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The Impact of Lifestyle Transitions on Dietary Habits, Sleep Patterns, and Health Among College Students

Deekshitha Reddy S, C Vinod Kumar, Sameer Basha, Mallikarjuna K M, Arul Jose R

UG Scholar, Department of Electrical and Electronics Engineering, Rajarajeswari College of Engineering, Bengaluru,
Karnataka, India

UG Scholar, Department of Electrical and Electronics Engineering, Rajarajeswari College of Engineering, Bengaluru,
Karnataka, India

UG Scholar, Department of Electrical and Electronics Engineering, Rajarajeswari College of Engineering, Bengaluru,
Karnataka, India

UG Scholar, Department of Electrical and Electronics Engineering, Rajarajeswari College of Engineering, Bengaluru,
Karnataka, India

Associate Professor, Department of Electrical and Electronics Engineering, Rajarajeswari College of Engineering,
Bengaluru, Karnataka, India

ABSTRACT: The transition to college life introduces significant lifestyle changes that can adversely affect students' dietary habits, sleep quality, and stress levels. This research investigates how these factors interact and influence overall student health. Through a structured survey exploring meal frequency, fast food intake, sleep duration, water consumption, and stress, we analyzed data from a diverse group of college students. The findings suggest that academic stress and irregular sleep patterns significantly affect food choices, leading to unhealthy dietary behaviors. Institutional efforts to promote wellness, such as mental health awareness, healthier food options, and sleep education, are essential to improving student well-being.

KEYWORDS: College students, dietary habits, lifestyle, stress, sleep, fast food, health, food choices, supplements, stress management, clustering

I. INTRODUCTION

The college phase represents a critical developmental stage marked by increased independence, academic demands, and social adaptation. These transitions often disrupt established routines and influence key health-related behaviors such as diet, sleep, and stress management. Poor dietary choices, sleep deprivation, and elevated stress levels can collectively undermine students' mental and physical health. This study aims to explore the relationship between these lifestyle factors and identify trends that may inform targeted wellness initiatives on campus.

II. OBJECTIVES

1. To analyze the dietary habits and meal patterns of college students.
2. To determine the impact of stress and sleep on food choices.
3. To evaluate the availability and influence of healthy food options on campus.
4. To assess students' knowledge and consumption of dietary supplements and water.
5. To observe lifestyle-related weight and health changes during college years.



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III. PROBLEM STATEMENT

Despite growing awareness of nutrition and wellness, many college students exhibit unhealthy behaviors. Behaviors due to stress, time constraints, and lack of access to nutritious food. These habits pose immediate and long-term health risks, yet holistic assessments of student lifestyles remain limited.

IV. LITERATURE REVIEW

- Nelson et al. (2009): High meal skipping and fast food intake. Gap: Did not address sleep impact.
- Mikolajczyk et al. (2008): Emotional eating under stress. Gap: Limited focus on water/supplements.
- Gan et al. (2011): Weight gain during college years. Gap: Did not assess campus food options.
- Deliens et al. (2014): Convenience and peer influence affect diet. Gap: Stress and boredom eating are not deeply explored.

V. METHODOLOGY

A cross-sectional survey was conducted among college students using a structured questionnaire. The instrument covered meal patterns, food preferences, supplement intake, sleep duration, stress levels, and water consumption. Data were analyzed using descriptive statistics and clustering to identify behavioral trends.

VI. RESULTS

- 60% reported eating 3+ meals daily, but 35% consumed fast food 3+ times/week.
- 45% skipped meals due to stress or time limitations.
- 70% experienced altered eating habits during stress, with increased snacking.
- Sleep deprivation (<6 hours/night) correlated with higher junk food cravings.
- Only 30% consumed fruits/vegetables daily; taste outweighed health in food decisions.
- 60% reported inadequate healthy food options on campus.
- 40% reported weight gain since entering college; 65% practiced stress-related eating.

VII. DISCUSSION

Our findings align with existing literature indicating that academic stress and poor sleep hygiene contribute to unhealthy dietary behaviors. Emotional and boredom eating, fast food dependency, and insufficient nutrient intake were prevalent among students facing high academic pressure. The limited availability of healthy options on campus further exacerbates these issues. Students also demonstrated low awareness of dietary supplements and hydration, underscoring the need for better health education.

VIII. LIMITATIONS

- Reliance on self-reported data may introduce bias.
- Cross-sectional design limits long-term behavior analysis.
- Lack of diverse representation in the sample.
- Physical activity and chronic health conditions were not evaluated.

IX. FUTURE WORK

- Conduct longitudinal studies across multiple semesters.
- Incorporate physical and mental health assessments.
- Compare results across universities and regions.
- Develop and implement campus-wide wellness interventions.



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X. CONCLUSION

College students frequently encounter health challenges due to poor dietary practices, inadequate sleep, and high stress. These behaviors can significantly impact academic performance and long-term health. Institutions must prioritize wellness by offering nutritious food, mental health resources, and educational campaigns. A proactive, supportive campus environment can foster healthier habits that persist beyond college years.

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