

Abstract

College students are a group of individuals especially prone to stress, tend to have poor eating habits, and most commonly report the head as a site of chronic pain. The perception of stress is one of the best predictors for headaches for college students; stress can influence appetite. This study aims to determine the eating styles, headache frequency, and stress levels among UC Irvine college students, explore any associations between these factors, and provide awareness of the possible role diet plays in the frequency and intensity of headache and stress for college students. This study utilizes an online survey, collecting a maximum of 1000 survey responses from college student participants. It is hypothesized that students who practice unhealthy eating choices will experience one or both of the following: high levels of stress and more headaches. This research will bring new information to the college community regarding a healthy and productive lifestyle which can result in increased student attendance, stronger academic performance, and heightened student motivation.

Introduction/Background

The head is the most commonly reported site of chronic pain conditions among college students.¹ One of the best predictors of headaches for college students is the “perception of stress”.² As a student’s stress level rises, so might the intensity and frequency of their headaches. Additionally, there is a definite connection between food and headaches, aside from stress.

One diet related connection to headaches is dietary excess.³ A low-fat diet was found to significantly decrease the frequency, intensity, and duration of headaches, as well as decrease the medication intake during headaches.⁴

It is well established that stress can influence appetite.⁵ When under stress, one’s fat consumption increases and a tendency to eat more sweet foods occurs.^{6,7} Previous research showed of 272 college students, 80% reported they typically try to make healthy choices in their diet, though only 34% of the subjects eat healthy when under stress.⁵

College students tend to have poor eating habits.⁸ Students report a high intake of high-fat, high-caloric foods and eat much fewer fruits and vegetables daily.⁹ Previous research has examined the determinants of eating behavior for college students. Determinants were seen to cluster students into four groups: those influenced by internal and external cues (such as hunger, taste, friends, or media); those influenced by budget; those influenced by health; and those not influenced by any of the factors.⁸ It is likely that the barriers to healthy eating were more influential than the benefits of healthy eating for college students.⁸ Additionally, a higher perception of stress was associated with poor eating habits.⁸

Objectives

- Determine eating styles, headache frequency, and stress levels among UCI college students
- Investigate patterns between these factors
- Propose any possible connections found from the data

Methods

Overview:

- Anonymous, online survey via “SurveyMonkey”
- Eligibility: 18 years or older and current UCI student
- Optional raffle to win one of twenty \$10 Amazon.com giftcards

Survey Breakdown:

- 41-46 questions (follow-up questions dependent on some answers)
- Section 1: Self-assessment of participants’ stress levels (Perceived Stress Scale¹⁰)
- Section 2: Self-assessment of participants’ headache frequency
- Section 3: Diet patterns and eating choices
- Section 4: Demographic information

Data Analysis (to be completed):

- Cluster analysis using SPSS (Statistical Package for the Social Sciences)
- Investigate any associations between eating styles, headaches, and stress levels

Demographic Group	Percentage	Responses
American Indian or Alaskan Native	0.5%	1
Black or African American	10.9%	20
Hispanic or Latino	21.2%	39
Native Hawaiian or other Pacific Islander	4.9%	9
White	19.0%	35
Declined to state	3.8%	7
None of the above	39.7%	73
Total		184 (194 total survey responses)

Public Health Significance

- Provide awareness and education to university communities
- New information to college community pertaining to healthy and productive lifestyle
- Increased student attendance, stronger academic performance, heightened student motivation

Acknowledgements

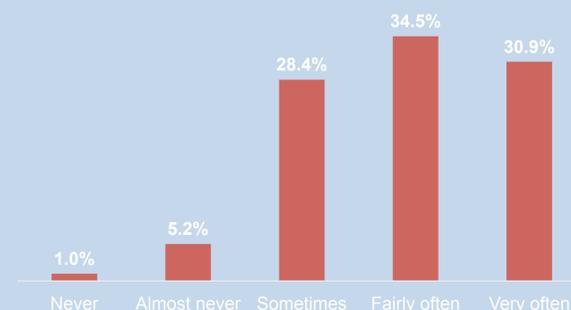
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Literature Cited

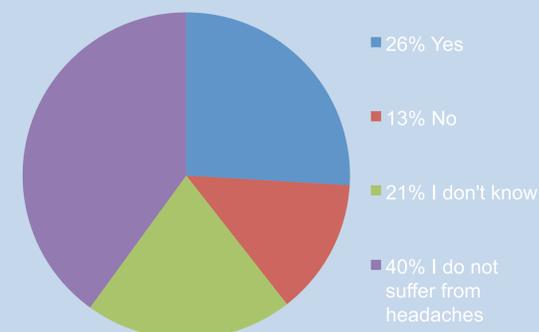
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Results

Section 1, Q3: In the last month, how often have you felt nervous and “stressed”?



Section 2, Q19: If you suffer from headaches, do you feel a proportion of your headaches may be caused by your diet?



Section 3, Q26: Over the past 7 days, what amount of saturated fat do you feel you consumed?*

