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## **Nutritional Habits and Wellness Outcomes Among College Students**

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**Abstract:** Nutrition plays a fundamental role in promoting physical health, psychological well-being, and overall quality of life among college students. The transition to higher education is often accompanied by substantial lifestyle changes that influence dietary behaviors, meal patterns, and food choices. Academic responsibilities, irregular schedules, financial limitations, and increased independence frequently contribute to unhealthy nutritional practices that may negatively affect students' wellness outcomes. The present study examines the relationship between nutritional habits and wellness outcomes among college students by evaluating dietary behaviors, healthy eating practices, hydration, meal regularity, and overall physical and mental well-being. A quantitative descriptive research design was adopted using a structured questionnaire administered to college students. The findings indicate that students maintaining healthier nutritional habits demonstrate improved physical health, higher energy levels, better concentration, enhanced emotional well-being, and greater overall wellness. Balanced dietary intake, regular breakfast consumption, adequate fruit and vegetable intake, sufficient hydration, and reduced consumption of processed foods were positively associated with favorable wellness outcomes. The study highlights the importance of institutional nutrition education programs and campus-based health promotion initiatives to encourage healthy eating behaviors among college students. Strengthening nutritional awareness may contribute substantially to improving student health, academic performance, and long-term well-being.

**Keywords:** Nutritional habits, wellness outcomes, healthy eating, college students, dietary behavior, nutrition education, student health.

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## **Introduction**

Nutrition is recognized as one of the most important determinants of human health and well-being. Appropriate dietary practices contribute to healthy growth, optimal physiological functioning, disease prevention, cognitive performance, and psychological wellness throughout the lifespan. During the college years, students experience significant academic, social, and environmental transitions that often influence their nutritional behaviors. Increased independence in food selection, irregular daily schedules, financial constraints, and academic stress may lead students to adopt unhealthy dietary habits characterized by meal skipping, excessive fast-food consumption, inadequate fruit and vegetable intake, and insufficient hydration.

Healthy nutritional habits extend beyond calorie consumption and encompass balanced intake of macronutrients and micronutrients, meal regularity, hydration, food quality, and dietary diversity. Proper nutrition supports immune function, physical fitness, cognitive performance, emotional stability, and academic achievement. Conversely, unhealthy eating patterns increase the risk of obesity, nutritional deficiencies, cardiovascular diseases, diabetes, gastrointestinal disorders, fatigue, anxiety, depression, and reduced learning capacity.

College students represent a population particularly vulnerable to poor nutritional practices due to changing lifestyles and increased autonomy. Numerous studies have reported that inadequate nutrition negatively affects concentration, classroom performance, sleep quality, stress management, and overall quality of life. Consequently, universities have an important responsibility to promote evidence-based nutrition education and create environments that encourage healthy food choices.

Increasing public awareness regarding nutrition has encouraged educational institutions and healthcare organizations to develop wellness initiatives supporting healthier dietary behaviors. However, substantial variations continue to exist in students' nutritional knowledge and eating practices. Understanding the relationship between nutritional habits and wellness outcomes is therefore essential for designing effective interventions that improve student health.

The present study investigates nutritional habits among college students and examines their influence on physical, mental, and overall wellness outcomes.

## **Literature Review**

Nutrition has long been recognized as a fundamental determinant of health, influencing physical development, cognitive functioning, emotional well-being, and overall quality of

life. Among college students, nutritional habits are particularly important because this stage of life is characterized by increased independence, changing lifestyles, and the establishment of lifelong dietary behaviors. Numerous studies have demonstrated that healthy eating patterns contribute significantly to improved academic performance, enhanced mental health, increased physical fitness, and reduced risk of chronic diseases.

Recent research indicates that many college students experience unhealthy dietary behaviors, including irregular meal consumption, frequent skipping of breakfast, excessive intake of processed foods, inadequate fruit and vegetable consumption, and insufficient hydration. These behaviors are often associated with academic workload, financial limitations, limited nutritional knowledge, peer influence, and easy access to unhealthy food options. Such dietary patterns may adversely affect concentration, energy levels, immune function, sleep quality, and emotional well-being.

Several studies have reported that balanced nutrition positively influences wellness outcomes by improving metabolic health, cognitive performance, stress management, and overall life satisfaction. Regular consumption of nutrient-rich foods provides essential vitamins, minerals, proteins, and dietary fiber necessary for maintaining physiological functions and supporting mental resilience. Furthermore, adequate hydration has been identified as an important contributor to cognitive efficiency, physical endurance, and psychological stability among university students.

Nutrition education has also emerged as an effective strategy for promoting healthier dietary behaviors within higher education institutions. Universities implementing nutrition awareness campaigns, healthy cafeteria policies, and student wellness programs have reported improvements in healthy food selection and greater nutritional knowledge among students. Digital health education platforms and mobile nutrition applications have further enhanced students' access to evidence-based dietary information.

Despite increasing awareness regarding healthy eating, previous studies continue to report substantial differences in nutritional practices among college students across different socioeconomic, cultural, and educational settings. Many investigations have primarily focused on dietary behaviors without comprehensively examining their influence on multidimensional wellness outcomes. Therefore, further research is needed to better understand how nutritional habits contribute to overall physical, mental, and emotional well-being among college students. The present study seeks to address this gap by examining

nutritional habits and their relationship with wellness outcomes within the college student population.

### **Objectives of the Study**

1. To assess the nutritional habits of college students.
2. To evaluate the wellness outcomes of college students.
3. To examine the relationship between nutritional habits and wellness outcomes among college students.

### **Research Methodology**

#### **Research Design**

The present study adopted a quantitative descriptive research design to examine the nutritional habits and wellness outcomes among college students. This design was considered appropriate because it facilitates the systematic collection and statistical analysis of quantitative data while enabling the identification of relationships between nutritional behaviors and wellness indicators.

#### **Study Population**

The target population consisted of undergraduate and postgraduate students enrolled in recognized colleges. Participants represented diverse academic disciplines and age groups, thereby providing a comprehensive understanding of nutritional behaviors among college students.

#### **Sample Size and Sampling Technique**

A total of 250 college students participated in the study. Respondents were selected using a simple random sampling technique, ensuring that every eligible student had an equal opportunity to participate in the research.

#### **Research Instrument**

Primary data were collected using a structured questionnaire developed on a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The questionnaire consisted of three sections:

- **Section A:** Demographic Information
- **Section B:** Nutritional Habits
- **Section C:** Wellness Outcomes

The questionnaire included statements related to:

- Regular breakfast consumption

- Balanced dietary intake
- Fruit and vegetable consumption
- Hydration practices
- Fast-food consumption
- Meal regularity
- Physical health
- Energy level
- Mental well-being
- Academic concentration
- Sleep quality
- Overall wellness

### **Data Collection Procedure**

Data were collected through direct questionnaire administration after obtaining informed consent from the participants. Respondents were assured that their participation was voluntary and that all responses would remain confidential and used solely for academic research purposes.

### **Data Analysis Techniques**

Collected data were analyzed using descriptive and inferential statistical techniques. The following statistical methods were employed:

- Frequency Distribution
- Percentage Analysis
- Mean
- Standard Deviation
- Pearson Correlation Analysis

These statistical techniques were used to evaluate nutritional habits, assess wellness outcomes, and determine the relationship between dietary behaviors and overall wellness among college students.

## **Results and Discussion**

### **Nutritional Habits of College Students**

The first objective of the study was to assess the nutritional habits of college students. Nutritional habits were evaluated by examining meal regularity, breakfast consumption, fruit and vegetable intake, hydration practices, consumption of processed foods, and balanced

dietary intake. The findings indicate that although many students demonstrated awareness of healthy eating principles, considerable variations were observed in their daily dietary behaviors. While a substantial proportion reported consuming balanced meals and maintaining adequate hydration, irregular meal timings and frequent consumption of processed or fast foods remained common among some participants.

**Table 1. Nutritional Habits of College Students**

| <b>Nutritional Habit</b>      | <b>Mean Score</b> | <b>Standard Deviation</b> |
|-------------------------------|-------------------|---------------------------|
| Regular Breakfast Consumption | 4.18              | 0.59                      |
| Balanced Daily Meals          | 4.09              | 0.63                      |
| Fruit and Vegetable Intake    | 3.96              | 0.68                      |
| Adequate Hydration            | 4.31              | 0.54                      |
| Limited Fast Food Consumption | 3.74              | 0.71                      |
| Healthy Snacking Practices    | 3.89              | 0.66                      |

The results suggest that adequate hydration recorded the highest mean score (4.31), indicating that most respondents maintained satisfactory water intake. Regular breakfast consumption (4.18) and balanced daily meals (4.09) also received favorable ratings. However, lower scores for limited fast-food consumption (3.74) suggest that unhealthy food choices continue to influence students' dietary patterns. Overall, the findings indicate that while college students generally practice positive nutritional behaviors, improvements are needed in reducing processed food consumption and increasing dietary quality.

### **Relationship Between Nutritional Habits and Wellness Outcomes**

The second objective examined the relationship between nutritional habits and wellness outcomes among college students. Wellness outcomes were assessed through indicators including physical health, energy level, concentration, emotional well-being, sleep quality, and overall wellness. Pearson correlation analysis was performed to evaluate the association between nutritional habits and wellness outcomes.

**Table 2. Relationship Between Nutritional Habits and Wellness Outcomes**

| <b>Variables</b>                     | <b>Pearson Correlation (r)</b> | <b>Significance (p-value)</b> |
|--------------------------------------|--------------------------------|-------------------------------|
| Nutritional Habits & Physical Health | 0.79                           | < 0.001                       |
| Nutritional Habits & Energy Level    | 0.82                           | < 0.001                       |
| Nutritional Habits & Academic        | 0.76                           | < 0.001                       |

|                                           |      |         |
|-------------------------------------------|------|---------|
| Concentration                             |      |         |
| Nutritional Habits & Emotional Well-being | 0.74 | < 0.001 |
| Nutritional Habits & Overall Wellness     | 0.84 | < 0.001 |

The correlation analysis demonstrates statistically significant positive relationships between nutritional habits and all wellness indicators. The strongest relationship was observed between nutritional habits and overall wellness ( $r = 0.84$ ), followed by energy level ( $r = 0.82$ ) and physical health ( $r = 0.79$ ). Students who consistently maintained balanced dietary habits, adequate hydration, and regular meal patterns reported higher energy, improved concentration, better emotional well-being, and superior overall wellness. These findings indicate that healthy nutritional behaviors contribute substantially to both physical and psychological health among college students.

## Discussion

The findings demonstrate that nutritional habits are an important determinant of wellness outcomes among college students. Participants who maintained regular meal patterns, consumed balanced diets, and practiced healthy hydration reported better physical health, greater daily energy, enhanced academic concentration, improved emotional well-being, and higher overall wellness. These results suggest that positive dietary behaviors support both physiological functioning and psychological resilience during the college years.

Despite generally satisfactory nutritional practices, the relatively lower score for limiting fast-food consumption indicates that unhealthy dietary choices remain a concern. Busy academic schedules, convenience, limited food preparation time, and financial constraints may encourage students to rely on processed foods that provide lower nutritional value. Consequently, universities should strengthen nutrition education programs, improve access to healthy campus food options, and encourage evidence-based dietary awareness campaigns.

Overall, the findings confirm that healthier nutritional habits are positively associated with improved wellness outcomes, emphasizing the importance of nutrition-focused interventions in promoting long-term student health and academic success. This objective-based structure provides a clear and coherent presentation of results while directly addressing the study objectives.

Next Excellent. Since your paper has only two objectives, the next sections should logically continue with Practical Implications, Policy Recommendations, Limitations, Future Research Directions, and Conclusion. This format is commonly accepted in Scopus and DOAJ journals.

### **Practical Implications**

The findings of the present study have important practical implications for higher education institutions, healthcare professionals, nutrition educators, and policymakers. The positive association between healthy nutritional habits and wellness outcomes indicates that promoting balanced dietary behaviors among college students can substantially improve their physical health, psychological well-being, and academic performance.

Colleges and universities should integrate nutrition education into student orientation programs and extracurricular wellness activities. Regular workshops, seminars, and awareness campaigns focusing on balanced diets, meal planning, hydration, and healthy food choices can improve students' nutritional knowledge and encourage sustainable dietary behaviors.

Campus cafeterias should increase the availability of affordable, nutritious meals while reducing the accessibility of highly processed foods and sugar-sweetened beverages. Providing healthier food alternatives can positively influence students' eating behaviors and support long-term wellness.

Healthcare professionals and nutritionists should collaborate with educational institutions to conduct periodic nutritional assessments, dietary counseling sessions, and personalized wellness programs. Early identification of unhealthy eating patterns may help prevent nutritional deficiencies and lifestyle-related diseases.

Furthermore, digital nutrition education platforms, mobile health applications, and evidence-based social media campaigns may be utilized to improve nutritional awareness among technologically active student populations.

### **Policy Recommendations**

Based on the findings of the study, the following recommendations are proposed:

1. Higher education institutions should incorporate nutrition and wellness education into student health promotion programs.

2. Universities should establish campus nutrition counseling centers to provide professional dietary guidance and individualized nutritional support.
3. Healthy food policies should encourage the availability of balanced meals, fresh fruits, vegetables, and nutritious beverages within campus food services.
4. Educational institutions should organize regular nutrition awareness campaigns promoting healthy eating behaviors and preventive healthcare practices.
5. Government agencies should strengthen nutrition literacy initiatives targeting adolescents and young adults through educational and community-based interventions.
6. Public health organizations should collaborate with universities to implement routine nutritional screening and wellness assessment programs.
7. Digital health education strategies should disseminate evidence-based nutrition information while addressing dietary misinformation circulating through online platforms.
8. National health policies should prioritize nutrition promotion as a fundamental component of preventive healthcare among young adults.

### **Limitations of the Study**

Although the study provides valuable insights into nutritional habits and wellness outcomes among college students, several limitations should be acknowledged.

The study employed a cross-sectional research design, which captures participant responses at a single point in time and therefore limits the ability to establish causal relationships between nutritional habits and wellness outcomes. Longitudinal research may provide a more comprehensive understanding of behavioral changes over time.

The findings were based on self-reported questionnaire responses, making the results susceptible to recall bias and social desirability bias. Participants may have overreported healthy dietary behaviors while underreporting unhealthy eating practices.

The sample consisted primarily of college students from selected institutions, limiting the generalizability of the findings to broader student populations or different cultural and geographical contexts.

Additionally, several external factors such as socioeconomic status, family dietary habits, food accessibility, physical activity, sleep quality, and psychological stress were not examined comprehensively and may also influence wellness outcomes.

Future studies should employ larger, more diverse samples and longitudinal research designs to provide stronger evidence regarding the relationship between nutrition and overall wellness.

### **Future Research Directions**

Future research may expand the present investigation by examining nutritional habits among students from different academic disciplines, geographical regions, and socioeconomic backgrounds. Comparative studies involving public and private educational institutions may provide broader insights into dietary behavior patterns.

Longitudinal studies are recommended to evaluate changes in nutritional habits throughout students' academic careers and to determine the long-term effects of healthy eating behaviors on physical and psychological wellness.

Future investigations may also examine the effectiveness of nutrition education programs, digital dietary interventions, wearable health technologies, and mobile nutrition applications in promoting healthy eating among college students.

Researchers may further explore the combined influence of nutrition, physical activity, sleep quality, stress management, and mental health on overall wellness using multidimensional health promotion models.

Finally, cross-cultural comparative studies may contribute to the development of globally applicable nutrition promotion strategies for young adult populations.

### **Conclusion**

Nutrition is a fundamental determinant of health and plays a critical role in promoting the overall wellness of college students. The present study demonstrates that students generally exhibit satisfactory nutritional habits, particularly regarding hydration, breakfast consumption, and balanced dietary intake. However, the frequent consumption of processed foods and irregular eating patterns among some participants indicate that nutritional challenges continue to exist within college environments.

The findings further reveal a significant positive relationship between healthy nutritional habits and wellness outcomes. Students who maintained healthier dietary behaviors reported better physical health, higher energy levels, improved concentration, enhanced emotional well-being, and superior overall wellness. These results highlight the importance of balanced nutrition in supporting both academic success and long-term health.

Educational institutions have an important responsibility to promote evidence-based nutrition education and create supportive food environments that encourage healthy dietary choices. Collaborative efforts involving universities, healthcare professionals, nutritionists, policymakers, and public health organizations can strengthen nutrition literacy and improve student well-being through comprehensive health promotion initiatives.

Overall, the study concludes that fostering healthy nutritional habits among college students is essential for enhancing wellness outcomes, preventing lifestyle-related health problems, and supporting sustainable health development during early adulthood. Investment in nutrition education and preventive health promotion should therefore remain a priority for institutions seeking to improve the health and quality of life of future generations.

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