Perceptions of Food Insecurity Among On- and Off-Campus UCSD Students

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Introduction

College students are known to suffer from hunger, poor nutrition and eating habits,¹ and are at high risk for food insecurity,²⁻⁵ defined by uncertain or limited access to sufficient or nutritionally adequate foods.⁵

Food insecurity is associated with increased risk of stress, sleep loss, and poor academic performance.⁵

A recent meta-analysis found a mean prevalence rate of food insecurity of 43.5%, significantly higher than rates of food insecurity among US households of about 13% during the same period.³

Another study of 8,705 undergraduate and graduate students at 10 University of California campuses, reported an overall food insecurity prevalence of 42%, after adjustment for age, race, gender, and ethnicity.⁴

Students attending US universities and colleges have been reported to suffer from food insecurity that exceed those of average US households by more than 3-fold³.

Objective

To identify perceptions of food insecurity and knowledge of food assistance programs among UCSD students by on- or off-campus residency.

Methods

This cross-sectional study used a brief 11-item Google Forms survey distributed to UCSD students to examine the potential associations of living on- or off- campus on perceptions of food insecurity, opinions concerning access to adequate and healthful foods, and knowledge of food assistance programs using questions adapted from standardized survey instruments (5).

Results

A non-representative sample of UCSD students completed a Google-based survey in April 2022 (n=62).

Table 1. Student Demographics (N=62)	
Sex	
Male	40%
Female	57%
Non Binary	3%
Race	
White	19%
Black	3%
Asian	57%
Other	22%
Hispanic Ethnicity	1%
Year in College	
Undergraduate 1st Year	11%
Undergraduate 2nd Year	18%
Undergraduate 3rd Year	26%
Undergraduate 4th Year	39%
Undergraduate 5th Year	3%
Graduate Student	3%
Age Range	
18-20 Years	50%
21-23 Years	44%
24-26 Years	5%
27 Years or Greater	1%

Figure 1. Reported off-campus and on-campus residency. Chi-Sq (1, N = 62) = 11.58, p < 0.05

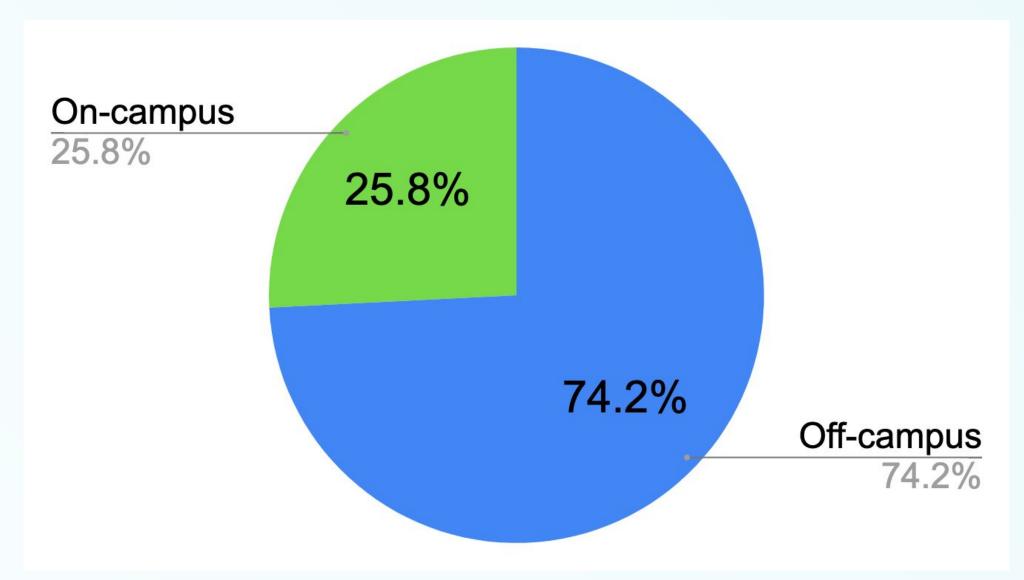


Figure 2. Percentage of respondents believing that on-campus students had better access to food by residency

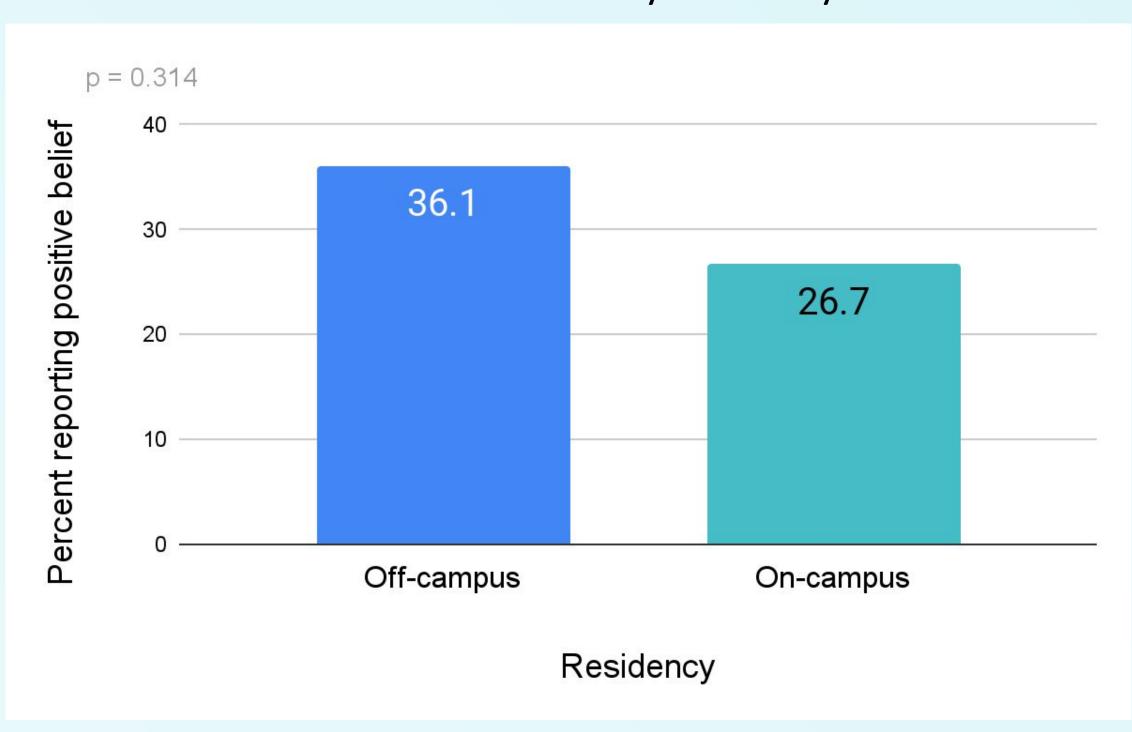
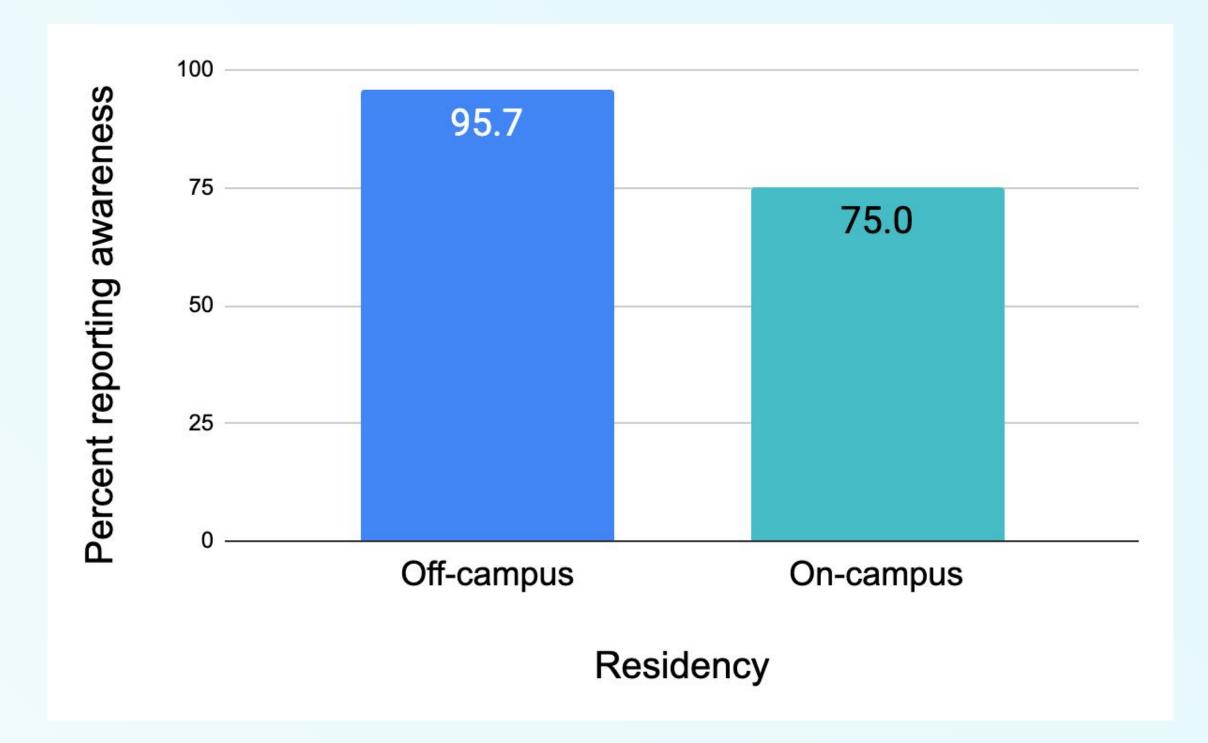


Figure 3. Awareness of food assistance programs by residency [F(1, N = 62) = 0.034, p < 0.05]



Conclusion

A majority of on-campus residents believed campus residency had no effect on food quality or access.

Significantly more off-campus students were aware of food aid programs, suggesting greater food insecurity in this group.

Policy Implications

Policies to promote food assistance programs, publicize food banks, and establish grocery delivery services should be encouraged, particularly among students living off-campus.

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References

- 1. Carolyn E. Moore, Kathleen E. Davis & Wanyi Wang (2021) Low Food Security Present on College Campuses despite High Nutrition Literacy, Journal of Hunger & Environmental Nutrition, 16:5, 611-627, DOI: 10.1080/19320248.2020.1790460
- 2. Aydin Nazmi, Suzanna Martinez, Ajani Byrd, Derrick Robinson, Stephanie Bianco, Jennifer Maguire, Rashida M. Crutchfield, Kelly Condron & Lorrene Ritchie (2019) A systematic review of food insecurity among US students in higher education, Journal of Hunger & Environmental Nutrition, 14:5, 725-740, DOI: 10.1080/19320248.2018.1484316
- 3. Shirley Haberman PhD, CHES & Deborah Luffey MS, RD, LDN (1998) Weighing in College Students' Diet and Exercise Behaviors, Journal of American College Health, 46:4, 189-191, DOI: 10.1080/07448489809595610
- 4. El Zein A, Shelnutt KP, Colby S, Vilaro MJ, Zhou W, Greene G, Olfert MD, Riggsbee K, Morrell JS, Mathews AE. Prevalence and correlates of food insecurity among U.S. college students: a multi-institutional study. BMC Public Health. 2019 May 29;19(1):660. doi: 10.1186/s12889-019-6943-6.
- 5. Cade JE. Measuring diet in the 21st century: use of new technologies. Proc Nutr Soc. 2017 Aug;76(3):276-282. doi: 10.1017/S0029665116002883. Epub 2016 Dec 15. PMID: 27976605.