of food security, it is not a definitive indicator of a student's food security status. Other factors, such as financial constraints or the availability of food resources, likely play a role in determining a student's level of food security. These findings emphasize the importance of addressing food insecurity holistically, considering various factors beyond the presence or absence of a meal plan.

Table 3.21 – How many meals per week the student's meal plan provides

Meal Plan - Number of Meals	Food Secure (n = 11)	Food Insecure (n = 12)
5 meal swipes per week	18%	25%
10 meal swipes per week	27%	34%
14 meal swipes per week	37%	41%
21 meal swipes per week	18%	0%

The table, labeled Table 3.21, presents data on the number of meals per week provided by student meal plans, categorized by food security status.

Among food secure students, the majority reported having a meal plan that provides 14 meal swipes per week (37%). This was followed by those with a meal plan offering 10 meal swipes per week (27%). A smaller proportion of food secure students indicated having a meal plan that provides either 5 meal swipes per week (18%) or 21 meal swipes per week (18%).

Similarly, among food insecure students, the highest percentage reported having a meal plan that provides 14 meal swipes per week (41%). This was followed by those with a meal plan offering 10 meal swipes per week (34%). A slightly higher proportion of food insecure students indicated having a meal plan that provides 5 meal swipes per week (25%) compared to food secure students. Notably, none of the food insecure students reported having a meal plan that provides 21 meal swipes per week.

Overall, the data indicates that a significant number of both food secure and food insecure students have meal plans that provide an ample number of meals per week, typically ranging from 10 to 14 meal swipes. This suggests that meal plans play a crucial role in meeting

student's dietary needs, regardless of their food security status. However, it is noteworthy that a notable proportion of food insecure students rely on meal plans with fewer meal swipes, typically around 5 per week. This limited number of swipes may pose challenges for these students in accessing enough meals. It is important to consider that some students may opt for meal plans with fewer swipes to meet eligibility requirements for SNAP benefits, as plans with 10 or more meals render students ineligible. Thus, the decision to choose lower swipe options may be influenced by financial considerations and access to other forms of food assistance.

These findings highlight the importance of considering the availability and adequacy of meal plans in addressing food insecurity among students. It suggests that efforts should be made to ensure that meal plans are accessible and provide sufficient meals to support student's nutritional needs. Also, targeted interventions may be necessary to address the needs of foodinsecure students who have limited access to meals through their plans.

Table 3.22 – Number of meal swipes lost at the end of the meal period

Number of meal swipes lost at the end of the meal period	Food Secure (n = 11)	Food Insecure (n = 12)
0 meals	36%	83%
1 - 2 meals	36%	17%
2 - 4 meals	9%	0%
4 - 6 meals	9%	0%
6+ meal swipes	9%	0%

Table 3.22 illustrates the distribution of lost meal swipes at the end of the meal period, categorized by student's food security status. Among food secure students, a majority (36%) did not report any lost meal swipes. An equal proportion of food secure students (36%) indicated losing 1-2 meal swipes. A smaller percentage of food secure students reported losing 2-4 meal swipes (9%), 4-6 meal swipes (9%), or 6 or more meal swipes (9%).

In contrast, there is a notable contrast among food insecure students. The majority of food insecure students (83%) reported not losing any meal swipes. A small percentage (17%) of food insecure students reported losing 1-2 meal swipes, while none of them reported losing 2-4 meal swipes, 4-6 meal swipes, or 6 or more meal swipes.

These findings suggest that food insecure students are more likely to retain and fully utilize their allocated meal swipes compared to food secure students. This indicates a greater need and reliance on the provided meals among food insecure students, resulting in heightened awareness and efficient utilization of their allocated swipes.

Overall, the data emphasizes the significance of meal swipes for both food secure and food insecure students. It underscores the ongoing need for support and resources to ensure all students have access to enough meals, particularly for food-insecure students who heavily depend on them. Consequently, efforts should be directed towards implementing the new meal

swipe donation program, which allows unused meals from other students to be utilized by those in need.

#### D. Impact

#### **Academic:**

Table 3.23 - Situations experienced by students in the last 12 months that have impacted academics

Situations experienced by students in the last 12 months that have impacted academics	Food Secure (n = 22)	Food Insecure (n = 26)
Missing class	13%	30%
Being unable to concentrate and/or falling asleep	50%	69%
Failing an assignment or exam	0%	7%
Failing or withdrawing from a single class	0%	7%
A decrease in your GPA	4%	19%
Withdrawing from an entire semester	4%	3%
Not buying a required textbook	0%	34%
Opting not to join an extracurricular activity	13%	34%
Skipping a club meeting	9%	19%
Not performing as well in your academics as you otherwise could have	18%	46%

The table (Table 3.23) presents the situations experienced by students in the last 12 months that have impacted their academics, categorized by their food security status.

Among food secure students, 13% reported missing class as a situation that has impacted their academics, whereas a higher proportion of food insecure students (30%) experienced the same challenge. This indicates that food insecurity may contribute to higher rates of class absenteeism.

Regarding concentration and sleep, a significant difference was observed between the two groups. While 50% of food secure students reported being unable to concentrate and/or falling asleep, a higher percentage of food insecure students (69%) faced this issue. This suggests that food insecurity may have a more significant impact on student's ability to focus and stay attentive in academic settings.

When it comes to academic performance, none of the food secure students reported failing an assignment or exam or failing or withdrawing from a single class. However, a small proportion (7%) of food insecure students experienced these challenges. Similarly, a higher percentage of food insecure students (19%) reported a decrease in their GPA compared to food secure students (4%). This implies that food insecurity may be associated with academic difficulties and a higher risk of poor performance.

Another notable finding is the difference in behaviors related to academic engagement. Food insecure students reported higher rates of not buying required textbooks (34%), opting not to join extracurricular activities (34%), and skipping club meetings (19%) compared to food secure students. This suggests that financial constraints associated with food insecurity may limit student's ability to participate fully in academic activities outside the classroom.

Furthermore, food insecure students were more likely to indicate not performing as well in their academics as they otherwise could have, with 46% reporting this situation compared to 18% of food secure students. This highlights the broader impact of food insecurity on overall academic achievement and potential unrealized academic potential.

The findings underscore the significant influence of food insecurity on various aspects of student's academic experiences. It emphasizes the need for comprehensive support systems to address the challenges faced by food insecure students, such as access to adequate and nutritious meals, financial assistance, and resources to alleviate the impact of food insecurity/poverty on their academic performance and engagement.

#### Mental:

Table 3.24 - How often students spend time with people they care about/feel close to

How often students spend time with people they care about/feel close to	Food Secure (n = 22)	Food Insecure (n = 26)
Less than once per week	4%	20%
1 - 2 times a week	10%	24%
3 - 4 times a week	27%	26%
More than 4 times a week	59%	30%

Table 3.24 provides insights into the frequency with which students spend time with people they care about or feel close to, categorized by their food security status.

Among food secure students, the majority (59%) reported spending time with people they care about or feel close to more than four times a week. A significant proportion (27%) indicated spending time together three to four times a week. A smaller percentage reported spending time together one to two times a week (10%), and only a few respondents reported spending time less than once per week (4%).

In contrast, among food insecure students, the distribution of responses varied. The largest percentage (30%) reported spending time with loved ones more than four times a week. A comparable proportion (26%) indicated spending time together three to four times a week. A significant portion (24%) reported spending time together one to two times a week. A smaller percentage (20%) reported spending time less than once per week.

The data suggests that, overall, food secure students tend to spend more time with people they care about or feel close to, with a majority engaging in such interactions more than four times a week. In comparison, food insecure students display a wider distribution of responses,

indicating a variation in the frequency of social connections. It is worth noting that a significant proportion of both food secure and food insecure students reported spending time together three to four times a week, suggesting a consistent level of social interaction for a substantial portion of the student population.

These findings highlight the importance of social connections and support networks for students, regardless of their food security status. Regular and meaningful social interactions have the potential to contribute positively to student's well-being and academic success. Recognizing the varying needs and circumstances of students, it is crucial for universities to provide resources and opportunities for students to foster social connections and maintain a sense of community.

Table 3.25 – Student self-report of stress levels during the past 12 months

Student stress levels in the past 12	Food Secure (n =	Food Insecure (n =
months	22)	26)
Not stressed at all	5%	0%
A little bit stressed	18%	7%
Somewhat stressed	36%	11%
Quite a bit stressed	23%	58%
Extremely Stressed	18%	24%

The table above (3.25) presents the results of a student self-report on stress levels during the past 12 months, comparing food secure and food insecure individuals. Looking at the stress levels reported, it is evident that the experiences of food secure and food insecure students differ significantly. Among the food secure students, none reported being not stressed at all, while 5% of food insecure students fell into this category. This suggests that food insecurity may contribute to higher stress levels among students.

When it comes to feeling a little bit stressed, 18% of food secure students reported this level of stress compared to 7% of food insecure students. Similarly, for somewhat stressed, 36% of food secure students felt this way, while only 11% of food insecure students reported the same. These findings indicate that food insecurity might be associated with a higher likelihood of experiencing lower levels of stress.

However, the data shows a stark contrast when it comes to higher stress levels. Among food secure students, 23% reported feeling quite a bit stressed, whereas a significantly higher percentage of food insecure students, 58%, fell into this category. This suggests that food insecurity has a strong association with heightened stress levels.

For the highest stress level, extremely stressed, 18% of food secure students and 24% of food insecure students reported experiencing this level of stress. Although the difference is not as substantial as for the previous category, it still indicates that food insecurity may contribute to an increased likelihood of extremely high stress levels among students.

Overall, the table highlights the varying levels of stress reported by students, based on their food security status. Food insecure students tend to experience higher stress levels,

particularly at the quite a bit stressed level, compared to their food secure counterparts. These findings emphasize the need to address food insecurity among students as it can have significant implications for their overall well-being and academic success.

Table 3.26 – Student self-report of emotions during the past 12 months due to a lack of food access

Toou access		
Student self-report of emotions experienced during the past	Food Secure	Food
12 months due to a lack of food access	(n = 22)	Insecure (n =
		26)
Increased feelings of anxiety	54%	73%
Increased feelings of depression	9%	46%
Increased feelings of distress	31%	42%
Increased feelings of anger	9%	27%
Increased feelings of loneliness	18%	46%
Decreased self-esteem	18%	3%

The table (3.26) presents the results of a student self-report on emotions experienced during the past 12 months due to a lack of food access.

Looking at the emotions reported, it is evident that food insecurity has a significant impact on the emotional well-being of students. The data shows that a higher percentage of food insecure students experienced increased feelings of anxiety compared to food secure students (73% versus 54%). This suggests that the lack of food access contributes to heightened levels of anxiety among students.

Similarly, food insecurity is associated with increased feelings of depression. While only 9% of food secure students reported experiencing this emotion, a much higher percentage of food insecure students (46%) indicated increased feelings of depression. This finding highlights the negative psychological consequences of food insecurity on students.

Feelings of distress were also prevalent among both food secure and food insecure students, but the percentage was slightly higher for food insecure students (42%) compared to food secure students (31%). This indicates that food insecurity contributes to a higher likelihood of experiencing distressing emotions.

The data also reveals that food insecurity is associated with increased feelings of anger and loneliness. Food insecure students reported higher percentages of increased anger (27%) and increased loneliness (46%) compared to their food secure counterparts (9% for anger and 18% for loneliness). These findings suggest that the lack of food access can exacerbate negative emotions, leading to feelings of anger and social isolation.

Interestingly, decreased self-esteem was reported by both food secure and food insecure students, but the percentage was higher among food secure students (18%) compared to food

insecure students (3%). This may indicate that other factors, in addition to food insecurity, contribute to decreased self-esteem among food secure students.

In summary, the table demonstrates that food insecurity has a profound impact on the emotional well-being of students. Food insecure students reported higher percentages of increased anxiety, depression, distress, anger, and loneliness compared to their food secure counterparts. These findings underscore the need for addressing food insecurity in educational settings to support the mental health and overall well-being of students.

Table 3.27 – Student self-report of anxiety related symptoms during the past two weeks

Student self-report of anxiety related symptoms during the past two weeks	Food Secure (n = 22)	Food Insecure (n = 26)
Not being able to stop or control worrying	50%	50%
Worrying too much about different things	50%	77%
Trouble relaxing	50%	80%
Being so restless that it is hard to sit still	9%	46%
Becoming easily annoyed or irritable	68%	65%
Feeling afraid as if something awful might happen	22%	53%

The table presents the results of a student self-report on anxiety-related symptoms experienced during the past two weeks, comparing food secure and food insecure individuals.

Analyzing the data, we can observe several notable findings regarding anxiety-related symptoms. Starting with the symptom of not being able to stop or control worrying, both food secure and food insecure students reported an equal percentage of 50%. This suggests that worrying uncontrollably is a common experience regardless of food security status among students.

When it comes to worrying too much about different things, a higher percentage of food insecure students (77%) reported this symptom compared to food secure students (50%). This indicates that food insecurity may contribute to heightened levels of multifactored worrying among students.

Trouble relaxing was another symptom assessed in the study. Interestingly, an equal percentage of food secure and food insecure students (50%) reported experiencing difficulty in relaxing. This suggests that the challenges in achieving a state of relaxation are not significantly different between the two groups.

In terms of being so restless that it is hard to sit still, a significantly higher percentage of food insecure students (46%) reported this symptom compared to food secure students (9%). This indicates that food insecurity may contribute to a higher likelihood of restlessness and difficulty remaining still among students.

When examining becoming easily annoyed or irritable, both food secure and food insecure students reported relatively high percentages. However, a slightly higher percentage of

food secure students (68%) reported this symptom compared to food insecure students (65%). This suggests that factors other than food insecurity may also contribute to irritability and annoyance among students.

Lastly, feeling afraid as if something awful might happen was assessed in the study. The results indicate that a higher percentage of food insecure students (53%) reported this symptom compared to food secure students (22%). This finding suggests that food insecurity may contribute to heightened feelings of fear and apprehension among students.

In summary, the table reveals that food insecurity is associated with higher percentages of certain anxiety-related symptoms among students. Food insecure students reported higher levels of worrying too much, restlessness, and fear compared to their food secure counterparts. These findings highlight the impact of food insecurity on the mental well-being of students and emphasize the importance of addressing food insecurity as part of broader efforts to support student mental health.

# **Physical:**

Table 3.28 – Student self-report of physical health during the past 12 months that were due to a lack of food access

Student self-report of physical health during the past 12 months that were due to a lack of food access	Food Secure (n = 22)	Food Insecure (n = 26)
General Health Problems	27%	38%
Developing an unhealthy relationship with food (Ex: Skipping Meals, Binge Eating)	54%	65%
Weight Fluctuations	45%	46%

Table 3.28 presents the results of a student self-report on physical health during the past 12 months that were attributed to a lack of food access.

Examining the findings, several significant patterns emerge regarding physical experiences related to food access. Firstly, in terms of general health problems, 27% of food secure students reported experiencing such issues, whereas a slightly higher percentage of food insecure students (38%) reported the same. This suggests that food insecurity may be associated with a higher likelihood of encountering general health problems among students.

Regarding the development of an unhealthy relationship with food, such as skipping meals or engaging in binge eating behaviors, a notable difference is observed. While 54% of food secure students reported this issue, a higher percentage of food insecure students (65%) indicated the same experience. This implies that food insecurity may contribute to a higher propensity for developing an unhealthy relationship with food among students.

When examining weight fluctuations, both food secure and food insecure students reported relatively similar percentages. For food secure students, 45% reported experiencing weight fluctuations, while for food insecure students, the percentage was slightly higher at 46%.

This suggests that weight fluctuations may be a common experience irrespective of food security status among students.

In summary, the table highlights the impact of food insecurity on the physical health among students. Food insecure students reported higher percentages of developing an unhealthy relationship with food and a slightly higher prevalence of general health problems. Weight fluctuations were observed in similar proportions among both food secure and food insecure students. These findings underscore the need to address food insecurity to mitigate its potential adverse effects on physical well-being among students.

Table 3.29 – Student self-report of energy levels during the past 12 months

Student self-report of energy levels during the past 12 months	Food Secure (n = 22)	Food Insecure (n = 26)
Poor	10%	8%
Fair	13%	61%
Good	40%	27%
Very Good	27%	4%
Excellent	10%	0%

The above table (3.29) presents the results of a student self-report on energy levels experienced during the past 12 months, comparing food secure and food insecure individuals

Analyzing the data, we can observe distinct patterns in the self-reported energy levels of students. Looking at the category of "Poor" energy levels, both food secure and food insecure students reported relatively low percentages, with 10% of food secure students and 8% of food insecure students indicating poor energy levels. This suggests that overall, a small portion of students experienced poor energy levels regardless of their food security status.

Moving on to the "Fair" energy levels category, there is a substantial difference between food secure and food insecure students. While only 13% of food secure students reported fair energy levels, a significantly higher percentage of food insecure students (61%) indicated the same. This indicates that food insecurity is associated with a higher likelihood of experiencing fair energy levels among students.

Interestingly, the category of "Good" energy levels shows that among food secure students, 40% reported good energy levels, whereas only 27% of food insecure students reported the same. This suggests that food security may contribute to a higher likelihood of experiencing good energy levels among students.

In the "Very Good" energy levels category, the data reveals that a higher percentage of food secure students (27%) reported very good energy levels compared to food insecure students (4%). This indicates that food security may be associated with a higher likelihood of experiencing very good energy levels among students.

Lastly, the category of "Excellent" energy levels shows that 10% of food secure students reported excellent energy levels, while none of the food insecure students indicated the same.

This suggests that excellent energy levels were only reported by food secure students and that food insecure students do not consider themselves to be fully energized.

In summary, the table highlights the impact of food insecurity on self-reported energy levels among students. Food insecure students were more likely to report fair energy levels and less likely to report good, very good, or excellent energy levels compared to their food secure counterparts. These findings emphasize the potential influence of food security on student's energy levels and highlight the importance of addressing food insecurity to support overall well-being and energy levels among students.

Table 3.30 – Student self-report of overall health during the past 12 months that were due to a lack of food access

Student self-report of overall health during the past 12 months	Food Secure (n = 22)	Food Insecure (n = 26)
Poor	4%	8%
Fair	22%	23%
Good	50%	61%
Very Good	14%	8%
Excellent	10%	0%

The table presents the results of a student self-report on overall health experienced during the past 12 months, comparing food secure and food insecure individuals. It provides insights into how students perceive their health based on their food security status.

Starting with "Poor" overall health, both food secure and food insecure students reported low percentages. Among food secure students, only 4% indicated poor overall health, slightly higher than the 8% reported by food insecure students. These findings suggest that a small proportion of students, regardless of their food security status, experienced poor overall health during the past 12 months.

Moving on to the category of "Fair" overall health, the percentages were similar for both groups. Among food secure students, 22% reported fair overall health, similar to the 23% reported by food insecure students. This indicates that a comparable portion of students from both groups perceived their overall health as fair during the past year.

When considering the category of "Good" overall health, a notable difference emerges between food secure and food insecure students. Among food secure students, 50% reported good overall health, whereas a higher percentage of food insecure students (61%) indicated the same. This suggests that food insecurity may be associated with a higher likelihood of perceiving one's overall health as good among students.

In the "Very Good" overall health category, a higher percentage of food secure students (14%) reported very good overall health compared to food insecure students (8%). This suggests that food security may contribute to a higher likelihood of perceiving one's overall health as very good among students.

Lastly, in the category of "Excellent" overall health, 10% of food secure students reported excellent overall health, while none of the food insecure students indicated the same. This indicates that excellent overall health was predominantly reported by food secure students.

In summary, the table highlights the association between food security and student's self-reported overall health. Food insecure students were more likely to perceive their overall health as good and less likely to perceive it as very good or excellent, compared to their food secure counterparts. These findings underscore the potential impact of food security on student's health perceptions and emphasize the importance of addressing food insecurity to promote overall well-being among students. However, it is important to note that one's opinion of good health is subjective, and a self-report like this may not necessarily correlate with actual health status.

# Recommendation's:

In response to the survey findings and the identified needs of students, the FoodShare proposes a set of strategic recommendations aimed at establishing a comprehensive student support system. The recommendations focus on various areas, including food, medication, housing, childcare, and clothing assistance, and encompass both educational initiatives and resource-based programs. By working to implement these strategies, the university aims to provide comprehensive support to students, ensuring their basic needs are met and empowering them to thrive academically and personally. The recommendations prioritize proactive measures, education, resource accessibility, and student involvement, reflecting a comprehensive approach towards addressing student well-being and fostering a supportive campus environment. Additionally, the university recognizes the importance of staying informed about best practices and conducting further assessments to continuously enhance the effectiveness of interventions in meeting student needs. Through the following efforts, The FoodShare/The Hub will be creating a campus environment where all students can thrive and succeed. The specific recommendations are outlined below.

- 1. Establish a comprehensive university Hub to address diverse areas of student need, focusing on food, medication, housing, childcare, and clothing assistance.
- 2. Develop and execute well-planned programming each semester to enhance student's culinary and financial literacy skills. This includes cooking/culinary demonstrations, budgeting workshops, and resource-based programs like grocery store ride-share programs and basic need resource fairs.
- 3. Foster awareness and understanding of The FoodShare/Hub among the campus community by engaging with various stakeholders, collaborating with new student programs, advisors, and representatives from each college. Utilize effective communication channels such as social media and digital signage.
- 4. Continuously expand basic need resources by establishing a comprehensive website as a centralized platform, providing easy access to relevant student resources. Incorporate

- practical tools like food access maps, resource guides, and video tutorials. Improve the meal swipe donation program.
- 5. Foster student empowerment and self-sufficiency by establishing a student-led peer-education group closely affiliated with The Hub. Provide opportunities for active student participation in addressing basic needs, fostering a sense of community and support.
- 6. Conduct periodic reviews of survey findings and stay informed about best practices to effectively implement targeted interventions.
- 7. Initiate additional assessments related to student needs support to gain a comprehensive understanding of the scope and requirements for further interventions.

The FoodShare program aspires for "The Hub," the upcoming center for student basic needs support at the university, to play a pivotal role in implementing these recommendations and advancing the goal of creating an inclusive campus environment where all students can thrive and graduate successfully, irrespective of their food security and socioeconomic status. By providing comprehensive support and resources, "The Hub" aims to contribute significantly towards addressing food insecurity and promoting equitable opportunities for every student.

# **Conclusion:**

In conclusion, the "Towson University: A survey on student's access to food, food security, and the effects of these factors" sheds light on the pressing issue of food insecurity within our university community. By successfully meeting the survey's objectives, we have gained valuable insights into the level of food security among our undergraduate population, identified the demographic groups most affected, evaluated the impact on various aspects of student's lives, and analyzed the current methods of accessing food assistance.

The survey's main findings underscore the complex nature of food security and its effects on students. Food insecure students clearly face significant challenges in multiple areas, including their social interactions, academic performance, and physical well-being, which hinder their graduation prospects. Notably, the survey revealed that approximately 54% of Towson students experience food insecurity, with a particularly disproportionate impact on the African American and Black population.

These findings underscore the urgency of implementing targeted and effective initiatives to address food insecurity within our university. By understanding the specific challenges faced by our students and recognizing the disparities among different demographic groups, we can strive to create a supportive environment that promotes the overall well-being of all individuals.

Moving forward, these survey findings will play a pivotal role in shaping future food security programming at Towson University. It is our collective responsibility as a university community to unite, advocate for change, and actively work towards eradicating food insecurity.

By providing our students with the necessary resources and support, we can create an environment that fosters equity and inclusivity, ensuring that every student can thrive academically, mentally, and physically.

In conclusion, the survey report serves as a call to action, urging Towson University to address the issue of food insecurity through the recommendations. Together, with our university community's commitment and collaboration, we can make a lasting impact and ensure that no student endures hunger, and we can create a brighter future where every student has access to the resources they need to succeed and thrive.

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# **Appendices**

## APPENDIX A.

Survey Questions.

# **Background Information Questions:**

- 1. Are you currently employed?
  - a. Yes, full time employment (30 or more hr./week)
  - b. Yes, part time employment (less than 30 hr./week)
  - c. Yes, unpaid internship or volunteer position
  - d. Yes, work study employment
  - e. No, but I am seeking employment
  - f. No, and I am not seeking employment
  - g. I have temporary work (contracted at 1 year or less)
  - h. Prefer not to answer
- 2. [IF YES TO 1, ASK] How many hours do you work per week?
- 3. How much money in student loans have you taken out to date?
- 4. During the past 12 months, have you and/or your household members struggled to get or pay for any of the following, when it was needed? Please select all that apply.
  - a. Food
  - b. Rent/Mortgage
  - c. Medicine or Healthcare
  - d. Utilities (Internet, electricity, water, etc.)
  - e. Childcare
  - f. Clothing
  - g. Other
  - h. Prefer not to answer
  - i. Not applicable
- 5. What is your household's total annual (yearly) income?
- 6. What is your household's size?
  - a. 1-2 people
  - b. 3-4 people
  - c. 5-6 people
  - d. 6+ people
- 7. Are any of your household members dependent? If so, how many?
  - a. 1-2 people
  - b. 3-4 people
  - c. 5-6 people
  - d. 6+ people
  - e. None. No dependents live in my household.

#### **Current Food Access:**

1. Have you utilized the TU (Towson University) FoodShare program (the on-campus food pantry)?

## <TU Hunger Survey >

- a. Yes
- b. No, but I am aware of the program.
- c. No, this is the first time I have heard of the program.
- 2. [IF YES TO 1, ASK] How many times a month are you utilizing the FoodShare's services?
  - a. Less than once a month
  - b. Once per month
  - c. Twice per month
  - d. Three times per month
  - e. Four times per month
  - f. Five times per month
- 3. Which of the following state/federal assistance programs are you aware of? Please select all that apply.
  - a. Supplemental Nutrition Assistance Program (SNAP formerly known as food stamps)
  - b. Special Supplemental Nutrition Assistance Program for Women, Infants, and Children (WIC)
  - c. Earned Income Tax Credit (EITC)
  - d. Federal work study
  - e. Other (add write-in option)
- 4. Have you previously received or applied for any of the above assistance programs?
  - a. Yes
  - b. No
  - c. Prefer not to answer
- 5. [IF NO TO 4, ASK] what barriers have prevented you from applying? Please select all that apply.
  - a. Income guidelines
  - b. Lack of knowledge/understanding about programs or eligibility requirements
  - c. Embarrassment or stigma
  - d. Complicated application process
  - e. Other (add write-in option)
- 6. Which of the following local resources or activities are you aware of? Please select all that apply.
  - a. Food pantry (either on or off campus)
  - b. Campus contact to assist with connections to food resources
  - c. Campus contact for SNAP application assistance
  - d. Campus Hunger-Free Task Force
  - e. Meal-swipe sharing program (if there is an on-campus dining and student meal plan option)
  - f. None of the above
- 7. Where did you learn about any of the above resources? Please select all that apply.

- a. Professor or other campus faculty/staff
- b. Social media
- c. Word of mouth
- d. Campus website or newsletter
- e. Sign/banner/poster on campus
- f. Other (add write-in option)
- g. I am not aware of any of the above resources on my campus
- 8. Have you attempted to access any of the above resources during the current school year (if yes, please select all that apply)?
  - a. Yes
    - i. Food pantry (either on or off campus)
    - ii. Campus contact to assist with connections to food resources
    - iii. Campus contact for SNAP application assistance
    - iv. Campus Hunger-Free Task Force
    - v. Meal-swipe sharing program
  - b. No
  - c. Prefer not to answer
- 9. [IF YES TO 8, ASK], were the resources available to you on campus able to meet your needs?
  - a. Yes, on-campus resources were sufficient
  - b. No, but nearby community resources were available
  - c. No, there were not enough available resources on-campus or in the surrounding community to meet my need
- 10. Have you and/or your household members utilized any of the following food assistance services in the past 12 months? Please select all that apply.
  - a. Supplemental Nutrition Assistance Program (SNAP)
  - b. Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)
  - c. Off campus food pantries
  - d. Church affiliated food assistance
  - e. Private organization assistance
  - f. Local soup kitchens
  - g. Free food events
  - h. Other
  - i. Not applicable
- 11. [If A-H is selected, ASK] How many times a month are you utilizing food assistance resources?
  - a. Less than once a month
  - b. Once a month
  - c. Twice a month
  - d. Three times a month
  - e. Four times a month
  - f. More than four times a month

- 12. Do you know if you would qualify for the Supplemental Nutrition Assistance Program (SNAP)?
  - a. Yes, I would but I have not applied for it.
  - b. Yes, I receive SNAP benefits.
  - c. No, I would not qualify for SNAP.
  - d. I am unsure if I would qualify for SNAP.
- 13. Where are you currently getting the majority of your groceries and/or prepared foods? Please select all that apply.
  - a. A grocery store
  - b. On-campus dining sites
  - c. Off-campus dining sites
  - d. Local food pantries or grocery distribution sites
  - e. Household members
  - f. Convenience stores
- 14. Do you currently have a TU meal plan?
  - a. Yes
  - b. No
- 15. [IF YES TO 14, ASK] How many meals swipes does your meal plan provide during a semester?
  - a. 5 meal swipes per week
  - b. 10 meal swipes per week
  - c. 14 meal swipes per week
  - d. 19 meal swipes per week
  - e. 21 meal swipes per week
  - f. Unlimited meal swipes per week
- 16. [IF YES TO 14, ASK] On average, how many left-over meal swipes do you lose at the end of the weekly meal period?
  - a. 0 meals
  - b. 1 2 meal swipes
  - c. 2 4 meal swipes
  - d. 4 6 meal swipes
  - e. 6+ meal swipes

## **Impacts of Food Access:**

### A. Academic:

- 1. Have you experienced any of the following situations in the past 12 months **because** you couldn't afford enough food/were hungry? Please select all that apply.
  - a. Missing class
  - b. Being unable to concentrate and/or falling asleep
  - c. Failing an assignment or exam
  - d. Failing or withdrawing from a single class
  - e. A decrease in your GPA

- f. Withdrawing from an entire semester
- g. Not buying a required textbook
- h. Opting not to join an extracurricular activity
- i. Skipping a club meeting
- j. Not performing as well in your academics as you otherwise could have

#### B. Mental:

- 1. How often do you talk to or spend time with people who you care about and feel close to?
  - **a.** Less than one time a week
  - b. 1-2 times a week
  - c. 3-4t times a week
  - d. More than 4 times a week
- 2. On a scale of 1-5 with 1 being not stressed at all and 5 being extremely stressed, how would you rate your overall stress levels in the past 12 months?
  - a. 1. Not stressed at all
  - b. 2. A little bit stressed
  - c. 3. Somewhat stressed
  - d. 4. Quite a bit stressed
  - e. 5. Extremely stressed
- 3. Have you experienced any of the following in the past 12 months **because** you couldn't afford enough food?"
  - a. Increased feelings of anxiety
  - b. Increased feelings of depression
  - c. Increased feelings of distress
  - d. Increased feelings of anger
  - e. Increased feelings of loneliness
  - f. Decreased self-esteem
- 4. Over the last 2 weeks, have you been bothered by any of the following problems? Please select all that apply.
  - a. Feeling nervous, anxious or on edge
  - b. Not being able to stop or control worrying
  - c. Worrying too much about different things
  - d. Trouble relaxing
  - e. Being so restless that it is hard to sit still
  - f. Becoming easily annoyed or irritable
  - g. Feeling afraid as if something awful might happen

## C. Physical:

- 1. Have you experienced any of the following in the past 12 months **because** you couldn't afford enough food? Please select all that apply.
  - a. Weight fluctuations

- b. General health problems
- c. Developing an unhealthy relationship with food (For example: skipping meals or binge eating)
- 2. On a scale of 1-5 with 1 being poor and 5 being excellent, how would you rate your energy levels during the past 12 months?
  - a. 1. Poor
  - b. 2. Fair
  - c. 3. Good
  - d. 4. Very good
  - e. 5.Excellent
- 3. On a scale of 1-5 with 1 being poor and 5 being excellent, how would you rate your overall health the past 12 months?
  - a. 1. Poor
  - b. 2. Fair
  - c. 3. Good
  - d. 4. Very good
  - e. 5.Excellent

# **Food Security Screening:**

- A. Intro Question
  - 1. Which of these statements best describes the food eaten in your household in the last 12 months?
    - a. Enough of the kinds of food I want to eat
    - b. Enough but not always the kinds of food I want
    - c.Sometimes not enough to eat
    - d.Often not enough to eat
    - e. Prefer not to answer
- B. Adult Stage 1 Mandatory Questions
  - 2. "I worried whether my food would run out before I got money to buy more." Was that often true, sometimes true, or never true for you/your household in the last 12 months?
    - a.Often true
    - b.Sometimes true
    - c. Never true
    - d.Prefer not to answer
  - 3. "The food that I bought just didn't last, and I didn't have money to get more." Was that often, sometimes, or never true for you/your household in the last 12 months?
    - a. Often true
    - b.Sometimes true
    - c.Never true
    - d.Prefer not to answer

- 4. "I couldn't afford to eat balanced meals." Was that often, sometimes, or never true for you in the last 12 months?
  - a.Often true
  - b.Sometimes true
  - c. Never true
  - d.Prefer not to answer

If affirmative response to one or more of Questions 2-4, OR response 3 or 4 to question 1 (if administered), then continue to Adult Stage 2. Otherwise, skip the End of Adult Food Security Module.

# C. Adult Stage 2

- 5. In the last 12 months, since last April, did you ever cut the size of your meals or skip meals because there was not enough money for food?
  - a. Yes
  - b. No (Skip 6)
  - c. DK (Skip 6)
- 6. [IF YES ABOVE, ASK] How often did this happen—almost every month, some months but not every month, or in 1 or 2 months?
  - a. Almost every month
  - b. Some months but not every month
  - c. 1 or 2 months
- 7. In the last 12 months, did you ever eat less than you felt you should because there was not enough money for food?
  - a. Yes
  - b. No
- 8. In the last 12 months, were you ever hungry but did not eat because there wasn't enough money for food?
  - a. Yes
  - b. No
- 9. In the last 12 months, did you lose weight because there was not enough money for food?
  - a. Yes
  - b. No

If affirmative response to one or more of questions 5 through 9, then continue to Adult Stage 3; otherwise, skip to End of Adult Food Security Module.

- D. Adult Stage 3
  - 10. In the last 12 months, did you ever not eat for a whole day because there was not enough money for food?
    - a. Yes
    - b. No (Skip 11)
    - c. DK (Skip 11)

- 11. [IF YES ABOVE, ASK] How often did this happen—almost every month, some months but not every month, or in only 1 or 2 months?
  - a. Almost every month
  - b. Some months but not every month
  - c. Only 1 or 2 months
  - d. DK