

The Effects of Breakfast Consumption on GPA, BMI, and Total Daily Caloric Intake Among College Students

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Introduction

- Children who consumed breakfast on average scored higher grades in math than children who did not consume breakfast (1)
- Breakfast skippers in all age groups tend to have greater BMIs than breakfast eaters (2)

Purpose

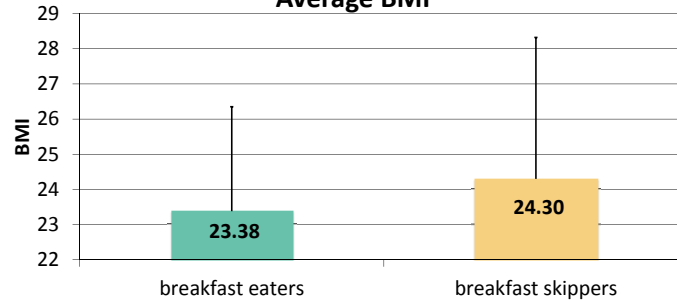
To determine if the college students who ate breakfast have lower body weights and higher GPAs.



Methods

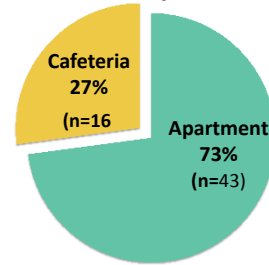
- The Institutional Review Board approved this study. Juniors and seniors college students signed and the informed-consent
- A Forms Manager survey collected data regarding breakfast intake, GPA, BMI, and physical activities
- The Automated Self-Administered 24-hour (ASA24) dietary recall survey collected data on individual's 24-hour total dietary intake
- The SPSS program was used to analyze data with the t-test, chi-square test, and oneway ANOVA

Breakfast Eaters vs Breakfast Skippers Average BMI

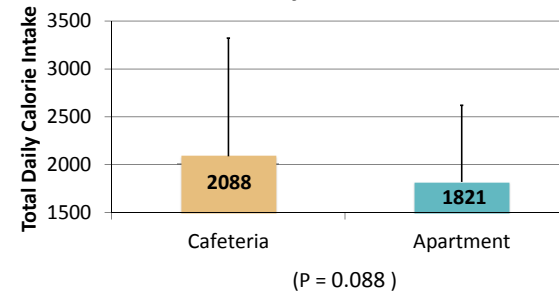


*Normal BMI Range:
18.5 – 24.9
*(P = 0.012)

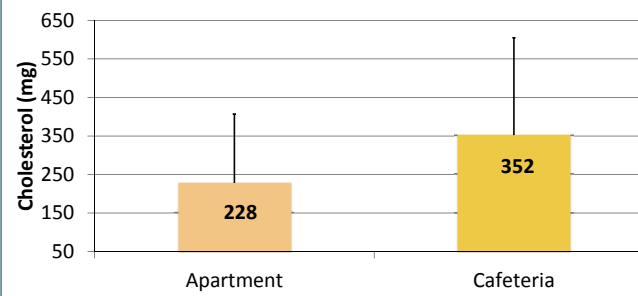
Location of Breakfast Consumption



Location of Breakfast Consumption and Total Daily Caloric Intake



Location of Breakfast Consumption and Cholesterol (mg) Intake



*Recommendation
Cholesterol: <300 mg
*(P = 0.051)

Results

- 80.2% (n=158) of subjects were regular (4+ times per week) breakfast consumers
- 63% gained weight in college with the majority (45.6%, n=57) gaining 6-10 lbs
- Participants who consumed breakfast in apartment consumed more whole fruit (1.29±1.42 servings) compared to breakfast consumption in school cafeteria (0.73±0.84 serving, p = 0.052)

	GPA	BMI
Low Protein (10.9±5.6 g)	3.47±0.31	23.9±3.5
High Protein (28.3±9.0 g)	3.56±0.32	22.5±1.2
P-Value	0.630	0.002

Conclusion

- Surprisingly, most students reported eating breakfast regularly
- People who eat breakfast have slightly lower BMIs
- Subjects who consumed higher protein for breakfast had lower BMIs
- Individuals who ate in their apartment tended to consume less cholesterol, and more fruit compared to their peers who ate in the school cafeteria, but it was not statistically significant
- Eating breakfast did not correlate with GPA or total physical activity



Acknowledgements

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