

# The Association of Stress on College Student's Food Choices

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## BACKGROUND

College students experience school-related stress, which can lead to coping mechanisms that manifest into poor food choices. Students who participated in a study failed to achieved a healthy lifestyle, which included these factors: diet, physical activity, smoking status, and stress (Hanawi et al., 2020). It is suspected that students have higher levels of stress due to schoolwork and extracurricular activities, which can lead them to stress eat. Eating behaviors are also influenced due to stress. Aspects like overall calorie consumption, macronutrient composition, and food choice/food craving are manipulated by stress (Reichenberger et al. 2020). These factors are directly related to overconsumption of foods and stress.

Stress has also been reported to be positively correlated to emotional eating (Ling & Zahry, 2021). Finding different ways and strategies to manage stress other than stress eating will not only help students during their college years but also with their future habits afterwards. The purpose of this study is to explore what types of foods are eaten when college students experience school-related stress.

## LEARNING OUTCOME

Describe how stress affects student eating patterns and what category of foods, nutrient-dense versus calorically dense, are eaten when stressed.

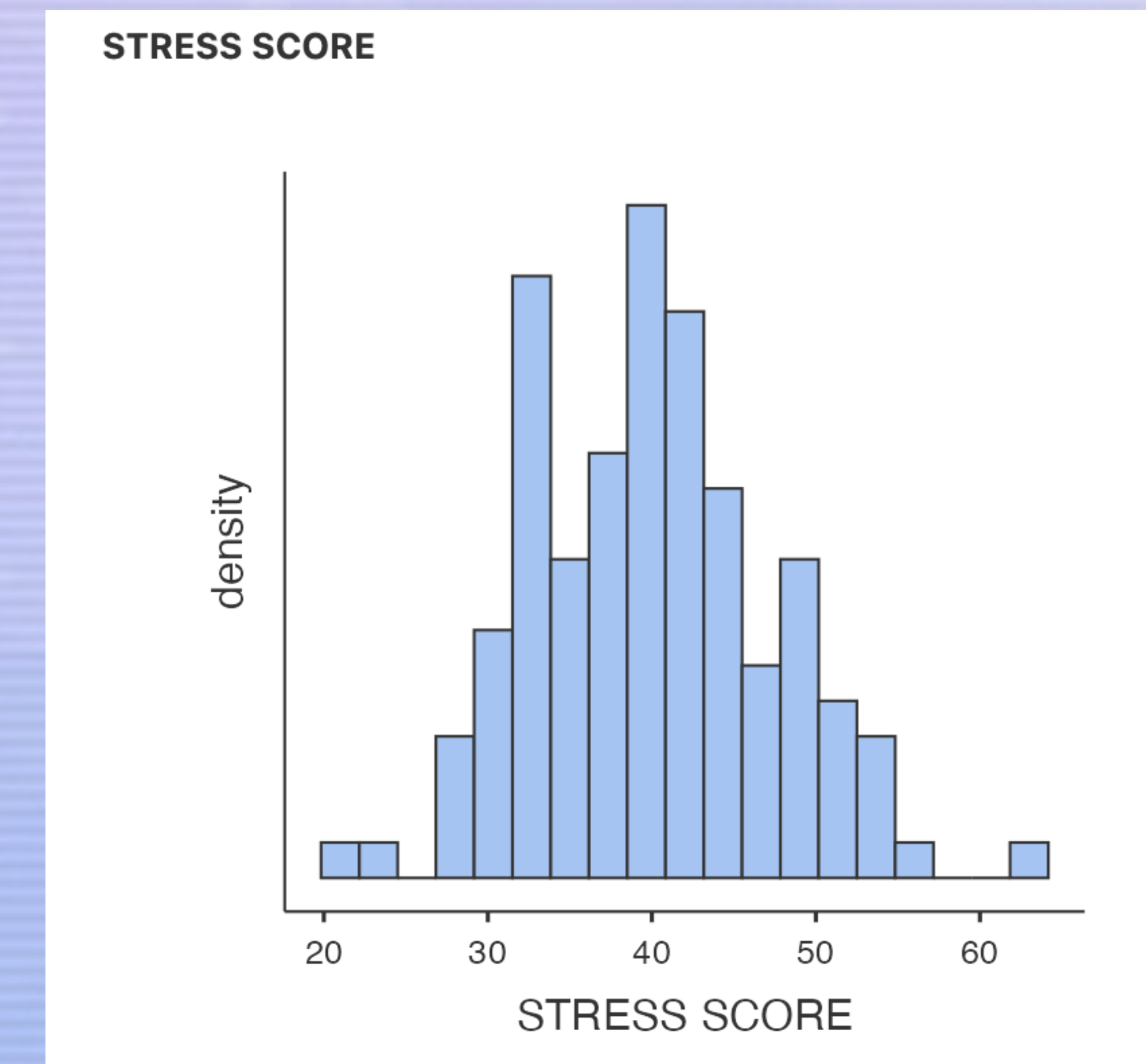
## RESEARCH QUESTIONS

1. What is the relationship between school-induced stress and student food choices?
2. What is the relationship between calorically dense food intake and stress?
3. What is the relationship between nutritionally dense food and stress?

## METHODS

A quantitative design was used. An online survey was sent to 2,800 undergraduate students at a private Midwestern university. One hundred and twenty-six usable questionnaires were returned for data analysis. Two valid and reliable questionnaires were administered online; Perceived Stress Scale assessed stress levels and the NHANES Dietary Screener evaluated foods consumed over the past month. Using Spearman's *r*, stress scores were correlated to two categories of food, nutrient-dense or calorically dense, to see if high stress scores were more commonly seen with an increase of nutrient-dense or calorically dense foods.

**TABLE 1**



**TABLE 2**

Correlation Matrix			
		STRESS SCORE	Beans - ND
STRESS SCORE	Spearman's rho	—	—
	p-value	—	—
	N	—	—
Beans - ND	Spearman's rho	-0.278	—
	p-value	0.002	—
	N	122	—

## RESULTS

Stress scores were graphed to show a normal distribution (Table 1). Then stress scores were correlated to 19 food categories; eight being nutritionally dense foods (i.e., leafy greens) and 11 were calorically dense (i.e., pizza). Spearman's *r* correlation showed only one of 19 was statistically significant – beans with  $p = 0.002$  and a Spearman's  $r = -0.278$  showing a negative correlation; indicating when students are stressed, they do not eat beans (Table 2).

## CONCLUSION

According to the data analysis, when students are experiencing school related stress, eating habits are not influenced by whether the food is nutritionally or calorically dense. Students chose foods from both groups. Beans were the only food category to show statistical significance with a negative correlation. The limited sample size does not allow for the results to be generalized.

## REFERENCES

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