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Food Insecurity among UC Davis Students and Barriers to the ASUCD Pantry

Food Insecurity Survey Project Team, ASUCD Research and Data
Committee

April 04, 2022

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Executive Summary

In its efforts to find the prevalence of food insecurity at UC Davis and common barriers to the ASUCD Pantry, the ASUCD Research and Data Committee (R&DC) conducted a survey which received 627 responses. The survey data showed that about 27.11% of survey respondents reported experiencing food insecurity in the last 12 months. First-generation students and Pell Grant recipients were also identified to have significantly larger ($p < 0.01$) proportions of those experiencing food insecurity in the last twelve months than students who were not first-generation or Pell Grant recipients. The most prevalent barriers to accessing the ASUCD Pantry chosen by respondents were being unsure about their eligibility (52.41%), not knowing when (36.33%) and where (19.61%) food is distributed, and the fear of being judged by peers (27.01%). R&DC was able to find that UC Davis students are most familiar with food programs that are operated and/or promoted by campus-based organizations such as ASUCD Pantry, Cal Fresh, and Aggie Compass.

Background

Impacts of food insecurity on college students

As per the *Assessing UC Davis Student Food Insecurity and Other Basic Needs During the Coronavirus Pandemic Report* authored by UC Davis School of Medicine master student Alexis Mae Liwanag Calinawan, University students who are food insecure experience related declines in their physical health (lower physical activity, lower fruits/vegetables consumption, higher body mass index), mental wellness (higher perceived stress, more depressive symptoms), and academic performance (more school disruptions, lower grade point averages) (3). Such experiences can cause students to drop out, not perform to their full potential, and may have long-term consequences for student health and wellness, making food insecurity in college an important issue to address (6).

UC-wide research on food insecurity

The Basic Needs Report authored by the UC Regents Special Committee on Basic Needs¹ found that 39% of University of California undergraduates reported themselves as food insecure (7). As financial aid serves primarily to subsidize tuition, individual campuses are left with the responsibility to explore new initiatives needed to compensate for this shortfall on their own (14). While pantry programs have been a critical asset in combating food insecurity, it is recognized that they don't always offer varied or healthy options to those who need it the most (40). The burden to constantly cope leaves students feeling at fault for not being able to meet their basic needs with it manifesting in detracted academic performance and a deterioration in

¹ Available at <https://regents.universityofcalifornia.edu/regmeet/nov20/s1attach.pdf>

wellbeing. Such incidences of lack of basic needs were reported by the Special Committee to be especially more prevalent in already vulnerable communities (ethnic minorities, those who identify as LGBTQ, transfer students, etc.) within the student body demographic (40-41).

While the Regents' Basic Needs Report outlines the severity of the food insecurity problem on the scale of the entire University of California system, it does not provide information that reflects the immediate and unique needs of the UC Davis student body on an ever-changing campus. The aim of this committee's efforts, as summarized in the report, is to address this deficiency by exploring the prevalence of food insecurity specifically on our campus and identifying measures to reduce such statistics with resources at the disposal of the ASUCD.

Background on the Pantry

Established in 2010, the ASUCD Pantry is currently a student-run, student-led organization. The Pantry's mission is to fight food insecurity and offset the financial burdens many students face by providing nutritious food for UC Davis students who are struggling to pay for meals, and basic necessities such as toiletries, soap, toothbrushes, etc. so students can live a dignified life while working to obtain their degree. The Pantry's food and basic necessity resources are free for all UC Davis students and can be accessed by simply bringing their student ID to the Pantry's location in the Memorial Union.

Objectives of the survey and report

The Pantry has tried to be as accessible as possible, with efforts such as putting in place an easy-to-use online ordering system, partnering with other UC Davis food services such as Aggie Compass and the UC Davis Student Farm, launching programs such as the Grocery Bag Access Program where 150 students can sign up by Sunday night every week to receive a pre-filled grocery bags, conducting frequent donation drives, organizing free food distributions on different campus locations, and creating awareness on the Pantry and other food insecurity issues through tabling and social media promotions. However, while the Pantry has tried to be as accessible as possible, the *Assessing UC Davis Student Food Insecurity and Other Basic Needs During the Coronavirus Pandemic Report* concluded that nearly three quarters of the survey respondents were still food insecure (3).

Because of this, the ASUCD Research and Data Committee aims to identify in our report the common barriers students face in accessing the Pantry, which demographics may have larger proportions of food insecure students, and areas of improvement.

Methodology

The data summarized in this report is from a survey that was administered anonymously via Qualtrics to the UC Davis undergraduate population (see Appendix A for survey questions). Participants were reached through social media posts, committee members approaching students on campus, and Pantry volunteers asking their patrons to take the survey. A random raffle of ten (10) \$25 gift cards for respondents were also advertised as an incentive for students to take the survey. The survey was open to receive responses from January 25, 2022 to February 18, 2022 for a period of about 4 weeks.

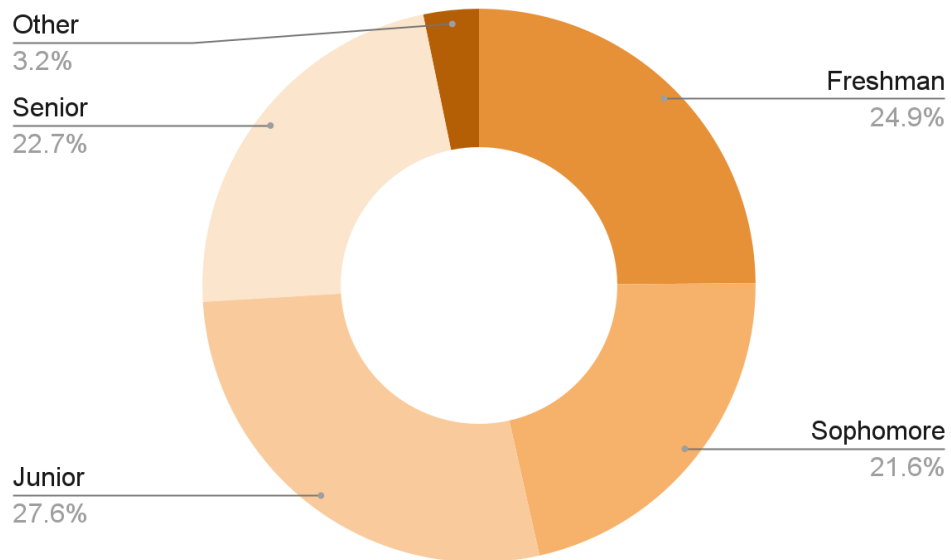
The structure of the survey was a filtering question that introduced a definition of food insecurity and then three blocks of questions: experiences with food insecurity, awareness of food resources in Davis and barriers to the ASUCD Pantry, and on respondent's demographics. Those who answered "Yes" to the filtering question (and thus indicating having experienced food insecurity in the last 12 months) were given the questions in all three blocks. Those who answered "No" were not shown the questions in the first block of questions and sent directly to the questions about the ASUCD Pantry.

Demographics

School year

Of the 557 students who provided a school year, 24.86% of survey respondents were first years, 21.62% were second years, 27.57% were third years, 22.70% were fourth years, and 3.24% identified as "other" such as 5th years or graduate students.

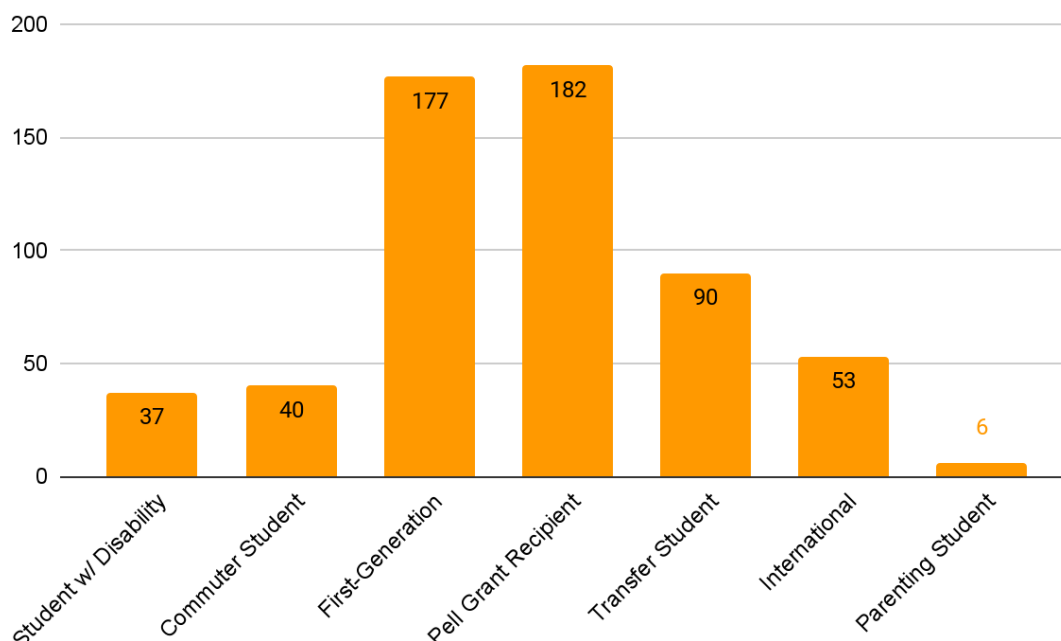
Figure 1: Breakdown of survey respondents by school year



Other demographics

340 of the 627 student respondents reported other relevant demographics with a high proportion of those students identifying as First Generation students, Pell Grant recipients, and transfer students as shown in the chart below.

Figure 2: Demographic counts of survey responses

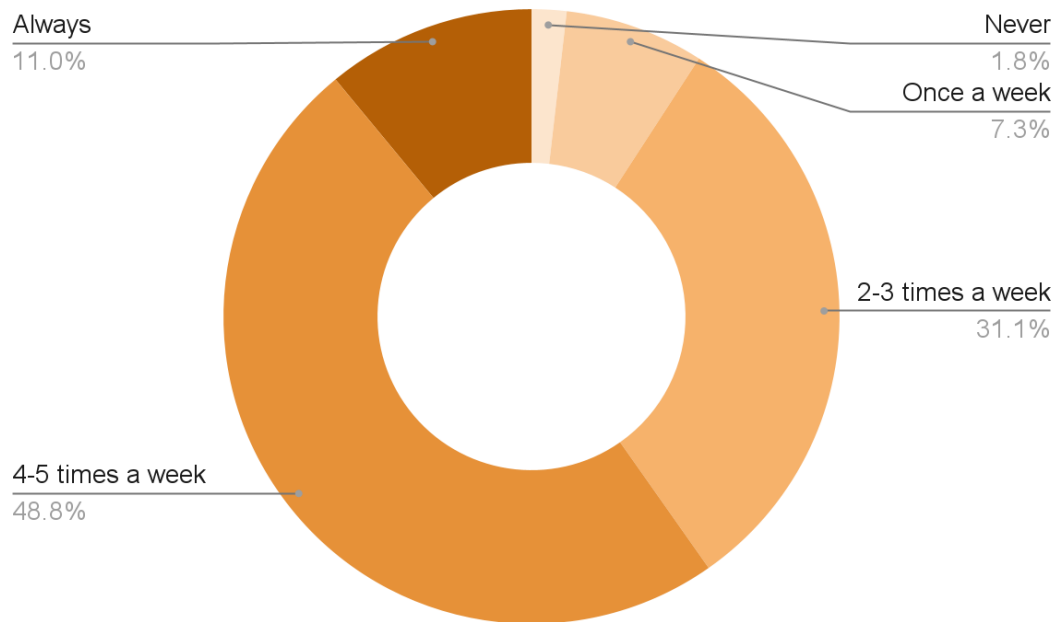


Key Findings

Finding #1: There is a notable percentage of students at UC Davis reporting experiencing food insecurity in the last year with many of these students still experiencing food insecurity.

Out of the 627 survey respondents, 170 students (27.11%) reported that they experienced food insecurity, specifically marked by not knowing where their next meal would come from or eating less than they needed due to not being able to afford enough food in the last 12 months. Those who answered that they experienced either were then asked how often they had access to nutritious meals. 48.78% (80 out of 164) of students answered they “Usually” (4-5 times a week) had access and 31.10% (51 out of 164) answered “Sometimes” (2-3 times a week). Only 10.98% (18 out of 164) of respondents responded with “Always,” showing that many are still currently some level of food insecurity. Additionally, about 88.68% (141 out of 159) of respondents who reported experiencing food insecurity in the last year said food insecurity negatively affected their physical or mental health. About 69.18% (110 out of 159) respondents also said food insecurity negatively affected their academic performance.

Figure 3: Current access to nutritious meal per week reported by food insecure students (see: Table 1 in Appendix B for counts)



Finding #2: Seniors are the class and students with disabilities are the demographic who have the largest proportion of students reporting food insecurity.

The data showed a general trend of the proportion of food insecurity increasing along with class year, with seniors having the largest proportion of food insecure students (34%, or 43 out of 126). Notable among various demographics, students with disabilities reported the largest proportion of food insecurity (43.24%, or 16 out of 37).

Figure 3: Proportion of food insecure students by school year (see: Table 2 in Appendix B for counts)

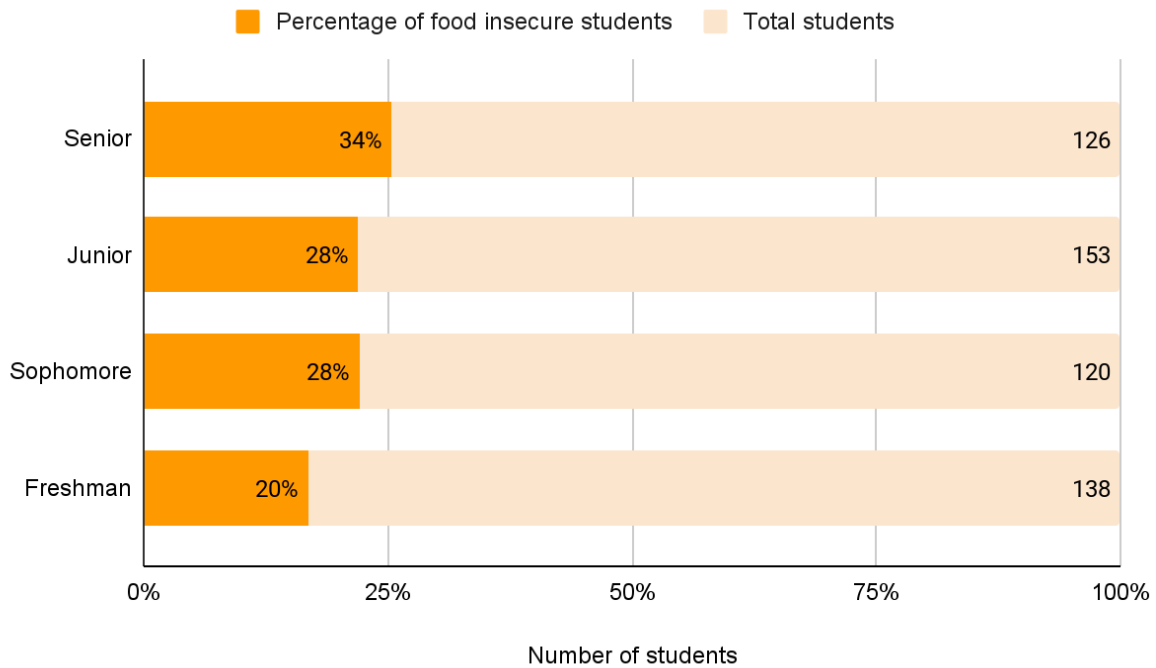
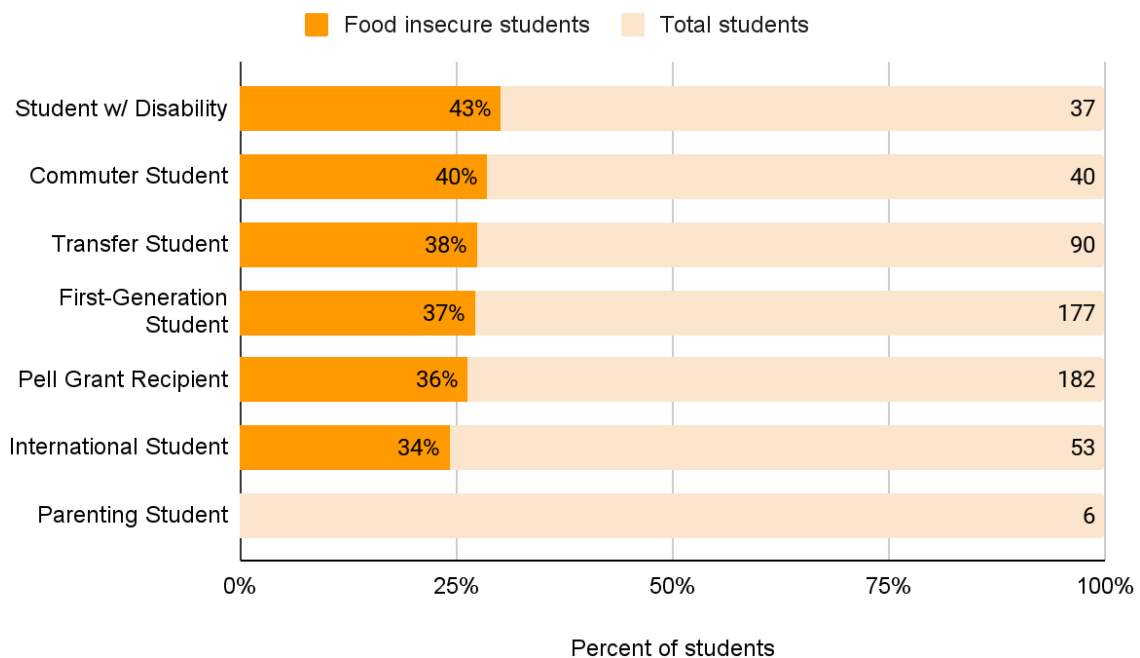
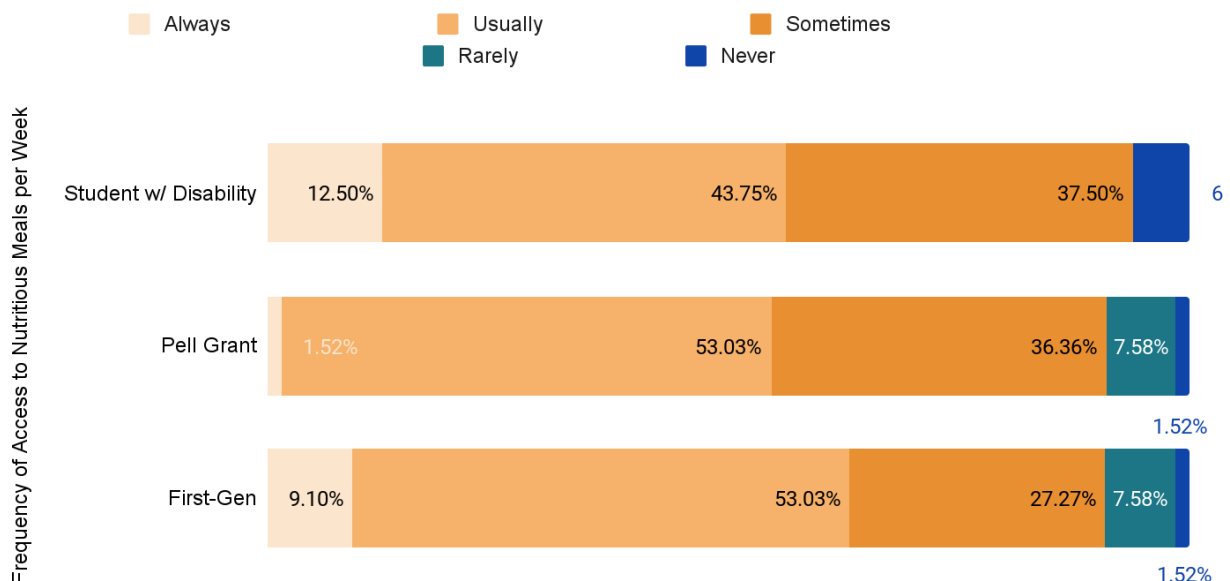


Figure 4: Proportion of food insecure students by demographic (see: Table 3 in Appendix B for counts)



For looking at the frequency of access to food, the demographic with the highest proportion of food insecurity (students with disabilities) and the two demographics with over a 100 responses (Pell Grant recipient and first-generation student) were explored. For all three demographics, the response most chosen by students experiencing food insecurity was “Usually” (4-5 times a week) having access to nutritious meals. However, it is also important to note that across all three demographics, less than 5 percent of respondents said they “Always” (6-7 times a week) have access to food. This points to many students who reported experiencing food insecurity in the last 12 months from these three demographics are currently experiencing a lack of access to food.

Figure 5: Frequency of access to meals per week by demographics of interest (see: Table 4 in Appendix B for counts)



Finding #3: Pell Grant recipients and first-generation students were found to have significantly higher proportions of food insecurity.

For each of the two demographics that had more than 100 responses, a one-sided z-test was conducted to compare the proportion of food insecure students in that demographic and the proportion of food insecure students not in that demographic.

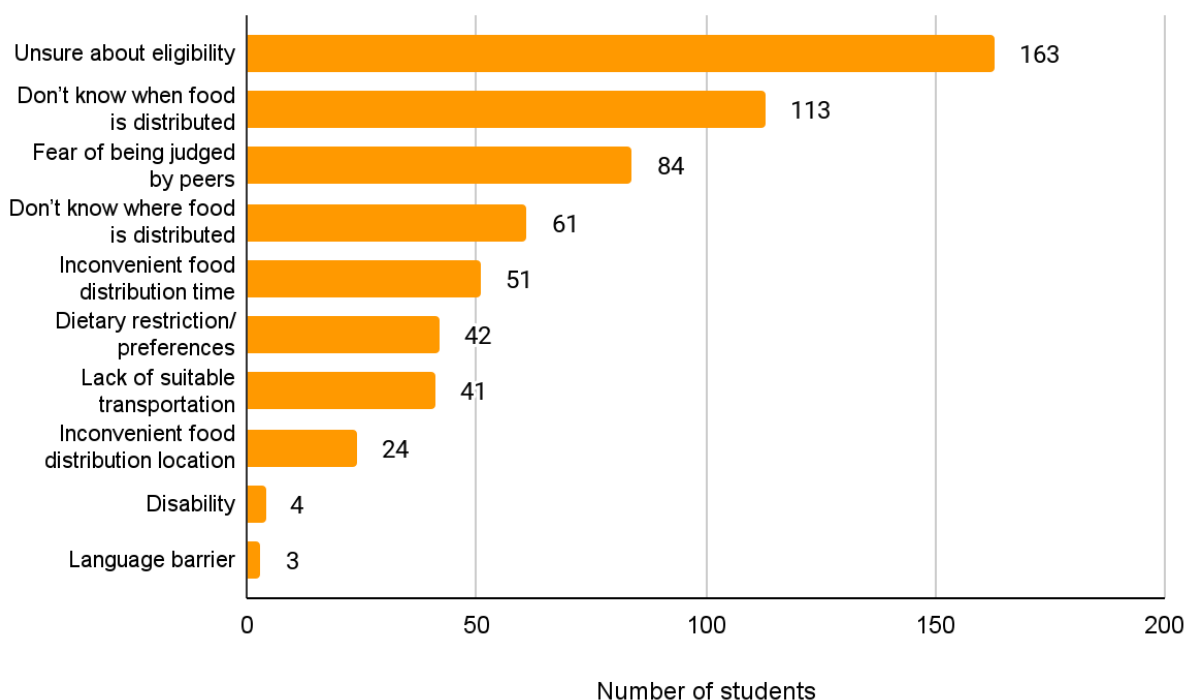
The proportion of food insecure students who were also Pell Grant recipients (35.71%, or 65 out of 182) was found to be significantly higher ($p < 0.01$) than the proportion of food insecure students who did not say they were Pell Grant recipients (23.49%, or

105 out of 447). Likewise, the proportion of food insecure students who were also first-generation students (37.50%, or 66 out of 177) was found to be significantly higher ($p < 0.01$) than the proportion of food insecure students who were not first-generation students (23.49%, or 105 out of 447).

Finding #4: The most commonly reported barriers to the ASUCD Pantry involve a lack of knowledge about the organization as well as stigma in using the services it provides.

311 out of the total 627 survey respondents reported that the most prevalent barriers to accessing the ASUCD Pantry are being unsure about their eligibility (52.41%), not knowing when (36.33%) and where (19.61%) food is distributed, and the fear of being judged by peers (27.01%).

Figure 6: Frequency of barriers to accessing the Pantry reported



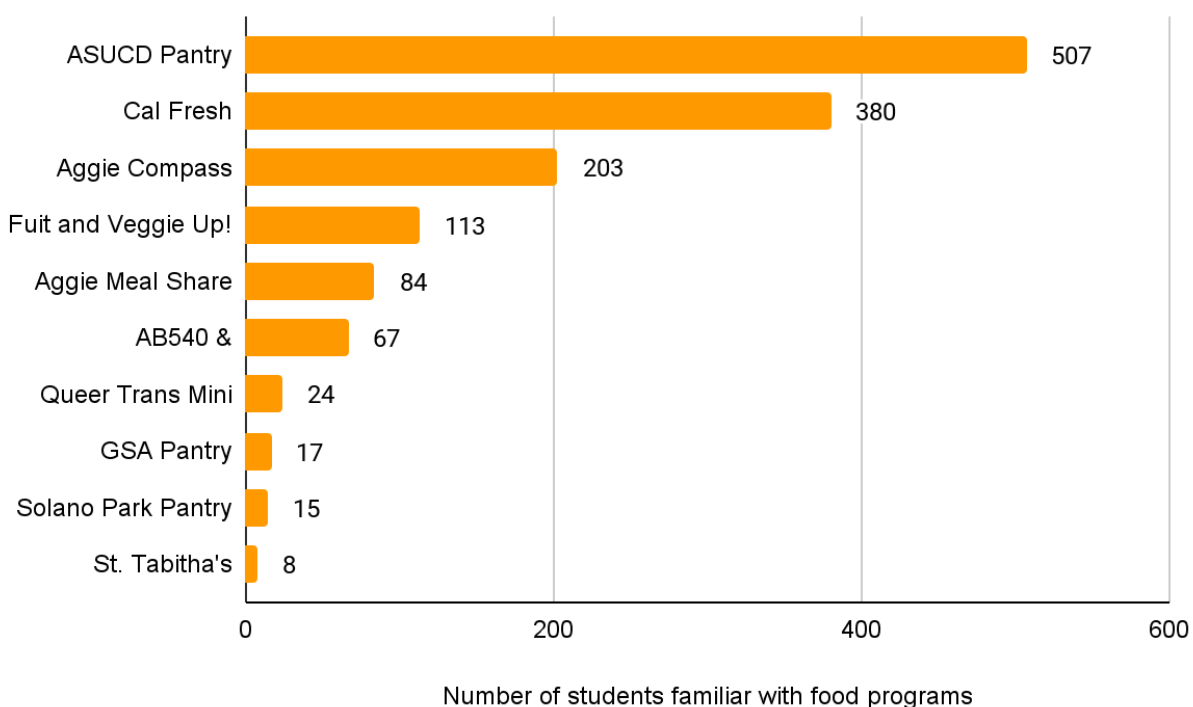
Other barriers food insecure students also mentioned in a free response section included long commute for those who don't own cars, anxiety, guilt that others may need the Pantry resources more, lack of information on where the Pantry is located and how to get food from there, and concerns about food items being sold out before they can be picked up, and products of "low quality" and lacking variety.

Finding #5: UC Davis students are most familiar with food programs that are operated and/or promoted by campus-based organizations.

Survey respondents were asked to identify which of the following food programs they were familiar with in a “select all that apply” question format. Out of the 560 responses collected, an overwhelming 507 (roughly 90.54%) indicated knowledge to some extent about the resources provided by the ASUCD Pantry with comparable campus-based programs such as CalFresh and Aggie Compass commanding similarly high double digit percentages. Another survey question also asked if the respondent had received food through the Pantry in the last twelve months with about 34.92% (198 out of 567) of the respondents answering that they had.

These figures reinforce the perspective established by the Regent’s Basic Needs Report that the efforts of individual campuses to mitigate the high prevalence of food insecurity among the undergraduate population remain critical in the absence of increased support from financial aid infrastructure. While motivations can not be defined through the scope of this report’s findings, it is clear that food assistance programs operated by or in conjunction with known campus institutions are well positioned to continue their contributions to those who need it most if provided the ability to do so.

Figure 7: Respondent’s familiarity with food programs



Conclusion and Recommendations

By administering a survey to the UC Davis student body, the committee found that a notable percentage (27.11%) of students reported having experienced food insecurity in the last year, with a trend of the percentage of food insecure students increasing with school year. The committee also found that the proportion of food insecure students in the Pell Grant recipient and first-generation demographics are likely higher than the proportions of food insecure students who are not of these backgrounds. As for knowledge of food resources, UC Davis students are most familiar with food programs operated and/or promoted by campus-based organizations, a finding that mirrors the UC Regents report's recognition that campus-funded bodies are the first ones tackling food insecurity.

Another goal for this committee is that the findings established from this report are utilized by ASUCD to improve campus food resources, particularly the ASUCD Pantry. We found that over half, or 52.41%, of the 311 respondents who provided a barrier to the ASUCD Pantry said they were unsure about their eligibility status. Furthermore, 27% of respondents selected fear of being judged as a barrier, making it the third-largest barrier. One possible solution to tackling both would be informing students explicitly, such as through social media posts, that any UC Davis student is welcome to use the Pantry regardless of financial background or how often they experience food insecurity. We also observed that 36.33% of 311 respondents reported not knowing the time of food distribution as a barrier and 19.61% of 311 respondents reporting not knowing the location of distribution as a barrier, indicating that lack of specific information about the Pantry is an issue. The committee recommends creating marketing that also focuses on providing more awareness on when and where the Pantry can be accessed and utilized — whether that be on social media or through in-person interactions with students.

Finally, a possible area of future research for improvements to the ASUCD Pantry is the issue of a difficult commute being a barrier to the Pantry. 13.18% (41 out of 311) of the respondents identified lack of suitable transportation as a barrier to getting food from the pantry and some free responses pointed out that not having access to a car makes it difficult to get food from the pantry on a daily basis due to longer commute times and difficulty carrying multiple bags while walking or biking. Thus, the committee suggests further research into this barrier and the possible efficacy of setting up food distribution sites on multiple locations around Davis with the goal of shortening the commute for Pantry users.

Appendix

Appendix A: Survey Questions

Food Insecurity Definition :

Food insecurity is defined as not having at all times, physical, social, and economic access to sufficient, safe, and nutritious food that meets personal food preferences and dietary needs for an active and healthy life.

Filtering question

1. At any point during the last 12 months, have you ever experienced food insecurity where you did not know where your next meal will come from, or had to involuntarily eat less than you need on a regular basis due to not being able to afford enough food?
 - Yes
 - No

Food Insecurity prevalence and impact questions

2. How often do you have access to nutritious meals that enable you to pursue both your academic and professional goals to the fullest extent?
 - Always (6-7 times a week)
 - Usually (4-5 times a week)
 - Sometimes (2-3 times a week)
 - Rarely (once a week)
 - Never
3. Has experiencing food insecurity negatively affected your academic performance?
 - Yes
 - No
4. Has experiencing food insecurity negatively affected your physical or mental health?
 - Yes
 - No
5. Have you experienced any of the following due to not being able to access food:
 - ☐ Headaches

- ☐ Fatigue
- ☐ Inability to focus
- ☐ Decrease in productivity
- ☐ Difficulty falling asleep
- ☐ Stress
- ☐ Decreased academic performance
- ☐ Other (please specify:) [text entry]

Questions on Awareness and Barriers to ASUCD Pantry

6. Which of the following resources for food accessibility are you aware of? Select all that apply.
 - ☐ ASUCD Pantry
 - ☐ AB540 and Undocumented Student Center
 - ☐ Aggie Compass Food Programs
 - ☐ Aggie Meal Share Program
 - ☐ St. Tabitha's Essentials Pantry (located at the Belfry church)
 - ☐ Cal Fresh
 - ☐ Fruit and Veggie Up!
 - ☐ Graduate Student Association (GSA) Pantry
 - ☐ Queer Trans Mini Pantry (LGBTQIA Center)
 - ☐ Solano Park Pantry

7. Have you received food through the ASUCD pantry in the last 12 months?
 - ☐ Yes
 - ☐ No

8. Have you experienced any of the following barriers in accessing the ASUCD Pantry? Select all that apply.
 - ☐ Unsure about eligibility
 - ☐ Fear of being judged by peers
 - ☐ Don't know when food is distributed
 - ☐ Don't know where food is distributed
 - ☐ Time for food distribution is inconvenient
 - ☐ Location for food distribution is inconvenient
 - ☐ Lack of suitable transportation
 - ☐ Dietary restriction/preferences
 - ☐ Disability
 - ☐ Language Barrier
 - ☐ Not applicable/haven't experienced any barriers
 - ☐ Other (please specify:) [text entry]

9. *[Displayed if respondent selects "Dietary restrictions" in Q8]* What is your specific dietary restriction or preference that is not being met? Please select all that apply.
- ☐ Lack of vegan/vegetarian options
 - ☐ Lack of halal, kosher, and other cultural and/or religious options
 - ☐ Lack of options that support my food sensitivity (gluten-free, dairy-free, etc.)
 - ☐ Lack of food I am familiar with/know how to cook
10. *[Displayed if respondent selects "Dietary restrictions" in Q8]* What options should be added to the ASUCD Pantry to accommodate your dietary needs and/or preferences?
[Text entry]
11. If you have faced any barriers to accessing the pantry, or have suggestions for improvement, please feel free to share here.
[text entry]

Demographic Questions

12. What year are you?
- ☐ Freshman
 - ☐ Sophomore
 - ☐ Junior
 - ☐ Senior
 - ☐ Other (please specify:) *[text entry]*
13. Are you any of the following? Select all that apply
- ☐ Student with Disability
 - ☐ Pell Grant recipient
 - ☐ Transfer student
 - ☐ International student
 - ☐ First-generation student
 - ☐ Commuter student
 - ☐ Parenting student

Appendix B: Tables

Table 1: Current access to nutritious meal per week reported by food insecure students

Response	Count	Percentage
Never (0 times a week)	3	1.83%
Rarely (Once a week)	12	7.32%
Sometimes (2-3 times a week)	51	31.10%
Usually (4-5 times a week)	80	48.78%
Always (6-7 times a week)	18	10.98%

Table 2: Proportion of food insecure students by school year

School year	Food insecure	Total	Percent food insecure
Freshmen	28	138	20.29%
Sophomore	34	120	28.33%
Junior	43	153	28.10%
Senior	43	126	34.13%

Table 3: Proportion of food insecure students by demographic

Demographic	Food insecure	Total	Percent food insecure
Student with Disability	16	37	43.24%
Commuter Student	16	40	40.00%
Transfer Student	34	90	37.78%
First-Generation Student	66	177	37.29%
Pell Grant Recipient	65	182	35.71%
International Student	17	53	0.32
Parenting Student	0	6	0.00%
Total	170	627	27%

Table 4: Frequency of access to meals per week by demographics of interest

Demographic	Always (6-7 times a week)	Usually (4-5 times a week)	Sometimes (2-3 times a week)	Rarely once a week)	Never
Student w/ Disability	2	7	6	0	1

Pell Grant Recipient	1	35	24	5	1
First-Generation Student	6	35	18	5	2