

INTRODUCTION

Within the past decade, food insecurity among college students has been recognized as a significant problem by researchers and universities. The United States Department of Agriculture (USDA) defines food insecurity as having “reduced quality, variety, or desirability of diet” and “multiple indications of disrupted eating patterns and reduced food intake.”¹

Marquette University is no exception to the issue of campus food insecurity. The 2015 Marquette University Climate Survey found that 15% of students who responded to the survey reported that they had difficulty affording food.² In the 2017 First-Time, First-Year Student Survey, 7% of respondents were already concerned about “being able to afford living expenses (housing/rent, food/meal plan, etc.)” and an additional 13% were concerned that this *would* become a problem for them.³

Although these two survey questions give the Marquette community a glimpse into the issue of campus food insecurity, a more targeted assessment of the level and kinds of food insecurity among students is needed. Therefore, in March 2018, a representative sample of Marquette students were surveyed utilizing the USDA’s U.S. Adult Food Security Survey Module as its basis. The USDA survey is considered the industry standard for assessing food insecurity. Instead of asking about the past 12 months as is typical, the USDA survey was modified to ask students about the past school year (i.e. the past 7 months).

The survey was emailed to a representative sample of 1,448 currently enrolled students, of which 269 responded. Two responses had too few valid responses to be considered scalable, so they were omitted. The total number of scalable responses was 267 with a response rate of 18.44%. Missing data points for the USDA assessment questions were imputed based upon the USDA *Guide to Measuring Household Food Security – 2000* protocol recommendations. Missing data to questions not included in the USDA assessment were not imputed. These included demographic questions. This means that individual questions did not have a 100% response rate, so the number of respondents per question reported below is not always equal 267.

RESULTS

Level and Kind of Food Insecurity

After scoring respondents’ answers to the USDA survey questions, each student was given a score between 0 and 10. These raw scores were then converted into the four levels of food security (high food security, marginal food security, low food security, and very low food security.) Based upon the converted scores, 78.7% of respondents (n=210) were food secure, and 21.3% (n=57) were food insecure. These findings affirm the results of the 2015 Climate Survey and the fall 2017 survey of first-year students.

Level of Food Security				
	Raw Scores	Frequency	Percent	Food Security
High food security	0	127	47.6	Food Secure
Marginal food security	1-2	83	31.1	Food Secure
Low food security	3-5	34	12.7	Food Insecure
Very low food security	6-10	23	8.6	Food Insecure
Total	--	267	100	--

Unsurprisingly, students were significantly more likely to be food insecure if they were receiving a Pell grant ($\chi^2(2) = 9.426, p = .009$) or had experienced food insecurity before attending Marquette ($\chi^2(1) = 12.969, p < .001$). A significant association between food insecurity and identifying as a person of color was also found ($\chi^2(1) = 6.573, p = .010$). Students who reported living in an off-campus rental with roommates or with their parents were significantly more likely to be food insecure than their peers who lived on-campus, alone off-campus in a rental, or owned their own house ($\chi^2(5) = 15.161, p = .010$). No international respondents were food insecure, but there were too few total (n=7) for statistical analysis.

No statistical association was found between food insecurity and individual racial categories, gender, sexual orientation, being financially responsible for someone else, and year in school, even when grouping all undergraduates together. When all off-campus choices were combined and compared to on-campus choices, students living on-campus were no more or less likely than those living off-campus to be food insecure.

Demographics

Female students responded at higher levels than their actual population on campus 67.33% (n=169) (actual 53.98%). Males were underrepresented at 31.87% (n=80). Graduate students were overrepresented at 35.32% (n=89) (actual 27.84%). Nearly 9% (n=22) of students identified as lesbian, gay, bisexual, queer and homosexual. No respondents identified as transgender. Students of color, including those who checked multiple boxes, made up 21.8% of the respondents (n=55), which is comparable to the overall student population (23.6%).

Forty-five percent of respondents lived on-campus (n=114). Of those living off-campus, most lived in rental properties with roommates (n=74). The surprising percentage of students reporting that they own a house (9.1%) can be attributed to the overrepresentation of graduate students, whom account for 20 of the 23 individuals reporting that they own a house.

More detailed tables of the following responses can be found at the end of this report: year in school, living situation, where students are buying food, and race and ethnicity.

Marquette Campus

Food insecure students are buying or finding food from various sources, but few report utilizing food pantries (n=4) or SNAP (n=3). Nearly two-thirds of respondents (n=169) had no dining plan. Of those who responded to the question, 43.7% (n=111) think that “not having enough to eat or not enough nutritional variety in your diet” is *definitely* or *probably* a problem among Marquette students.

DISCUSSION

The data from this survey supports the findings of previous campus questionnaires that food insecurity is a problem for 21% of the student population and provides a more nuanced portrait of these students. This continues the disturbing trend among the research that college students have higher rates of food insecurity than the state or city populations in which they reside. The majority of Marquette students come from either Wisconsin or Illinois (70.8%, n=8,092).⁴ These two states have rates of food insecurity at 10.7% and 11.1% respectively (average between 2014-2016).⁵

Although there is some effort to address this problem through the Marquette *Nourishing Our Students* website, there are no specific university resources dedicated to responding to this student need. This survey also shows that the fall 2017 opening of Sendik’s Fresh2Go market right next to campus—eliminating the food desert surrounding Marquette University—did not solve the food insecurity problem among students.

This report recommends the following next steps:

- Few students are utilizing SNAP, so a targeted intervention that educates students about SNAP and assists them in signing up for the program may be beneficial.
- Few students are utilizing food pantries, so a campus food pantry or food closet might be more accessible and less intimidating for students.
- The majority of students who are not required to have a dining plan, do not have one. The Loyalty 50 dining plan for students living off campus could be made cheaper, so more students could purchase it. Additional dining plans could be made available for off campus students to increase the number of students who are able to eat on campus. Another possibility would be a sliding scale price for dining plans.
- Any intervention needs to be intentionally broad in order to reach both undergraduate and graduate students. It also needs to ensure dignity throughout the process, so students do not feel stigmatized or discouraged from utilizing the program.

FREQUENCY TABLES

Year in School		
	Percentage*	Frequency
First-Year	12.7%	32
Sophomore	17.1%	43
Junior	17.1%	43
Senior	17.5%	44
Graduate	35.3%	89
Other	0.4%	1
Total	100%	252

*Individual percentages rounded.

Where Students are Buying Food	
	Frequency
Other grocery store	182
Sendik's Marquette Fresh2GO	103
On-campus restaurants/cafes	96
Dining Halls	87
Parent(s)	80
Convenience store (i.e. Walgreens, 7-11)	73
Other	16
Food Pantry	4

*Students could select multiple options.

Race and Ethnicity		
	Percentage*	Frequency
African American/Black	2.0%	5
Asian American/Pacific Islander	5.6%	14
Latina/o/x	4.8%	12
Middle Eastern/North African	0.4%	1
Native American/Alaskan Native	0.4%	1
White	77.41%	195
A race/ethnicity not listed here	2.4%	6
Multiple racial/ethnic groups selected	6.3%	16
Prefer not to answer	0.8%	2
Total	100%	252

*Individual percentages rounded.

Type of Housing		
	Percentage*	Frequency
On-campus, residence hall	28.6%	72
On-campus, apartments	16.7%	42
Off-campus rental, alone	11.9%	30
Off-campus rental, with roommates	29.4%	74
At home with parent(s)	4.4%	11
Own house	9.1%	23
No permanent housing	--	0
Total	100%	252

*Individual percentages rounded.

¹ United States Department of Agriculture. (2017). Definitions of food security [webpage]. Retrieved from <https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/definitions-of-food-security/>

² Rankin & Associates Consulting. (2015). Marquette University - Campus Climate Project Final Report.

³ Marquette University. (2018). Student Survey Dashboards: First-Time, First-Year Student Survey [webpage]. Retrieved from <http://www.marquette.edu/oira/ftfy-dash.shtml>

⁴ Marquette University. (2018). Student Enrollment/FTR Interactive Report [webpage]. Retrieved from <http://www.marquette.edu/oira/enrl-dash.shtml>

⁵ Coleman-Jensen, A., Rabbitt, M. P., Gregory, C. A., & Singh, A. (2017). *Household Food Security in the United States in 2016*, ERR-237, U.S. Department of Agriculture, Economic Research Service.