

Fruit and Vegetable Consumption and BMI among San Francisco State University Students

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Abstract

Clinical evidence suggests that increasing fruit and vegetable consumption is an effective strategy for balanced body weight. The purpose of this study was to evaluate whether an association between fruit and vegetable consumption and BMI exists in San Francisco State University students. A cross-sectional analysis of 109 participants was conducted measuring fruit and vegetable consumption with a pre-tested questionnaire. The self-reported intake of fruits and vegetables and self-reported height and weight revealed low prevalence (19.25%, n=21) of obesity and overweight and shows that fresh/healthy students' eating is close to national standards. There was no relationship between intake of the majority of fruit and vegetable groups and BMI; however, corn and potato consumption showed a positive relationship with BMI (n=109, r=0.299, p=0.002). The findings from this study shows no relationship between fruit and vegetable intake and BMI among San Francisco State university students

Hypothesis

Is there any relationship between fruit and vegetable consumption and BMI among San Francisco State University students?

Research Objective

The comparison of fruit and vegetable intake by SFSU students to national standards.

Methodology

Cross sectional study

Sample size

The participant sample size has been calculated based on prevalence of obesity for college-aged data (CDC), 109 students female and male.

Questionnaire

With 22 questions about fruit and vegetable intake, demographic characteristics and self-reported weight and

Recruitment

2 Interior design classes, apparel design, consumer and family studies class

Data analysis

SPSS

Framework



Results

Prevalence of obesity at SFSU

San Francisco State University students' BMI (n=109)		
Variable	f	%
BMI		
Normal weight (18.5-24.9)	79	72.5
Overweight (25-29.9)	17	15.6
Underweight (≤ 18.5)	8	7.3
Obese (≥ 30)	4	3.65
Undeclared	1	0.9
Total	109	100

Fruit and vegetable intake

Table 5 San Francisco State University Students daily fruit and vegetable intake as combined groups				
	N	Mean	Mode	Std. Deviation
Combined Fruits	109	4.05	3	3.16
Combined vegetables	109	3.67	4	3.13

Results

Fruit and vegetable intake

Mean fruit consumption 4 cups

Mean vegetable consumption 3.6 cups

Fruit and vegetable intake and Gender

No significant relationship

Fruit consumption and BMI

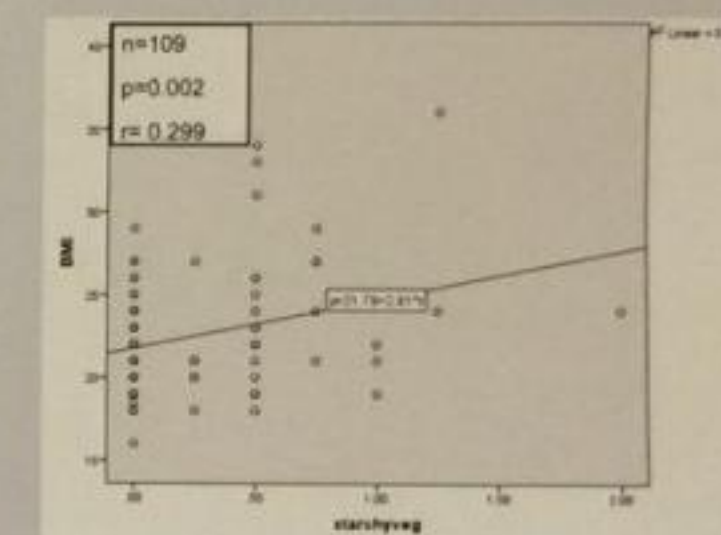
No significant relationship

Vegetable consumption and BMI

No significant relationship

** Significant relationship

Corn and potato & BMI



Discussion

- Region of CA
- Sample size
- Not accurate instrument
- Over reported fruit and vegetable intake
- Over reported height and weight
- Expand to other SFSU departments
- Other factors are related to BMI

References

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