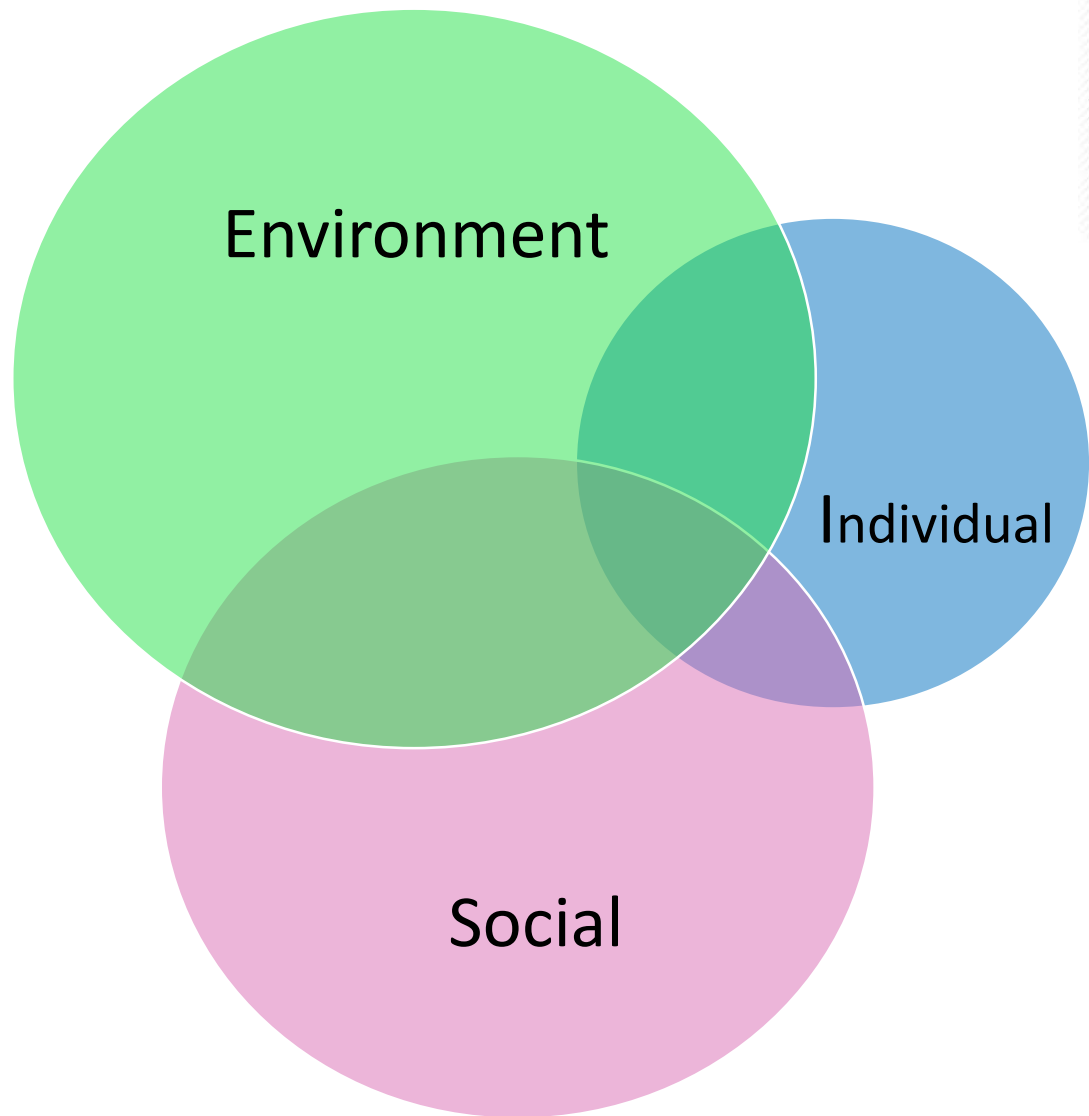


# Deep dive into food insecurity in higher education

Suzanna Martinez, PhD, MA  
Assistant Professor, UCSF  
Lead Researcher, UC Basic Needs Security



# Presentation Map



State of the problem



Food insecurity in CA public higher ed



Factors related to food insecurity

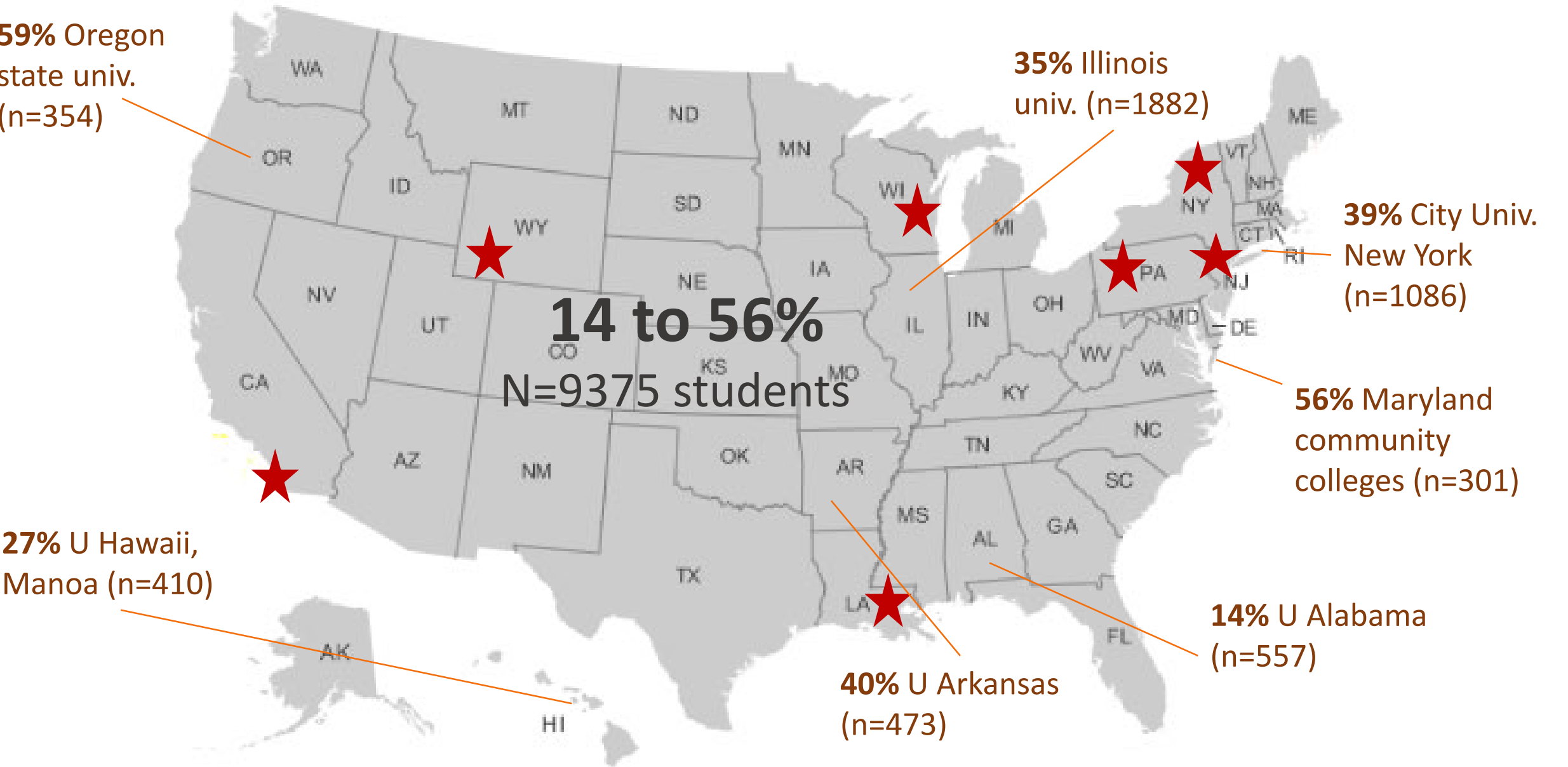


Policy implications

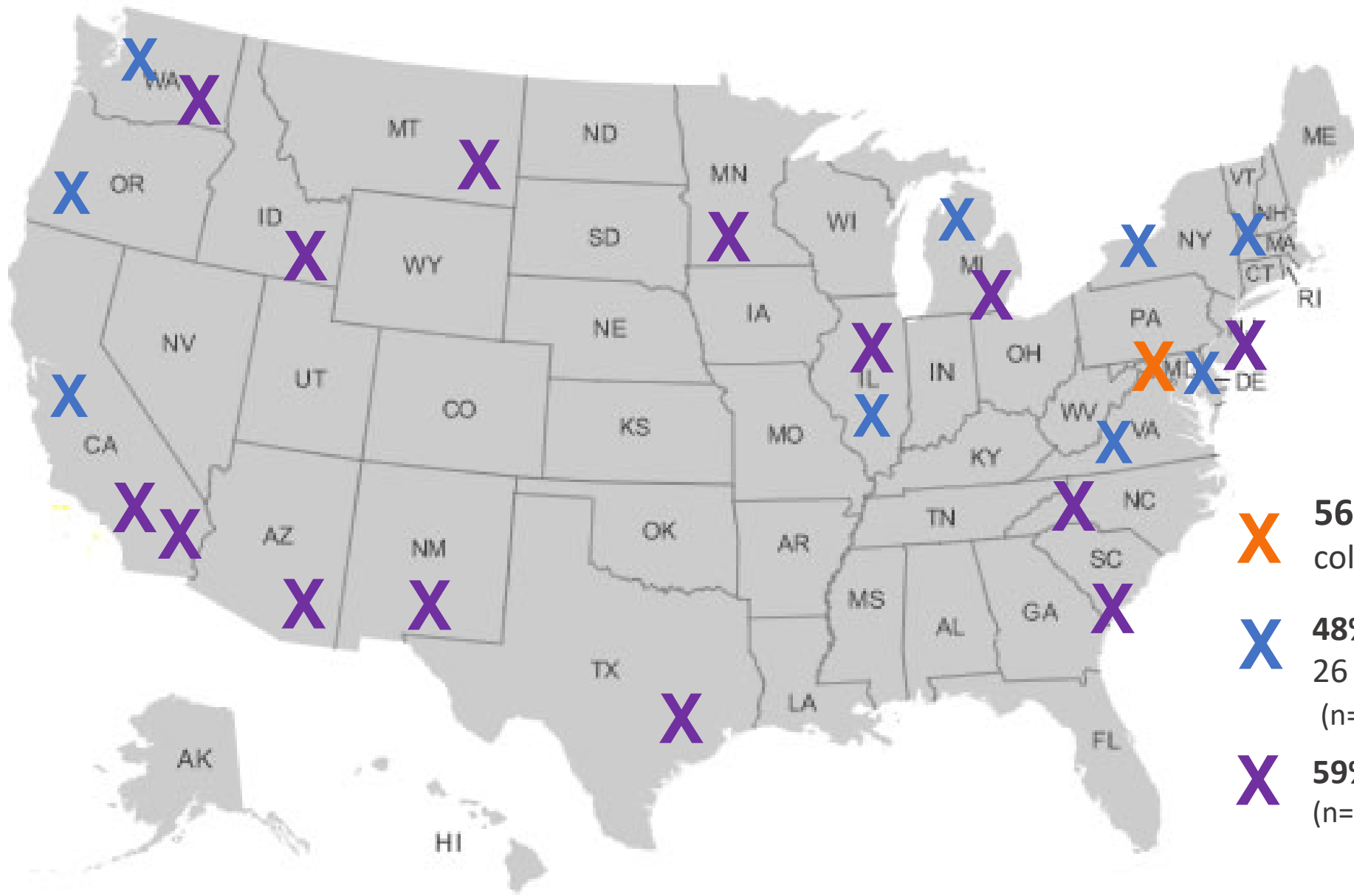


# State of the Problem

# Student Food Insecurity in 2014



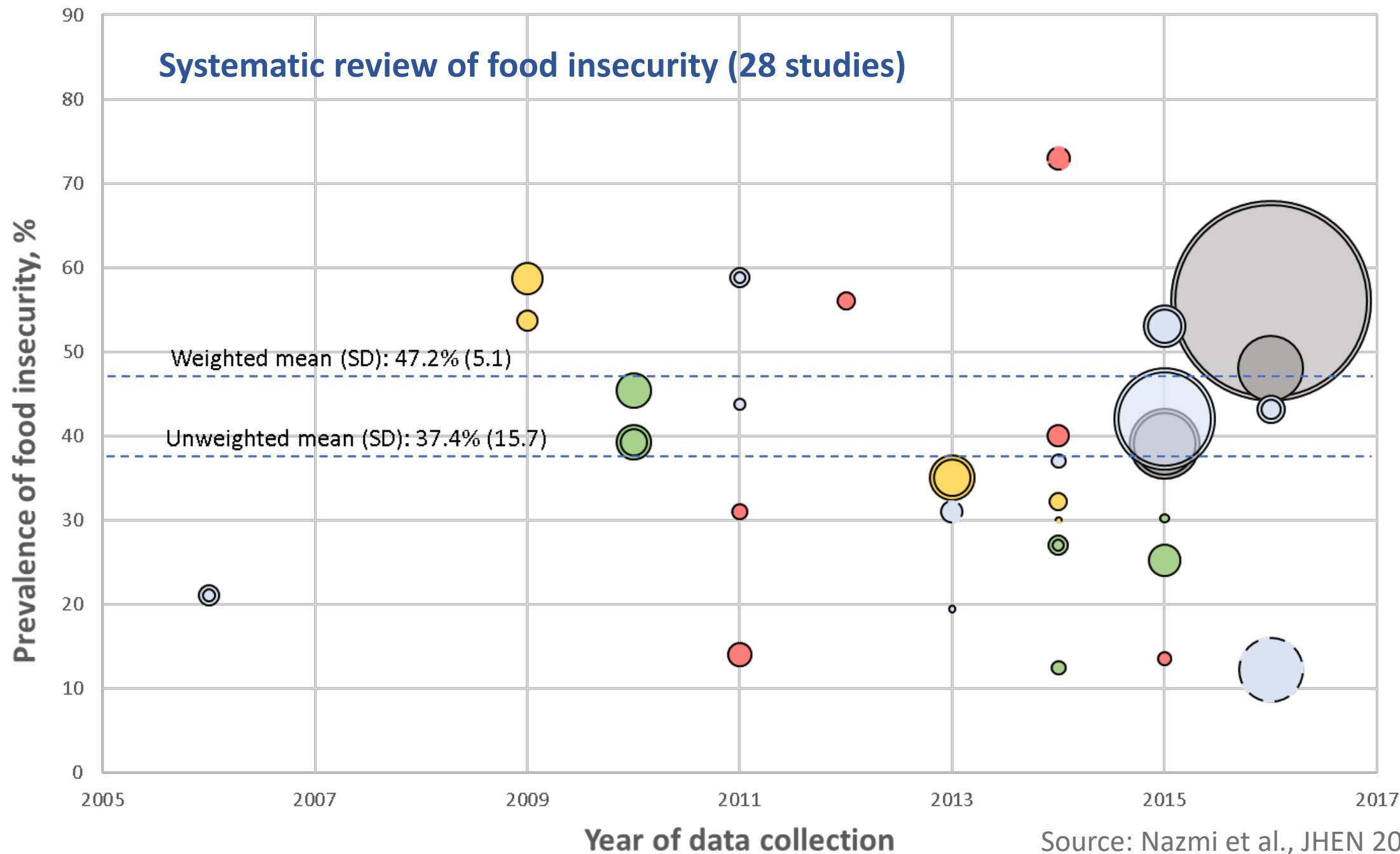
# The field grows...



**X** 56% Maryland community colleges (n= 301)

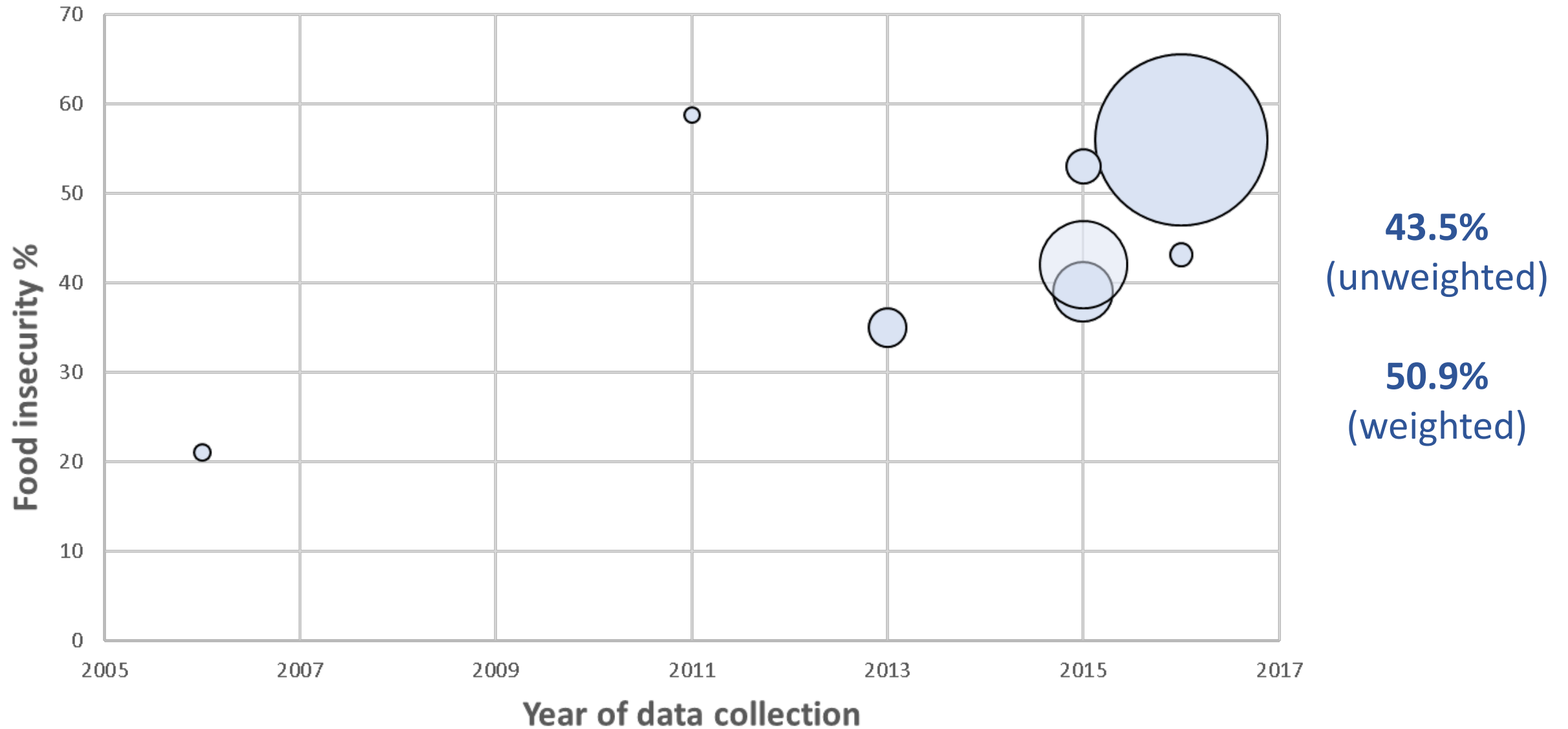
**X** 48% 8 Community colleges and 26 4-yr Universities (n= 3,752)

**X** 59% 70 Community colleges (n=33,934)



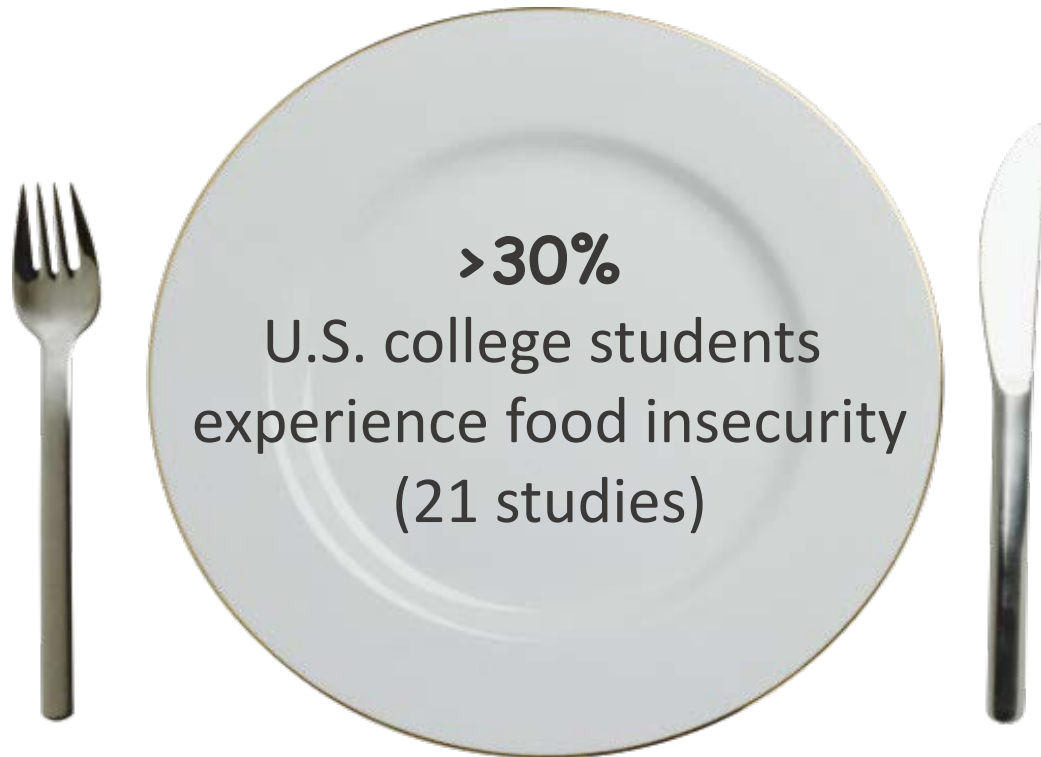
Source: Nazmi et al., JHEN 2018

## 8 studies using USDA food security module



Source: Nazmi et al., JHEN 2018

# GAO Food Insecurity Report (Jan. 2019)



**9% to > 50% food insecurity:**  
31 studies of U.S. college students

## **Recommended that FNS:**

- 1) Improve student eligibility information on web
- 2) Share information on approaches that state SNAP agencies' are taking to help eligible students.



# FOOD INSECURITY in California Public Higher Education



UC San Diego Food Pantry



TRITON  
FOOD  
PANTRY

## What is the Triton Food Pantry?

The mission of the Triton Food Pantry is to provide a discreet service to UCSD students in need of food. Our goals are to ensure that every student has enough energy to get through the day and that no student needs to give up a part of themselves in order to aim to obtain a minimum of resources and awareness about food insecurity.

## Why have the Triton Food Pantry?

The Triton Food Pantry is a result of a study conducted by the UCSD campus, an issue which we know is prevalent in over 20% of our undergraduate community (UCSD Survey, 2014). We learned that food is a flexible expense, which some students sacrifice in order to pay for other, more important things such as tuition, housing, transportation.

The Triton Food Pantry serves the need through emergency to students can always have access

## Resources

Triton Food Pantry  
Phone: 858-534-5694  
Email: foodpantry@ucsd.edu

Financial Aid  
Phone: 858-534-4480  
Email: finaid@ucsd.edu

Counseling and Psychological  
Services (CAPS)  
Phone: 858-534-3755  
Website: caps.ucsd.edu

Student Promoted Access Center  
for Education & Service (SPACES)  
Phone: 858-534-7330  
Website: spaces.ucsd.edu

HDH  
Email: hddh@ucsd.edu

The Zone  
Phone: 858-534-5553  
Website: zone.ucsd.edu

The General Store Coop  
Website: thegeneralstorecoop.com

Undocumented Student Services  
Phone: 858-822-6916  
Website: undoc.ucsd.edu

Student Health Services  
Phone: 858-534-3300  
Email: studenthealth@ucsd.edu

Deans of  
Phone: 858-534-349,  
858-534-3587

Phone: 858-534-439,  
858-534-473,  
858-534-534

## University of California 10 Campus System

- Student enrollment (in 2013)
  - 72,500 low-income
  - **40% low-income** backgrounds
  - **25% first-generation** college-going
- Attending UC
  - **52%** students' tuition **fully covered** by financial aid programs
  - **71%** receive some form of financial aid



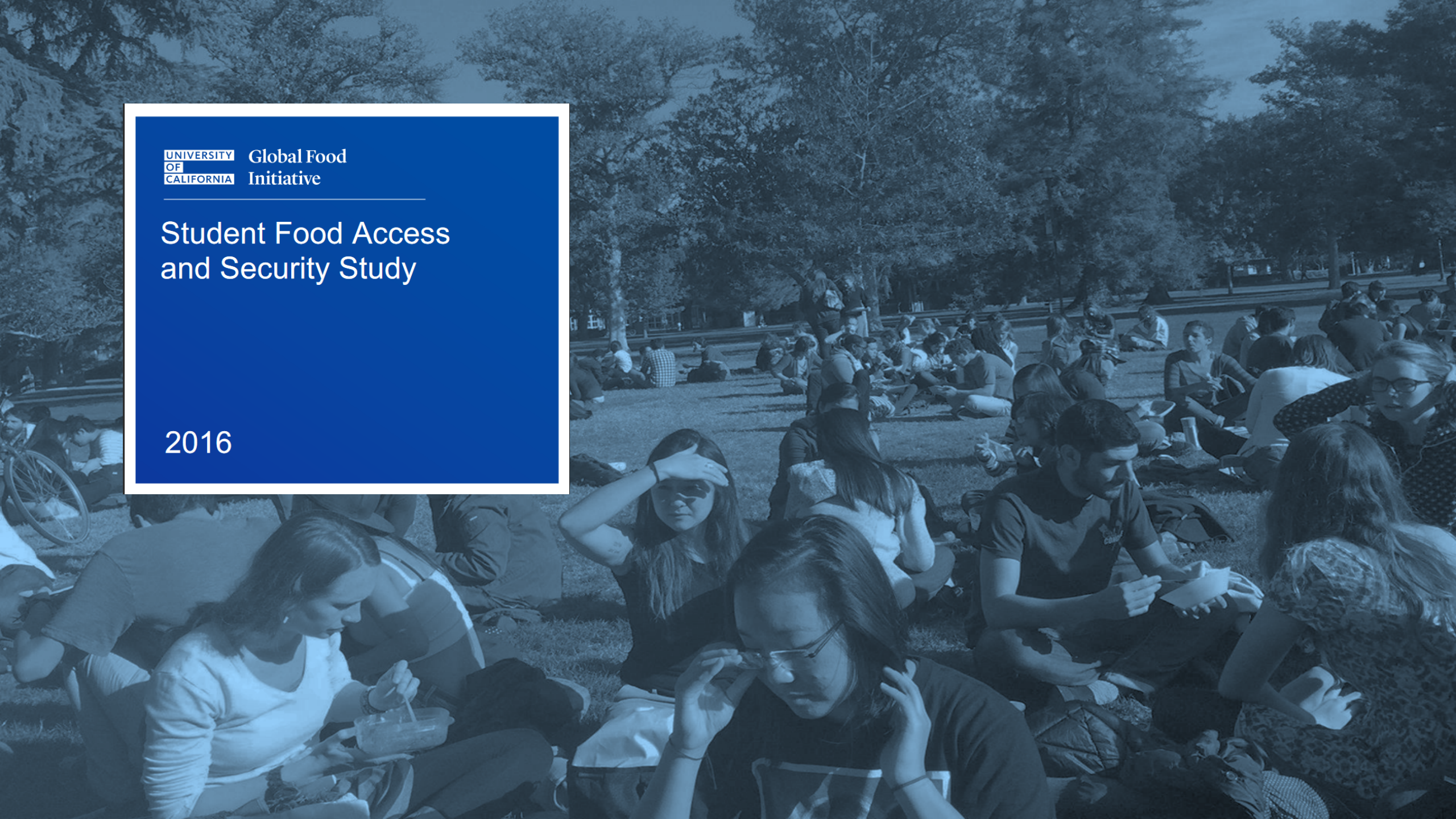




Global Food  
Initiative

## Student Food Access and Security Study

2016





# First UC Study (2015; N= 8932)

## Student Characteristics

- 66% Female
- 76% 17-24 years old
- 34% Asian
- 31% White
- 21% Hispanic
- 2% Black
- 73% Undergraduate
- 58% Living off campus
- 63% Received financial aid

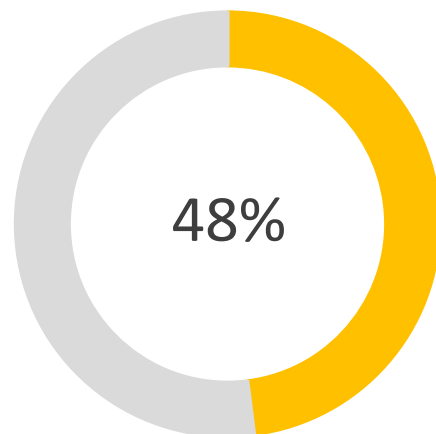


Source: <http://regents.universityofcalifornia.edu/regmeet/july16/e1attach.pdf>

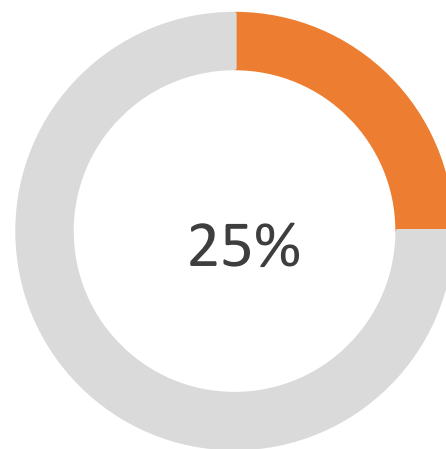


**2015 data**

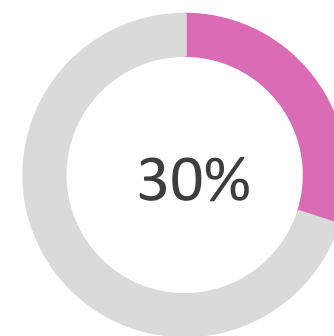
- 23% low food, 19% very low food
- N=8,932
- Random sample
- 14% response



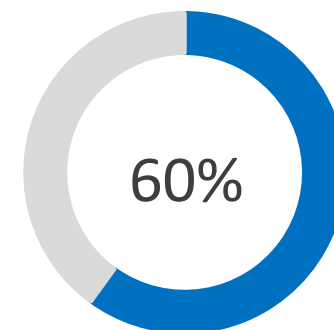
Undergraduates



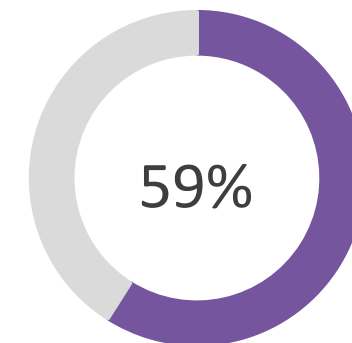
Graduates



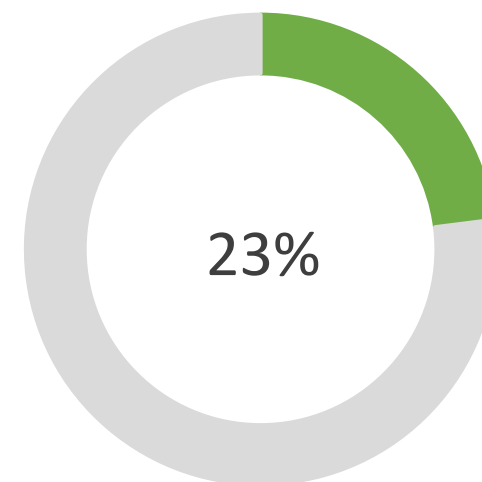
White



Black

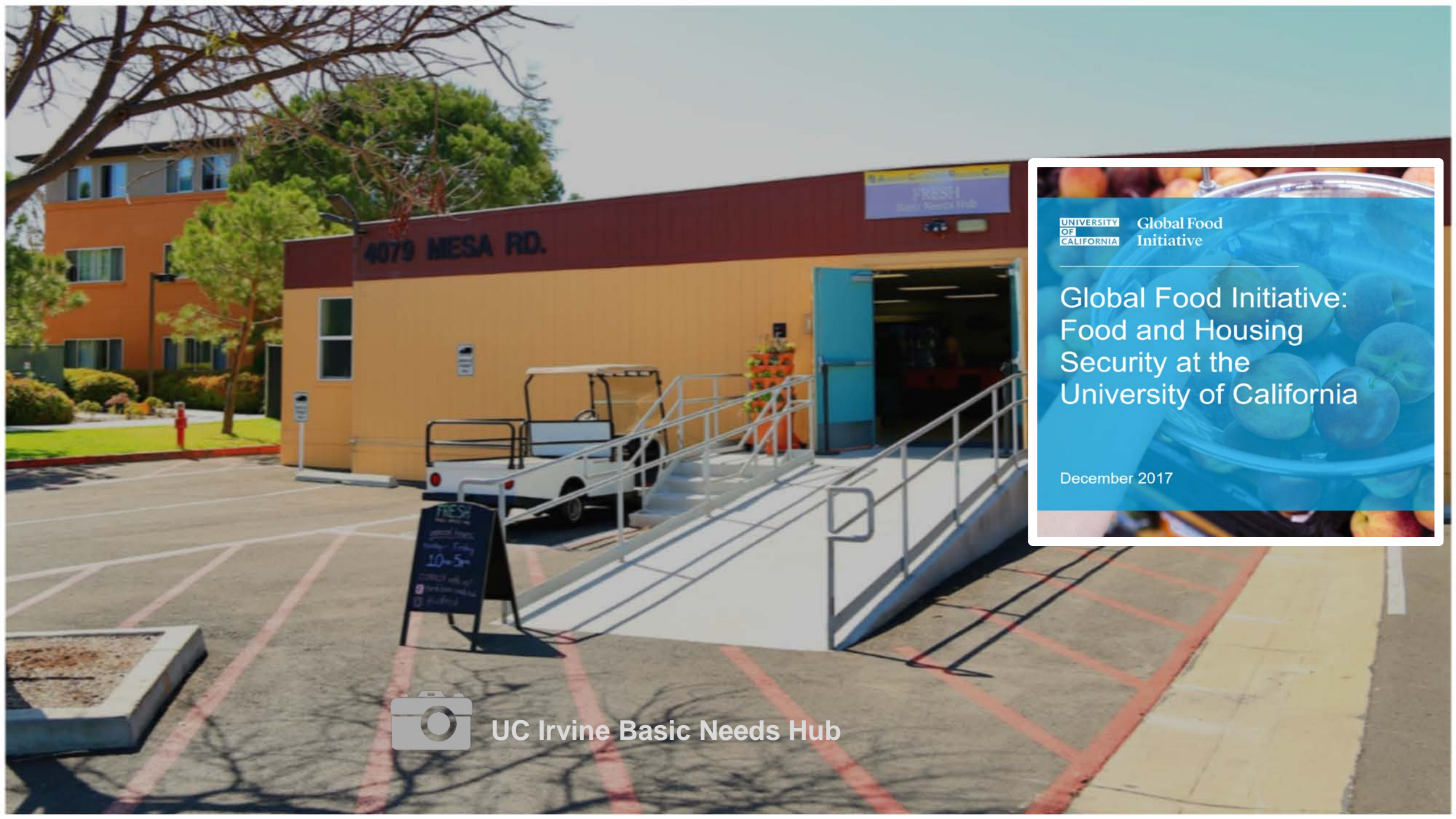


Hispanic



Child history  
food insecurity





UNIVERSITY  
OF  
CALIFORNIA

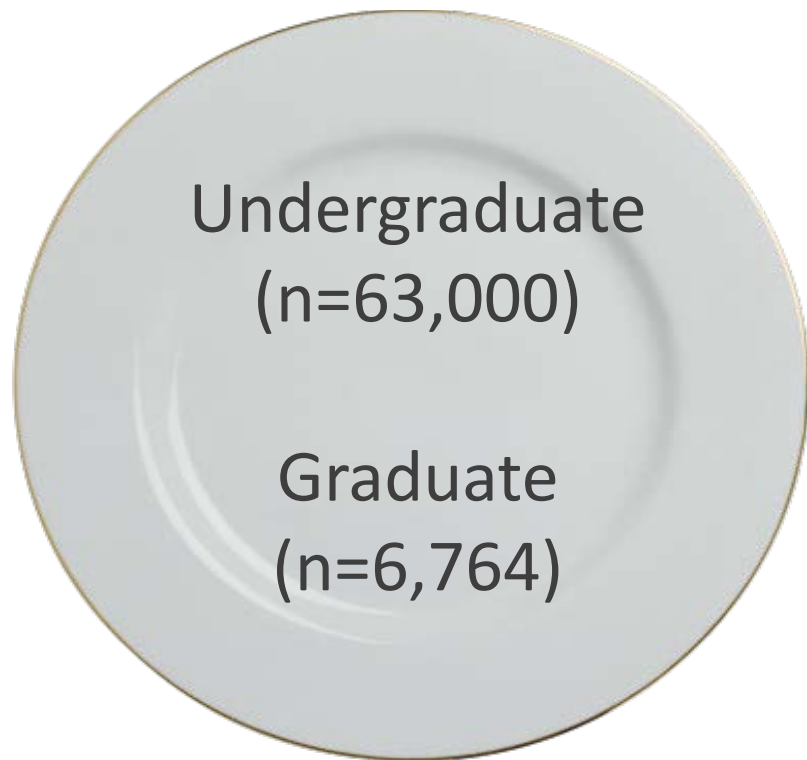
Global Food  
Initiative

## Global Food Initiative: Food and Housing Security at the University of California

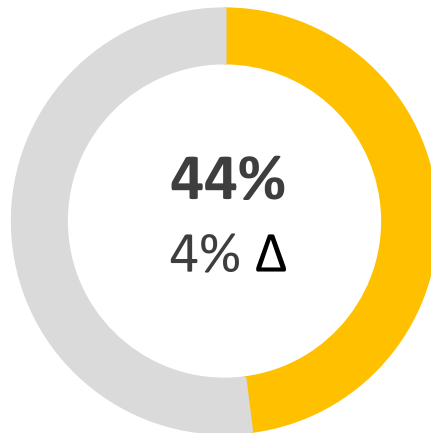
December 2017



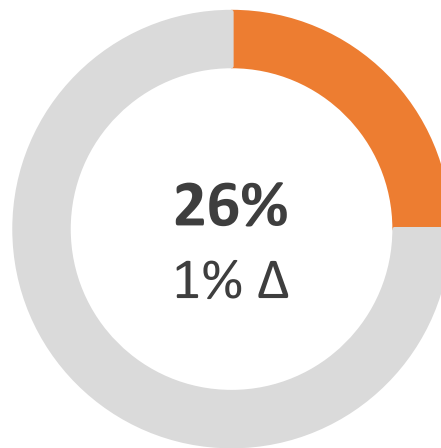
UC Irvine Basic Needs Hub



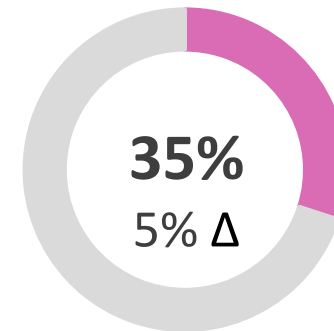
- 2016 data**
- Census sample
  - 33% response



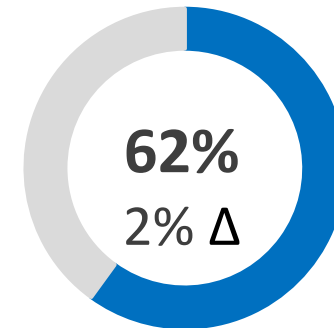
Undergraduates



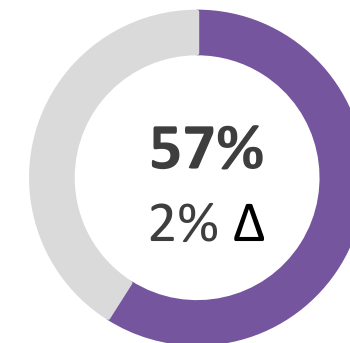
Graduates



White



Black



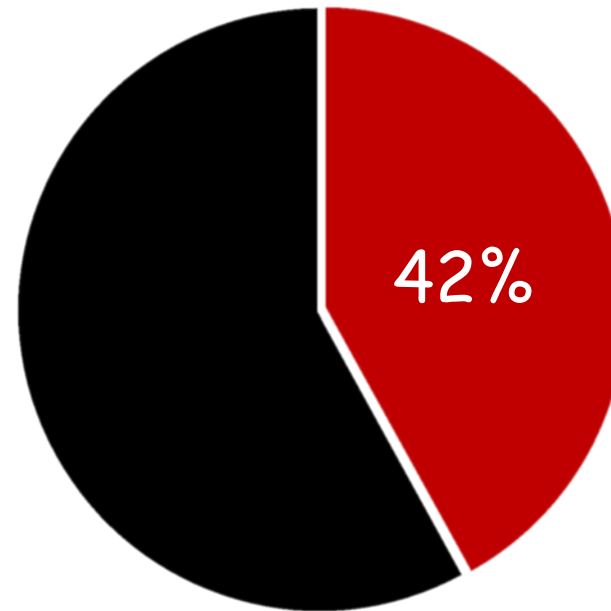
Hispanic

Δ = difference





## CSU 23 campus system 2016 data

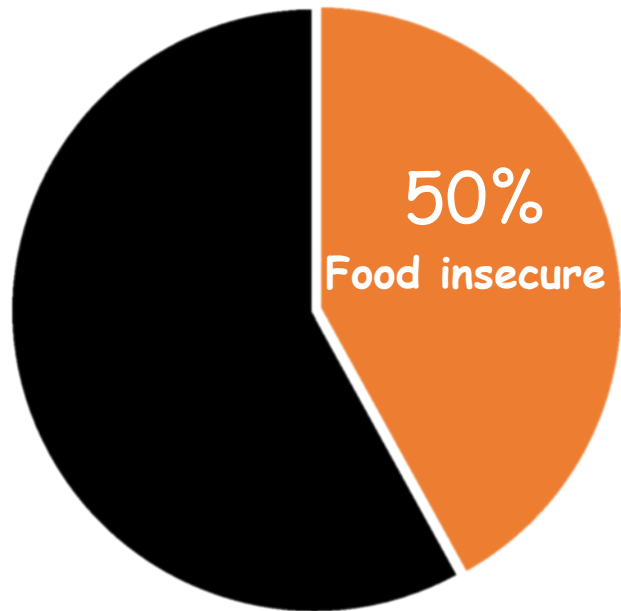


In the past 30 days  
20% low food security  
22% very low food security


- N=24,324
- Census sample
- 5% response



2016+2018 data



In the past 30 days  
20% low food security  
30% very low food security



**MARCH 2019**

## California Community Colleges #RealCollege Survey

---

**AUTHORS:**  
Sara Goldrick-Rab  
Christine Baker-Smith  
Vanessa Coca  
Elizabeth Looker

- **N=32,256**
- **Census sample**
- **Response rate 5%**



57 of 115 community colleges

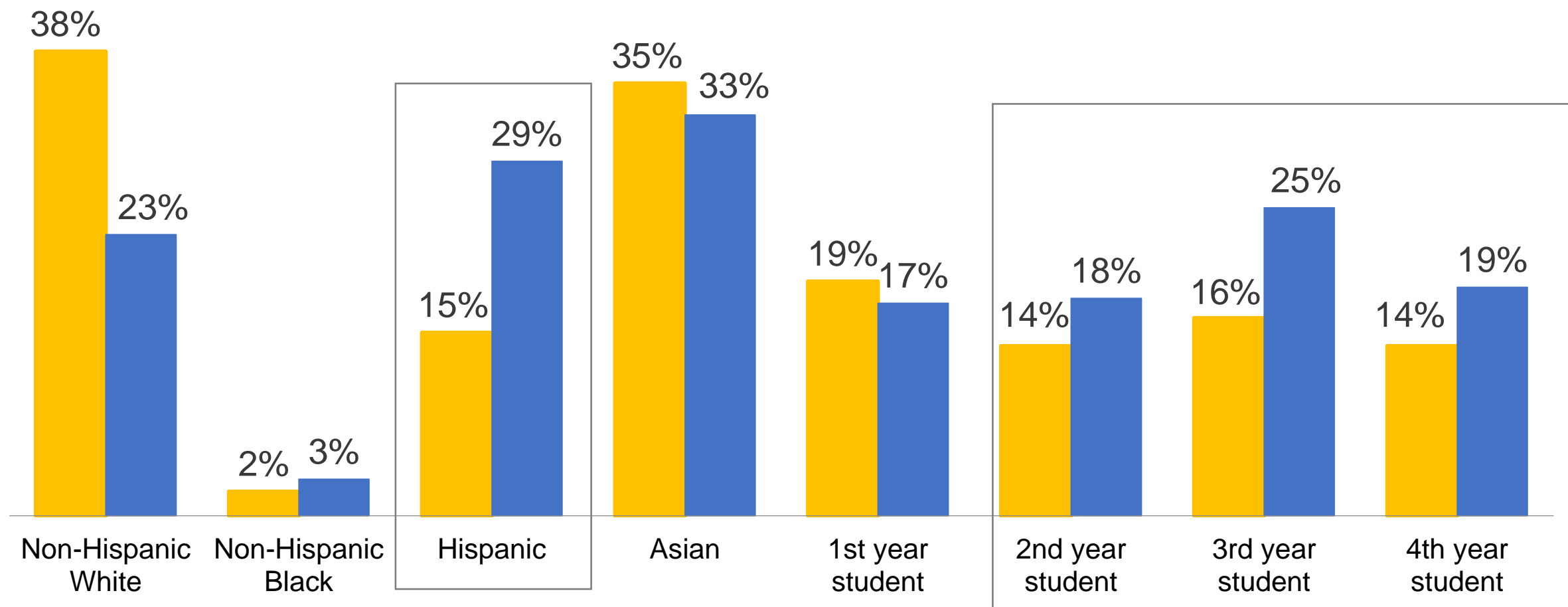


UC Berkeley Basic Needs Center

Factors related to food insecurity

# More students experiencing food insecurity were from minority groups and in their 2nd to 4th year

■ Food secure group    ■ Food insecure group

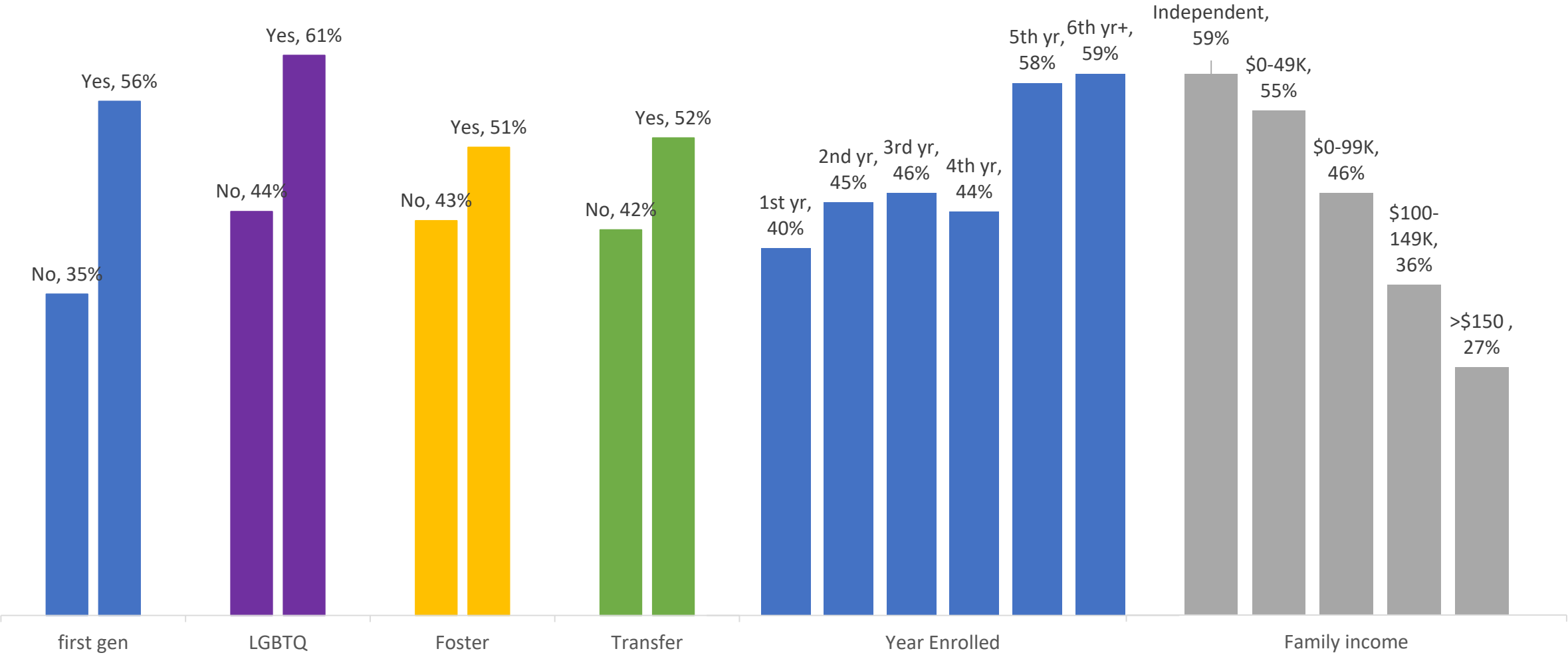


**Table 5.** Odds ratios of student risk factors on food insecurity among University of California students surveyed in Spring 2015 ( $n = 8554$ ).<sup>a</sup>

Student factors	OR	95% CI
Age group (in years)		
17–24	1.6	1.1, 2.3
25–34	1.6	1.1, 2.3
35+	1.00	Reference
Race/ethnicity		
Non-Hispanic black	1.7	1.2, 2.5
Hispanic	1.8	1.5, 2.3
Asian	1.3	1.1, 1.6
Mixed race/other	1.4	1.2, 1.7
Non-Hispanic white	1.0	Reference
Socioeconomic status		
Childhood history of food insecurity	7.4	5.8, 9.4
No childhood history of food insecurity	1.0	Reference
Received need-based financial aid, grant, scholarship, loan	1.6	1.3, 2.0
Did <i>not</i> receive need-based financial aid, grant, scholarship, loan	1.0	Reference
Academic year		
First-year undergraduate	2.0	1.4, 2.8
Second-year undergraduate	2.7	2.0, 3.5
Third-year undergraduate	3.0	2.5, 3.7
Fourth-year undergraduate	2.6	1.8, 3.7
Fifth-year or more undergraduate	4.1	2.8, 6.2
Graduate or other professional	1.0	Reference

More students from underrepresented groups experiencing food insecurity

Food insecurity impacts all students regardless of income



UC 2016 Data

# 11 Focus groups at UCLA (Spring 2016; N= 82)

Theme 1: Awareness regarding food insecurity

Theme 2: Cost of Attendance

Theme 3: Consequences of food insecurity

Theme 4: Coping with food insecurity

“I’ve heard [of ] it. I don’t use it. It feels kind of weird to like intellectualize this process that just comes down to like, I’m hungry, and I don’t have money to buy food, you know.” — Undergraduate student

“I try to allocate [my refund check] for housing because housing is like really, really important, but what’s left over is like nothing for food.” — Undergraduate student

“The physiological effects of having poor quality of food really affects the way you think and the way you function as a student . . . Because good grades, ultimately, is a function of how well you are getting your physiological needs met.” — Undergraduate student

“I think an indirect effect that [food insecurity] has on academics is just the fact that people might feel obligated to sacrifice some of their academics to go work a secondary—a part-time—job, just to be able to afford food.” — Undergraduate student

# One-on-One Interviews at UC Berkeley (Spring 2017; N=25)

Theme 1: Stress of food insecurity interfering with daily life

Theme 2: Fear of disappointing family

Theme 3: Jealousy or resentment of students in more stable food and financial situations

Theme 4: Inability to develop meaningful social relationships

Theme 5: Sadness from reflecting on food insecurity

Theme 6: Feeling hopeless or undeserving of help

Theme 7: Frustration and anger at the larger institution for not providing enough support



# No food for thought

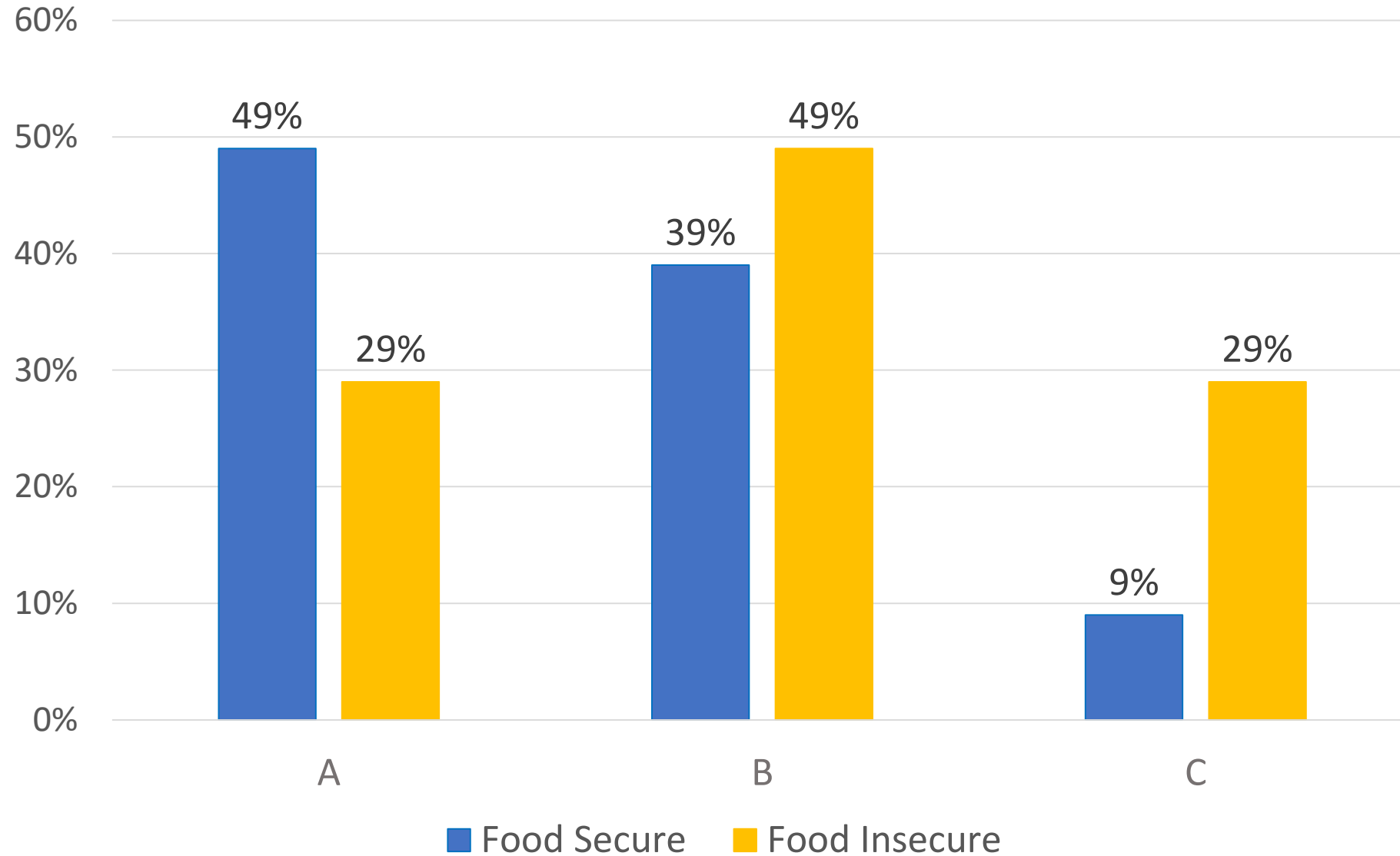
**Table 2.** Mental health indicators for 8705 students surveyed in spring 2015 about the past 12 months at University of CA.

Have you ever felt ...	Total sample	Food secure	Food insecure
Hopeless*	43 (3694)	36 (1912)	46 (882)
Overwhelmed by all you had to do*	82 (7080)	80 (4229)	81 (1534)
Exhaustion (not from physical activity)*	76 (6625)	74 (3891)	77 (1470)
Very lonely*	52 (4494)	47 (2489)	53 (1016)
Very sad*	55 (4792)	51 (2662)	58 (1112)
Overwhelming anxiety*	52 (4517)	47 (2447)	56 (1068)
Overwhelming anger*	28 (2459)	23 (1230)	32 (604)
Depression that made it difficult to function*	31 (2694)	24 (1284)	36 (680)
Tremendous stress*	15 (1324)	11 (563)	18 (337)

*Note.* Response options were no [0] or yes [1]; \*  $p < 0.05$



Average GPA by food security status (%)



# Food insecurity and health outcomes

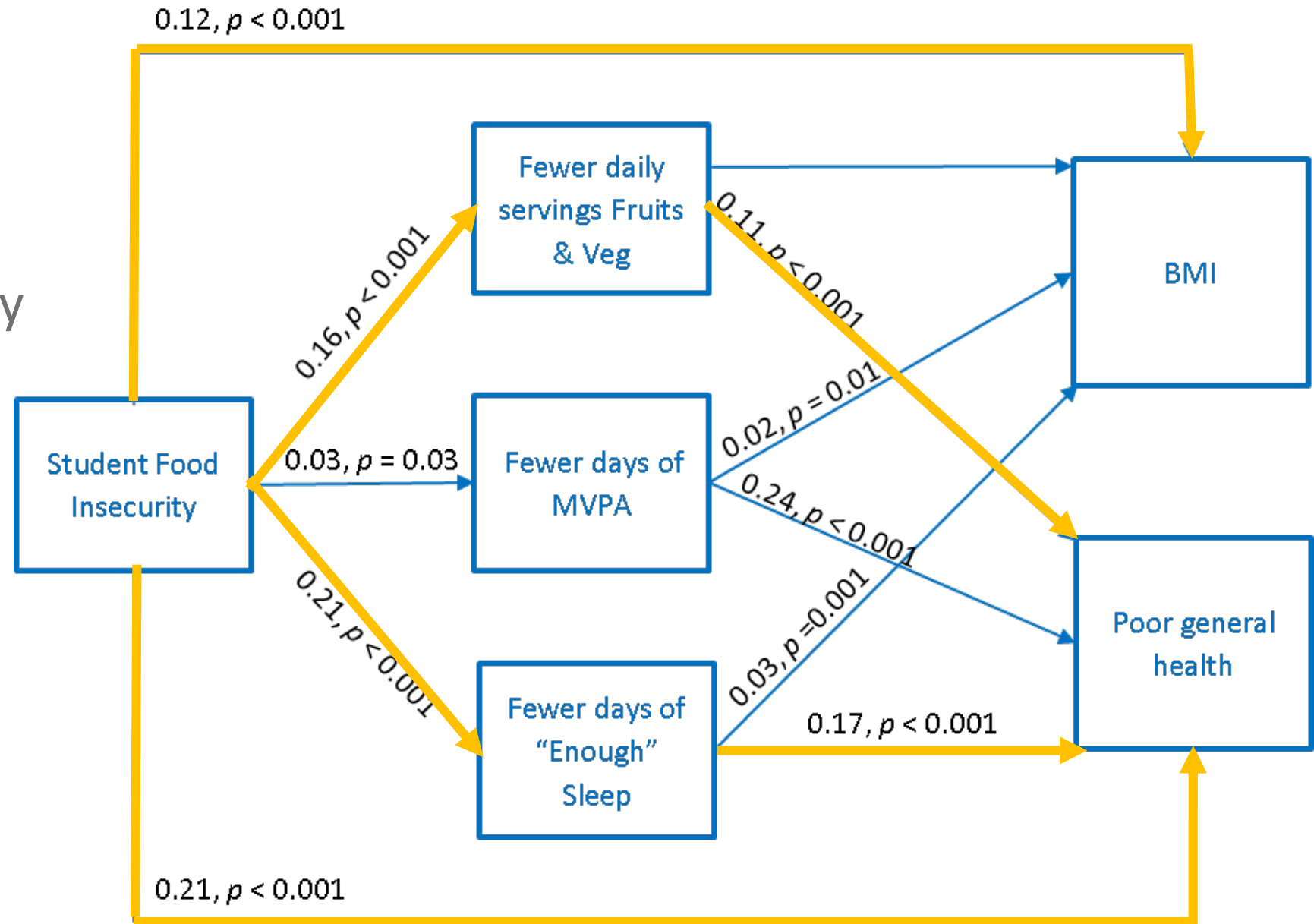
**Table 2.** Lifestyle behaviors and health factors for 8705 students surveyed in spring 2015 at University of CA; data represent mean (SD) unless otherwise specified.

	Total Sample	Food Secure	Food Insecure
<b>Health factors</b>			
Body mass index (kg/m <sup>2</sup> ) ***	23.65 (4.82)	23.22 (4.23)	24.30 (5.55)
Poor self-report health (median, interquartile range)	3 (2–3)	2 (2–3)	3 (2–4)
Overweight/obese (% <sup>a</sup> , n) ***	28, 2349	25, 1270	33, 1110
<b>Lifestyle behaviors</b>			
Daily servings of F/V ***	2.30 (1.38)	2.50 (1.41)	2.00 (1.28)
No. days of enough sleep ***	3.34 (1.99)	3.64 (1.98)	2.87 (1.91)
No. days of MVPA **	1.77 (1.56)	1.81 (1.53)	1.72 (1.60)

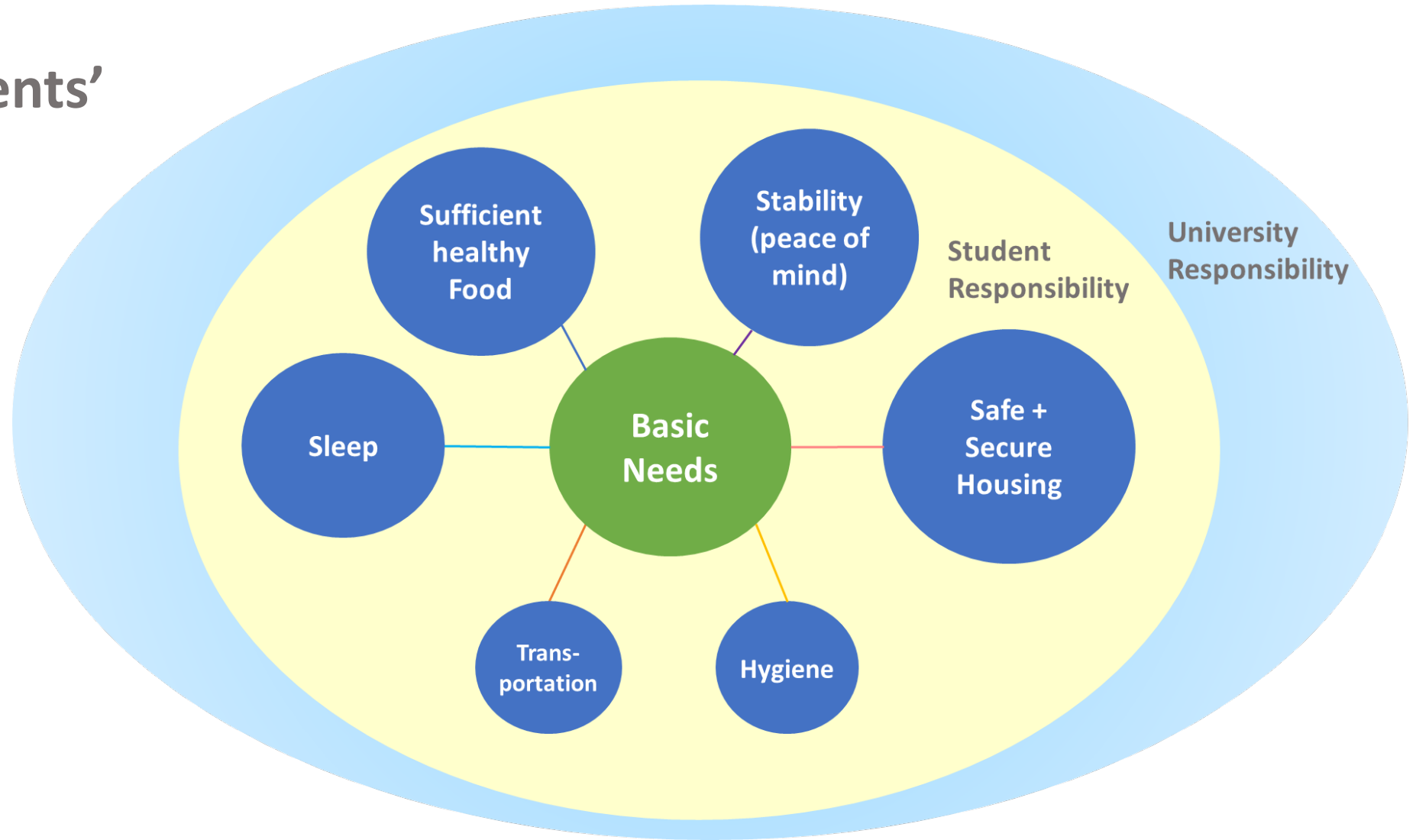
*Note:* Range for poor self-rated health is excellent (0) to poor (5); no. days of enough sleep and MVPA refers to the last 7 days; fruits and vegetables abbreviated as F/V. \*\*\* Independent *t*-tests between food-secure and food-insecure groups significantly different at  $p < 0.001$ ; \*\*  $p < 0.01$ .

**Food insecurity**  
directly and indirectly  
related to  
**poor health  
behaviors**, and in  
turn increased  
**weight status &  
poor general health**

MVPA = moderate to vigorous  
intensity physical activity

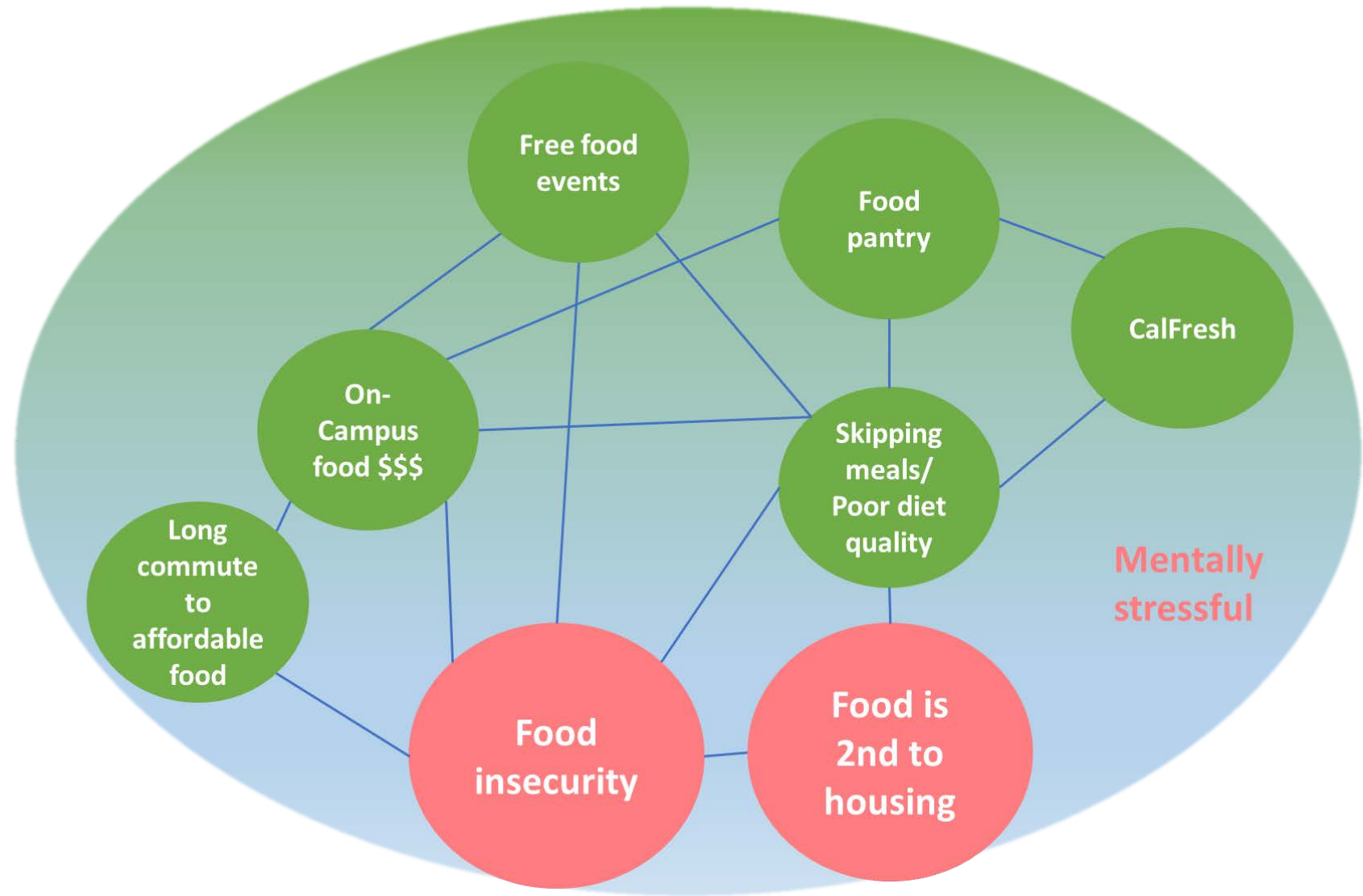


## What are Students' Basic Needs?



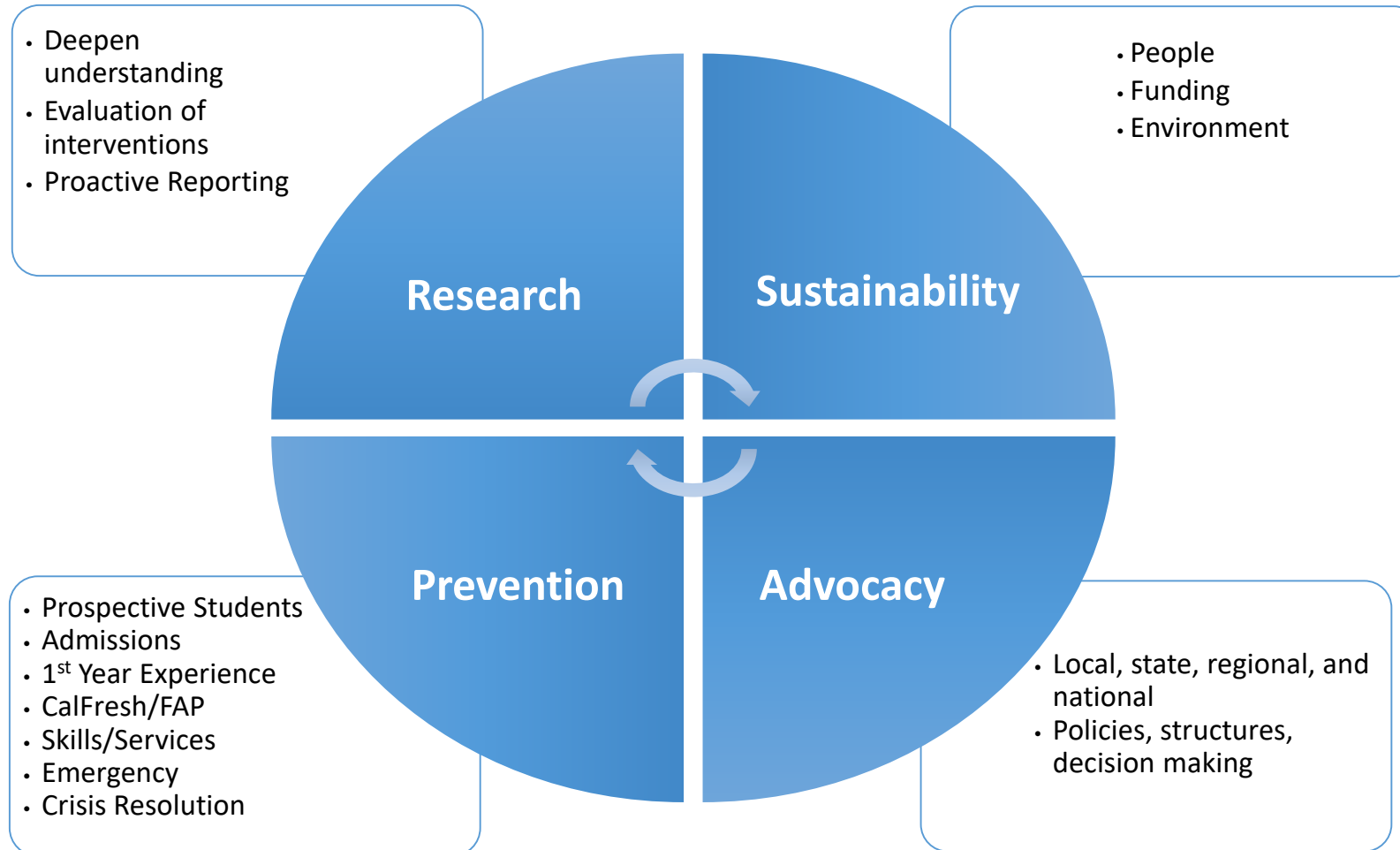
N=60; 11 focus groups @ 5 UC campuses, Spring 2019 (unpublished)

# The Reality





# UC Basic Needs Strategy





# Presenting to UC Regents





# California Higher Education Basic Needs Alliance

## HOLISTIC SUPPORT TO ADDRESS STUDENT BASIC NEEDS

Studies across the nation show that U.S. college students are not receiving sufficient financial aid and are struggling with meeting their basic needs, which includes consistent access to nutritious food in addition to stable and safe housing.<sup>1</sup> These core aspects are essential to the mental and physical well-being of college students. All three of California's public higher education systems and stakeholders are committed to addressing student basic needs in a holistic manner to ensure that all students have the opportunity to be successful. As higher education populations, policies and practices continue to evolve, providing access to resources to help alleviate barriers related to basic needs are critical to academic success.

### What is cost of attendance?

The total cost of attending college includes tuition and fees, housing,<sup>2</sup> food,<sup>3</sup> transportation, books, childcare and supplies. Although California state and institutional aid programs cover full tuition and fees for about half of students attending a California State University, University of California and California Community College, students struggle to pay for the total cost of attendance.<sup>4</sup>

### What is food insecurity?

Food insecurity is when individuals report multiple indications of disrupted eating patterns and reduced food intake.<sup>5</sup>

Food security exists on a continuum, with low and very-low food security counted as "food-insecure."

### What is housing insecurity?

Housing insecurity is a broad term that includes inability to pay rent, having to move often, poor housing quality, unstable neighborhood and housing structures, overcrowding or homelessness. Homelessness is defined by the McKinney-Vento Act as individuals who lack fixed, regular and adequate nighttime residence.<sup>6</sup>



#### Concerns Over College Affordability

- Each year over 300,000 eligible applicants don't get a state Cal Grant because not enough are available.<sup>7</sup>
- The portion of the state grant that helps cover non-tuition expenses is worth less than \$1,700 today, while non-tuition college costs can exceed \$20K annually.
- Low-income students spend about half their family income on out-of-pocket costs after grant aid.<sup>8</sup>



#### Who's Affected by Food Insecurity?

- 50% of CCC students experience food insecurity
- 41.6% of CSU students experience food insecurity
- 44% of UC<sup>9</sup> Undergraduates experience food insecurity
- 26% of UC Graduate Students experience food insecurity



#### Who's Affected by Housing Insecurity?

- 19% of CCC students have experienced homelessness within the past 12 months
- 60% of CCC students experience housing insecurity
- 10.9% of CSU students are homeless
- 5% of UC students are homeless





AB1930  
(2016)

Improve access to CalFresh,  
make it easier for students to  
qualify for CalFresh

AB453  
(2017)

Hunger-Free Campus Bill - food pantries, meal vouchers  
One-time **\$2.5M** investment to each UC & CSU

Higher Ed Trailer Bill -  
**\$15M** investment to UC + CSU  
to address food insecurity +  
**\$3.5M** for rapid rehousing

Trailer Bill  
(2018)

**\$1.5M** investment to  
UC + CSU to address food insecurity

AB 77  
(2019)



GAO  
2018 Report

Call out to FNS!

1. EATS (Gomez; CA)
2. BASIC (Harris; CA)
3. Food for Thought (Schiff; CA)
4. Closing the College Hunger Gap Act of 2019 (Hayes; CT)
5. Campus Hunger Reduction Act of 2019 (Chu; CA)
6. STOP Campus Hunger Act (Fudge; OH)

# UC progress to date

100%

- Institutional basic needs committees
- Basic needs prevention models
- CalFresh application and enrollment efforts
- Emergency food provision efforts

75%

- Launched basic needs skills development efforts

50%

- Basic Needs Centers to centralize information and services



# Acknowledgements

- UC Students
- UC Student Regent
- UC Office of the President
- UC Institutional Research & Academic Planning
- UC Student Affairs + Diversity & Engagement
- UC Basic Needs Co-Chairs
- UC Systemwide Basic Needs Team
- Lorrene Ritchie (UC Nutrition Policy Institute)
- Erin Esaryk (UC Berkeley)
- Jessica Barthalow (Western Center on Poverty & Law )
- UC Student Association
- CHEBNA



