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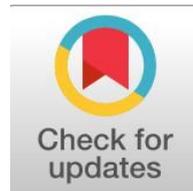
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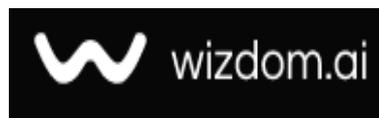
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Nutrition and Anxiety: Exploring Food's Role in Student Mental Health During Exams

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Abstract

General Background: Stress during university life is widely recognized as a major factor affecting students' psychological well-being and dietary behavior. **Specific Background:** College students frequently experience heightened stress during examination periods, which may lead to changes in eating habits, appetite, and physical symptoms that can interfere with learning and daily functioning. **Knowledge Gap:** Despite growing research on student stress, limited evidence exists regarding nutrition awareness and food preferences during exam periods among students in health and medical technique programs in Baghdad. **Aims:** This study aimed to assess knowledge of healthy nutrition and examine food preferences and stress-related symptoms among college students during examinations. **Results:** A cross-sectional survey conducted from March 1 to April 30, 2025 revealed that 97% of students experienced anxiety accompanied by memory loss, 95% reported appetite changes, and 100% experienced headaches and stomach pain during exams. In terms of food preference under stress, 90% of students selected fast food, 74% preferred dark chocolate, and 60% consumed sweets. Meal skipping among male students showed strong association with stress and poor mood, while female students reported higher perceived stress and were more likely to engage in dietary changes such as binge eating. **Novelty:** The study provides empirical data linking exam-related anxiety symptoms with specific food choices and meal patterns among health college students in Baghdad. **Implications:** These findings highlight the need for nutritional awareness and stress management strategies within academic institutions to support student well-being during examination periods.

Highlights:

- High Prevalence of Anxiety Symptoms and Physical Complaints Reported During Examination Periods.
- Stress Conditions Associated With Appetite Changes, Fast Food Preference, and Chocolate Consumption.
- Gender Patterns Indicate Stronger Perceived Stress and Dietary Changes Among Female Students.

Keywords: Exam Anxiety, Student Nutrition, Eating Habits, College Students, Academic Stress.

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1. Introduction

Stress, a common physiological response, takes part as an important factor in maintaining the body's state of homeostasis. Because of its adverse effects on human health, it is an international issue. Underlying factors may cause heterogeneous individual reactions to stress. Critical pressures in college, for example, assignment, reading, seminars, etc., are major contributors to stress among students on campus. Across different populations, the relationship between stress and its affect on eating among college students has been examined [1]. Some symptoms of stress and depression are widespread in the college years. Many studies have confirmed that college students suffer extensive stress throughout their university experience [2]. Stress can impair cognitive functions and learning functions at least according to measures from studies. Stress from academic workload, long hours of study and other factors associated with the work may lead to or at least aggravate anorexia. When people are stressed, many university students cease eating altogether and develop abnormal eating habits. They will eat sweets and drink sugary water instead of solid food.

A recent study in Kuwait found a strong association between stressful situations and an unhealthy diet. Stressed students consumed more fatty foods and snacks with higher calorie content, while reducing their intake from nutritious, natural sources. The evidence linking stress to adverse health outcomes--such as tendency for fat-prone diets cannot help but fit with this assertion of other research. The incidence of stress-related problems is especially high among college students (particularly first-year students). Additional factors contributing to the pressure felt by medical students come from distances between home and their university or institution, unclear academic goals and the easy availability of food outlets outside; near academic institutions. These external factors make the consumption of fast food higher due to its accessibility, big calorie content and quick preparation time [5]. In order to minimize the pressure on students and improve their health, it is necessary to create new systems within schools which will lessen stress. Dietary changes caused by stress must be reversed if we are to improve the academic performance and general welfare of students [6, 7].

The importance of dietary habits and physical activeness in evaluating overall health of college students has recently been emphasized [8]. This study investigated students' physical activities, dietary behaviors and perceptions of stress to give students some students recommend people make diet adjustments, especially for vulnerable people who suffer from illness due to stress that cannot handle the necessary nutrients. To further assist in this effort, his investigation focused particularly on such subjects as are having abnormal levels of stress and ate inadequate vitamins. [8] This paper further provided a diagram of the relationship between the three indices and the attendant Recommendation:

2. Aim of the Study

To determine the level of knowledge among college students regarding proper nutrition during examinations at the College of Health & Medical Techniques in Baghdad.

3. Subjects & Methods

3.1 Study Design

This was a cross-sectional study. We used a random sampling strategy to survey 108 university students when exams were over or about to begin. They had to be ongoing patients, willing or able to offer their informed consent. Participants with a history of psychiatric disorder state exclusion.

3.2 Questionnaire Development:

The structured questionnaire is based on a tool which was part of previous studies. It was piloted with twenty students to ensure that instructions and relevance were clear. Depending on the feedback, a few minor changes were made--responses were trimmed to make them simpler, and ambiguous terms clarified.

3.3 Duration of the Study and Sample Size

Data were collected from March 1, 2025, to April 30, 2025, involving a sample size of 108 college students.

3.4 Place

The study was conducted at the College of Health & Medical Techniques in Baghdad.

3.5 Statistical Analysis

The data were analyzed statistically using the one-sample t-test and chi-square test to meet the objectives of the study.

4. Results

Table (1): Distribution of students according to demographic characteristics

Demographic characteristic		Percent	Frequency
Gender	Male	79.9%	74
	Female	36.7%	34
Age	20-25	92.9%	86
	26-30	13%	12
	31-36	10.8%	10
Marital status	single	36.7%	34
	Married	77.8%	72
	Divorced	1.1%	1
	Widow	1.1%	1
Housing Situation	Ownership	58.3%	54
	Rent	29.1%	27
	With Relatives	1.1%	1
	Dormitory	17.3%	16

The table indicates a higher percentage of males (79%) within the age group of 20–25 years (92%). Among these, 77.8% are married, and 58.3% own a house.

Table (2): Distribution of students according to scientific department

Scientific Department		
Selection	%	Frequency
Radiology	16.2%	15
Optics	13%	12
Anesthetization	22%	20
Community Health	7.6%	7
Dental department	16.2%	15
physical therapy	15.12%	14
Laboratory	27%	25
Total	100%	108

This table shows a higher percentage in the Laboratory Department (27%) compared to the Anesthesia Department (22%).

Table (3): distribution of students according to their knowledge about stress and suitable food

Knowledge		%	Frequency
Do you feel fear and anxiety during exams period?	Yes	97.2%	90
	No	19.44%	18
If the answer was yes to the previous question please answer this	Fear	33.5%	56
	Anxiety	99.36%	92
	Difficulty Breathing	20.5%	19
	If you smoke, is there an increase in smoking	16.2%	15
	Difficulty concentrating	97.2%	90

	Change in behavior	68%	63
	Tachycardia	90.7%	84
	Excessive eating or loss of appetite	95%	88
	Headaches or stomach problems	100%	93
	Feeling tired even if you slept well for enough hours	100%	93
What kind of food do you prefer during the examination period	Fish	22.68%	21
	Yoghurt	27%	16
	Eggs	27%	25
	Dark Chocolate	74.5%	69
	Nuts (cashews, peanuts, Almonds)	65.88%	61
	Tea	68%	63
	Coffee	65.88%	61
	Sweets	60.5%	64
	Fast food (Burger, etc.)	60.5%	56
	Green Tea	21.6%	20
Is there a certain type of food that you like or hate to eat in normal days	Yes	38.88%	36
	No	95%	88

According to this chart, the majority of participants have stress-related symptoms. 97% said they felt anxious and unable to concentrate; 95% found that their appetite was altered (either for the worse or better); and all 100% suffered from headaches and upset stomachs. It can be seen from the accompanying figures what their favourite foods are when they are under difficult circumstances. 74% of people choose to eat bitter chocolate, sweets 60% and instant noodles 90%.

Discussion

In the College of Health and Medical Technologies, Bagdad, our research found a high percentage of female students--79.9 percent to be exact. This discovery contrasts with research of 2019 in Korea in which, there were 9,725 students: 5,170 males (53 percent) and 4,555 females (47 percent). The disparity may be attributed partly to the fact that the structure of the College of Health and Medical Technologies of Bagdad has more female students than male ones. Most of the respondents in our survey were aged from 20 to 25. more than 90% of them were just about starting in life. 77.8% were married, and 58.3% owned their homes. The remaining participants lived with their parents. In the Korean study, 71.2% of the students lived alone and most (23.3%) with their parents. Higher participation percentages occurred among students in the Anesthesia (22%) and Laboratory (27%) nursing departments.

The survey wilted a large number of students showing symptoms obvious of anxiety during examination periods: 97.2% were anxious; 99.36% of subjects sought various balmings because they felt anxious; for 97.2% it was difficult to concentrate. A majority of patients also had tachycardia (90.7%) or were bothered by loss of appetite and excess eating (95%). They experienced--repeatedly! headaches stonuch trouble even after meals with little result and fatigue despite enough sleep. (100%).

These are what students consume during exams: 74% dark chocolate, 65.88% nuts, 68% tea, 65% coffee, 60.5% sweets and 60.5 % fast food.

The preference for dark chocolates and fast food during stress is biological and psychological in nature. Dark chocolate carries compounds that can counteract mood swings, such as flavonoids and magnesium, even temporarily improving your spirits. A hint of sweetness and texture prevailing from its sensory qualities, too, makes the experience another reason to keep savoring it when you're completely stressed out. On the other hand, fast food is high in sugar, fat and salt. These things activate the reward system of the brain — offering immediate comfort but diminishing returns over time. Psychological Research has suggested that stress is often emotio-nal eating. When people are unhappy, they eat foods that are high in calories and palatable. This study further explores how this situation is compounded by convenience food, a more affordable form of nourishment during stressful times and one that is easily accessible by everyone regardless of social status and rank too. These findings indicate that stress during exams can influence total food intake and lead to unbalanced eating habits whether excessive or pernicious [9].

Skip-ping meals was extraordinarily correlated with stress and poor mood. It can even cause stress and be caused by it. Regular breakfast eating may increase physical activity and mental health, thus it is important to advise college students to keep eating habits regularly even while under much pressure [10,11]. Previous research has suggested that females

experience higher degrees of self-perceived stress than men and are more likely to diet. In addition, women with anxiety are inclined to binge and have symptoms resembling bulimia nervosa or binge-eating disorder. All participants practiced strict dietary constraints, such as fasting during periods of stress [12]. This practice of putting severely restricted curbs on one's diet for an extended period can produce overeating in participants who are already anxious. It is necessary that students be educated on the balanced, practical eating habits of modern society [13,14,15]. A number of limitations are present in this study. The sample students were taken from a single college in Baghdad and therefore may only represent limited geographical areas. In contrast to our research findings, students living away from home might show different responses. Furthermore, stress generated by long commutes was not covered under this study — a point that may well affect results. Future studies ought therefore to extend their range and cover more students studying at college levels generally.

Finally, while this study analyzed diet, The quantity of consumed food items and calorie intake were not surveyed. Included in future studies would be attention to these details in order to obtain a more accurate picture of how stress-related eating patterns work.

Conclusions

During exam time, anxiety and stress take a toll on young adults in their twenties, with symptoms such as having trouble concentrating, rapid pulse, loss of appetite, headaches, or a bad tummy. They showed moderate changes in eating habits with increased consumption of dark chocolate, tea, coffee, nuts and fast food or candies. Although these foods are frequently consumed during times of stress, they should be regulated, because of their potential negative health effects if enjoyed immoderately. It is recommended that the diet be supplemented with nutrient-rich food items such as fish, milk and eggs, and green tea. These foods have vital nutrients like omega-3 fatty acids, protein and antioxidants which can help support brain function and sharp wits during periods of high stress. To put these recommendations into practice, universities or agencies of public health could implement specific measures. As an example, nutrition education programs could be integrated with student well-being campaigns on campus to teach students all about the stress-reducing qualities of food and how to cook simple, healthful meals. In addition, campus-based interventions, ranging from providing healthy snacks in libraries and study spaces during exam times.

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Conflict of Interest

The author declares that there is no conflict of interest concerning the publication of this article.

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