



# Student Living Situation and Nutritious Eating

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## Introduction

- 1 in 3 college students tend to become less active (Huang et al., 2003)
- Brewis et al. (2016) study shows less than 50% of students who live in dorms ate fruits.
- The same study also found approximately 44% of the students live in dorms ate breakfast.



## Introduction

-Abraham, Noriega, & Shin (2018) study concluded convenience and taste are a priority in making food choices.

### Our Question:

Are off campus students are more likely to eat nutritious meals than those that live on campus ?



# Relevance

Nutrition= important aspect of physical and mental health

College students experience many challenges when it comes to proper diet (Finances, time, transportation, access to fresh produce)



# Relevance

Our research examined the relationship between SJSU commutanship and nutritional needs by asking questions about on campus vs off campus living situations and its effect on basic dietary choices

# Operationalizing

Living Situation:

(Off-Campus vs. On-Campus)

Nutrition Assessment:

Weekly Fruits and Veggies

Daily Water Intake

Fast Food Consumption

Check Nutrition Label



VS.





# Methods

Study design: Analytic  
Cross-Sectional

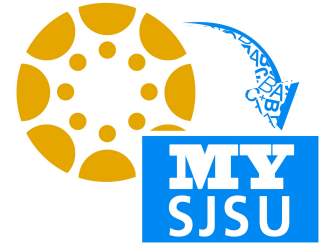
Source population: San  
Jose State Students





# Methods - Data Collection

- Instruments: Qualtrics survey, social media, SJSU Canvas, electronic devices (cell phones, tablets, laptops, computers)
  - Procedure:
    - Survey collected on Qualtrics for accessibility
    - Shared through social media platforms and SJSU Canvas messaging
- Each assigned one course outside of Public Health, unshared courses, organization





# Methods - Samples

**Sample Population: SJSU**

students from 10/16/2018 -  
10/28/2018



**Sample Participants: 169**

participants, 163 SJSU students





# Survey

☐ Q1 Are you an SJSU Student?



☐ Yes



☐ No



Condition: No Is Selected. Skip To: End of Survey.

☐ Q2 Do you live on-campus or off-campus?



☐ On-campus



☐ Off-campus

☐ Q3 In the past week, how many cups of fruits and vegetables did you consume? (one cup = 1 serving)



☐ 0 Cups



☐ Less than 10 Cups



☐ 11-20 Cups

☐ 21-29 Cups

☐ 30 or more Cups

☐ Q4 How much water do you drink in a day? (1 cup = 8oz)



☐ 0



☐ 1-4 cups

☐ 5-8 cups

☐ 9 or more cups

	N	%
SJSU Students		
Yes	156	96.3%
No	6	3.7%
No response	0	0
Living Situations		
On-campus	30	19.24%
Off-campus	124	79.48%
No response	2	1.28%

Fruit and Vegetable Consumption per week		
0 cups	11	7.14%
> 10 cups	100	64.94%
11-20 cups	30	19.48%
21-29 cups	10	6.49%
30 or more cups	3	1.95%
No response	0	0
Water Consumption per day		
0 cups (less than 1)	2	1.30%
1-4 cups	64	41.56%
5-8 cups	57	37.01%
> 9 cups	31	20.13%
No response	0	0%



☐ Q5

How many meals (larger than snack portions with varied foods) do you eat a day?



- ☐ 0 meals
- ☐ 1 meal
- ☐ 2 meals
- ☐ 3 meals
- ☐ 4 or more meals

☐ Q6

Do you check the nutrition fact labels or overall nutritional value of the food you consume?



- ☐ Yes
- ☐ No

☐ Q7

How often do you eat fast food or junk food in a week? (eg. Panda Express, Steak N' Shake, Chipotle, Starbucks, Jack In The Box...)

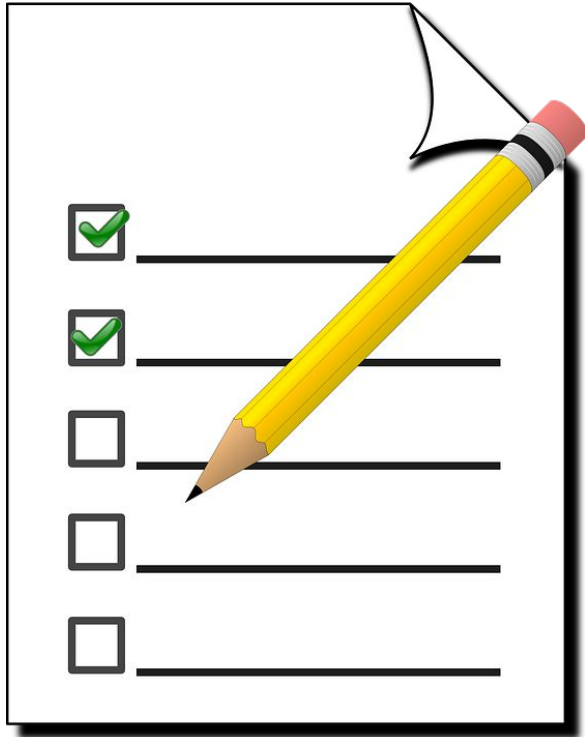


- ☐ 0 times a week
- ☐ 1-2 times a week
- ☐ 3-4 times a week
- ☐ 5 or more times a week

Meals per Day		
0	0	0%
1	14	9.09%
2	85	55.19%
3	51	33.12%
4 or more	4	2.60%
No response	0	0%

Check Nutrition Label		
Yes	74	48.05%
No	80	51.95%
No response	0	0%
Fast Food Consumption per week		
0 times	17	11.04%
1-2 times	84	54.55%
3-4 times	35	27.73%
5 or more times	18	11.69%
No response	0	0%

# Main Results





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Response Rate:  $162/500 = 0.324 \times 100 = 32.4\%$

Prevalence:

$$E_1 = 25/30 = 0.83 \times 100 = 83\%$$

$$E_0 = 112/124 = 0.90 \times 100 = 90\%$$





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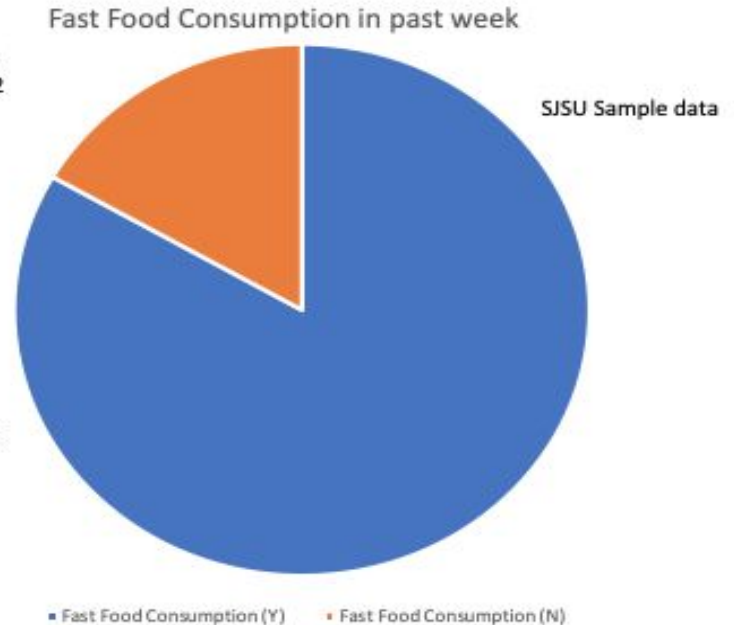
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# Fast Food Consumption

	Fast Food Consumption (Y)	Fast Food Consumption (N)	Total
On campus	25	5	30
Off-campus	112	12	124
Total	137	17	154

Fast Food (Y)  
On Campus: 25  
Off-campus 112  
Total: 137

Fast Food (N)  
On Campus: 5  
Off-Campus 12  
Total: 17





# Incidence Proportion

Students living on campus (exposed) = 83 percent fast food consumption

Students living off campus (unexposed) = 90 percent fast food consumption

## Incidence difference

$$0.83 - 0.90 = -7 \times 100 = -7 \text{ per 100 people (exposed-unexposed)}$$

For every 100 students on campus there are 7 less cases of fast food consumption compared to off-campus students.

## Incidence ratio

$$0.83/0.90 = 0.92 \text{ (exposed/unexposed)}$$

Therefore, students living on campus are 0.92 times as likely to eat fast food compared to students who live off campus.



## Demographics

Did not stratify our data into descriptive categories such as race, age, or gender



## Interpretations

From our study, the results show that students who live off-campus tend to consume more fast food than those who live on campus.

Off-campus students often eat more meals and are more aware of their nutritional values than on-campus students.

# Strengths

- Study Design
  - Cross-sectional
    - Fast and accessible
    - Done at no cost to either party
    - Good for fast associations - first round of study
  - Analytic
    - Adds to quick responses, short survey
    - Removes overly-personal questions
    - Gives data fast





# Strengths

- Survey platform and accessibility
  - Not having to go around from individual to individual
  - Removes tension
  - Available on many electronic devices
  - Single shared link
- Short
  - Nothing too personal, not much thought required
  - 2-3 minute survey
- Anonymous
  - More inclined to honestly answer





# Limitations

- A limitation within the survey was being able to distribute the survey to more on-campus students
- Thus leading to a substantial difference and possibly underestimating actual on-campus sample responses towards fast-food consumption
- The uneven distribution of the sample population may have led to an unreliable generalizability for the group that is not equally represented

Q2 - Do you live oncampus or offcampus?	×	Distribution (%)	Actual Count	Weight
On-campus		19.48	30	1
Off-campus		80.52	124	1
		100	154	



# Potential Biases

- The questions provided in the survey were standardized in hopes of reducing bias and confounding factors
- Through distribution Methods of MyCanvas, Selection bias was identified as distribution was mostly sent through the Health Science courses student roster
  - Health Science students may be more health conscious of their fast-food consumption compared to general SJSU students
- Recall bias was acknowledged as students may not accurately remember their fast-food consumption from a previous week



# Considerations

- Age could play a large factor in fast-food consumption
  - When conducting another survey on the topic of Fast Food consumption, age should be included in the questionnaire as it can be a confounding variable
  - Age could associate to younger people consuming more fast food whether on or off-campus and vice versa for older people who may consume less fast food
- Definition of fast food in the survey was not carefully detailed
  - An exhaustive explanation of what constitutes fast food may be more appropriate for further investigations as there may have been some variability in our results due to individual beliefs



# Conclusion

- Students who live off-campus tend to consume more fast food than those who live on campus
- Off-campus students eat more meals throughout the day and are more aware of nutritional values
- Data that was collected was not an accurate representation of all SJSU students



# References

Brewis A., Brennhofers S., van Woerden I., Bruening M. Weight stigma and eating behaviors on a college campus: Are students immune to stigma's effects? *Prev. Med. Rep.* 2016;4:578–584.

Small, M., Bailey-Davis, L., Morgan, N., & Maggs, J. (2013). Changes in eating and physical activity behaviors across seven semesters of college: living on or off campus matters. *Health Education & Behavior*, 40(4), 435-441.