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A KAP study on food expenditure and food consumption pattern among college students staying at hostel in Lucknow District

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Abstract

College students living in hostels often experience a shift in dietary habits due to newfound independence, financial constraints, and limited food choices. This study explores the knowledge, attitudes, and practices related to food expenditure and consumption patterns among college students residing in hostels across Lucknow District. Understanding these patterns is essential for developing effective nutrition interventions and institutional policies. Using a structured questionnaire, the study assessed students' budget allocation for food, frequency of fast-food consumption, snacking behaviors, meal-skipping tendencies, and awareness of dietary consequences. The findings reveal that students spending 40–60% of their monthly budget on food are more likely to consume fast food and snacks frequently, often driven by convenience and dissatisfaction with hostel meals. Longer hostel stays were linked to poorer eating habits, despite students' awareness of the associated health risks. The study underscores a critical gap between nutritional knowledge and actual food-related behavior, especially among higher-income students. It calls for targeted measures such as improved hostel food services, structured nutrition education, and student-centered dietary policies to foster healthier lifestyles and prevent long-term health complications.

INTRODUCTION

ood is an essential component of human survival, with life being unsustainable without it for even a few days. It serves as a source of energy and contributes to a sense of social stability (Jyoti and Neetu,2017). The term 'food' typically refers to chemical substances consumed to maintain bodily health and metabolism. Proper nutrition is crucial for sustaining life processes, and every individual needs food for growth, development, and leading an active and healthy lifestyle (B. Srilakshmi, 2008). This study examines the knowledge, attitude, and practices of college students regarding their food spending and consumption habits, especially those living in hostels or paying guest (PG) accommodations. Food expenditure encompasses the total financial outlay on food, including both purchased and non-purchased items, non-alcoholic and alcoholic beverages, and money spent on eating outside—in bars, cafes, canteens, food courts, or from street vendors (FAO Household Survey Database; ILO; country publication (2011).

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Food is one of the primary necessities for students. Their food-related expenses typically vary based on the income or financial support they receive from their families or earn themselves. Local food options, such as street vendors and cloud kitchens, are often popular among students (FattoAmoakon, et al.,2016). University life marks a transformative period when students begin making independent choices, including those related to diet. This independence often leads to shifts in dietary patterns (Silliman K, et al., 2004; Deshpande S, et al., 2009). The proliferation of fast-food outlets, cafes, and restaurants offers students easy access to meals outside their residences (Yahia N, et al., 2008). Poor eating habits developed during this stage can persist into adulthood, raising the risk of chronic illnesses. Therefore, this research aims to raise awareness about healthy eating practices among youth (Yun TC, et al., 2018). According to Shanker (2010), the growing popularity of fast food among children can be attributed to the influence of global urban culture and Western cuisine. These affordable, appetizing meals are increasingly preferred over traditional multi-course meals. Following India's economic liberalization in 1992, international fast-food giants such as Burger King, Pizza Hut, Domino's, McDonald's, and KFC have rapidly expanded their presence in malls and public areas. Changing consumer behaviors and favorable demographics have further accelerated the fastfood industry's growth in India.

Income is a significant factor affecting the ownership of durable goods Bijaya KP, et al., 2008, and household income distribution heavily influences the purchase of non-durable goods (Prrashanta BT, et al., 2008). Several studies show that income substantially impacts consumer purchasing behavior (Ratchford BT, et al., 2001). The global rise in fast-food consumption is mirrored in India, where the fast-food sector is expanding at an annual rate of 40%. India ranks 10th globally in per capita spending on fast food, comprising 2.1% of its annual expenditure (Ferences A and Deepthi, 2012).

Students living away from home are more prone to obesity. Research by Islam and Ullah (2010) identified factors such as brand image, availability, taste, price, quality, hygiene, and fat/cholesterol levels as influencing fast-food preferences among Bangladeshi university students A study by Goon et al, 2014 involving 426 students from a top Bangladeshi private university, found that 56%

consumed fast food weekly, and 44% did so twice or more per week. The study linked frequent consumption of fast food with increased obesity risk. Common snack items such as chips, chocolates, and pastries were preferred due to the repetitive menus in hostel messes.

In China, Shi et al. (2005) conducted research on dietary preferences among school adolescents in Jiangsu Province. The findings indicated a positive association between higher socioeconomic status and increased intake of high-calorie foods, including animal products, Western cuisine, and dairy. Similarly, Akbay et al. (2007) identified various factors—age, income, education, household size, presence of children, price concerns, health consciousness, and children's preferences—as key influencers of fast-food consumption frequency in Turkey.

Mohr et al. (2007) explored the demographic, lifestyle, and attitudinal variables related to fast-food intake. Their study revealed that young age (under 45), a dismissive attitude toward health effects, higher income, greater advertising exposure, and less time for meals were linked with higher consumption rates. Interestingly, occupational status and education level showed no significant impact.

In South Africa, Van Zyl (2010) examined fast-food consumption patterns among young adults from various socioeconomic backgrounds in Johannesburg. About 42% of employed participants earned less than Rs 5,000 per month but still spent over R200 on fast food monthly. Fast food was consumed once weekly by 21%, and two to three times weekly by 27.6%. A notable relationship was found between socioeconomic status, gender, and fast-food intake, with males and those from lower income groups showing higher consumption rates.

A study by Y Prabhavathi et al. (2014) reported that 45% of participants ate fast food three times per month, and 34% did so once a month. Evening was the most favored time for fast food consumption (81%). Key motivations were taste (56%), convenience (15%), and as an alternative to home-cooked meals (11%). Other reasons included relaxation and menu variety. Most respondents (49%) spent Rs. 1,000–1,500 monthly on fast food, with 21% spending Rs. 1,500–2,000. The average monthly per capita fast-food expense was Rs. 1,430. Taste satisfaction, social interaction, and relaxation were the most appreciated benefits of fast-food consumption.

While several studies have examined dietary habits among college students, limited research specifically addresses the relationship between food expenditure and consumption patterns among hostel-residing students in the Indian context. Most existing literature focuses on general eating behaviors, fast-food consumption, or nutritional awareness, with little emphasis on how budgeting and hostel stay duration impact food choices. Additionally, there is a lack of region-specific data from Tier-2 cities like Lucknow. This study aims to fill these gaps by exploring the knowledge, attitudes, and practices related to food expenditure and dietary behaviors among college students living in hostels across Lucknow District.

OBJECTIVES

- 1. To assess the knowledge about food expenditure and food consumption pattern among college students.
- 2. To study the attitude towards food expenditure and food consumption pattern among college students
- 3. To explore the practices prevalent among college students about food expenditure and food consumption

METHOD

Research Design:

The present study employed a prospective design to assess the knowledge, attitude, and practices related to food expenditure and consumption patterns among college students residing in hostels. Conducted in the Lucknow district, the research spanned a six-month period from March 2024 to August 2024. The study used purposive sampling to select participants who met

Collected data were coded and entered into Microsoft Excel and subsequently analyzed using SPSS version 25. Descriptive statistics such as frequencies, percentages, means, and standard deviations were used to summarize demographic data and responses related to knowledge, attitude, and practices. Inferential statistics, primarily the Chi-

specific inclusion criteria such as residence in hostels and willingness to participate. This approach allowed for a comprehensive understanding of the dietary behaviors influenced by budget constraints, lifestyle changes, and hostel living conditions among the student population.

Sample Size-

A total of 420 college students residing in hostels across Lucknow were included in the study. The sample was selected using purposive sampling to ensure adequate representation of students from diverse academic disciplines and varying durations of hostel stay. This approach enabled a focused assessment of knowledge, attitudes, and practices related to food expenditure and consumption patterns within this specific population group.

Tool Used:

A valid and reliable questionnaire was used for collecting data. The questionnaire contains open, closed-ended and multiple choice questions with pre-defined answers which will help to learn more about knowledge, attitude and practice on food expenditure and food consumption pattern among college students.

A questionnaire is a tool which helps in collecting data about a particular subject within a large number of people.

Inclusion Criteria:

- 1. College students currently residing in hostels within Lucknow District.
- 2. Individuals with no major physical or psychiatric illness.
- 3. Students willing to provide informed consent for participation in the study.

Data Analysis:

square test, were employed to examine the association between variables such as monthly food budget, duration of hostel stay, and dietary behaviors (e.g., fast-food consumption, meal skipping). A p-value of less than 0.05 was considered statistically significant. Tables were used to present the key findings in a clear and interpretable format.

RESULT

Table 1: Summary of Associations between Monthly Budget and Behavioral Patterns

Behavioral Pattern	Key Observation	χ²(df)	Р
Awareness of fast- food effects	Higher awareness among individuals allocating 40-60% of the budget to food.	22.45	< .001
Frequency of consuming fast food	Daily consumption more frequent in 40-60% budget category; infrequent for others.	19.68	< .001
Changes in health/body	Higher reporting of changes among 40-60% budget allocation group.	17.32	< .001
Skipping meals in hostel	Most common among those allocating 40-60% budget; increases with budget allocation.	25.76	< .001

Table 2: Time Spent in Hostel and Food Habits

Time Residing in Hostel	Bring Food from Home (%)	Snack Between Meals (%)	Skip Meals in Hostel (%)	χ²(df)	p
1 year	28.21	41.02	38.46	20.36	< .001
2 years	34.45	36.14	30.25	18.79	< .001
3 years	65.14	67.89	39.45	24.53	< .001
4 years	66.67	60.00	40.00	21.22	< .001
> 4 years	70.00	80.00	35.00	26.01	< .001

The study analyzed the food expenditure and consumption patterns among college students residing in hostels. The study revealed key demographic, budget allocation, food consumption, health, and lifestyle patterns among hostel students. Most participants (57%) were aged 20-22, followed by 29.4% aged 23-25, with a nearly equal gender distribution (51.3% females, 48.7% males). The majority were undergraduate students, with B.Sc. (20.9%) and B.Com. (17.2%) being the most common courses. In terms of budget allocation, 53.6% of students dedicated 40-60% of their monthly allowance to food, while 22.4% allocated 60-80%. Those in these budget groups were more likely to consume fast food daily and snack frequently between meals. A significant association (p < 0.0001) was observed between budget allocation and awareness of fast food's ill effects. Long-term hostel residents reported increased health changes, frequent fast food consumption, habitual meal skipping, and higher snacking frequency. Additionally, students staying in hostels for three years or more showed a strong preference for outside food, with 70% opting for it over mess meals.

The findings of this study provide significant insights into the dietary patterns, food expenditure, and health-related behaviors of college students residing in hostels. The discussion elaborates on the implications of the results and their alignment with existing literature.

Food Expenditure and Dietary Patterns:

A key observation from the study is that the majority of students (53.6%) allocated 40-60% of their monthly budget to food expenses, with many falling into the 60-80% category as well. This allocation was significantly associated with dietary behaviors, such as increased fast food consumption and snacking. Students spending higher portions of their budget on food were more likely to consume fast food daily and snack frequently. This finding aligns with studies by Yun et al. (2018), which suggest that greater financial flexibility increases exposure to convenience foods like fast food, particularly in urban and campus settings.

Impact of Hostel Residence Duration on Dietary Choices:

The length of time spent in a hostel had a significant effect on students' eating habits and food preferences. Longer stays correlated with higher fast

DISCUSSION

food consumption, more frequent meal skipping, and a preference for outside food over mess-provided meals. This behavioral shift can be attributed to a combination of factors, including monotony in hostel food, peer influence, and the ease of accessing fast food outlets. These findings mirror observations by Yahia et al. (2008), who noted that increased independence among university students often leads to a reliance on fast food due to its convenience and availability.

Health and Lifestyle Implications:

While 39.7% of participants reported being highly aware of the ill effects of fast food, this awareness did not necessarily translate into healthier practices. A substantial proportion of students consuming fast food daily or multiple times a day reported changes in their body or health since joining college. These changes were more prevalent among students with longer hostel stays, indicating that prolonged exposure to an unhealthy dietary environment exacerbates health risks. This finding is consistent with research by Silliman et al. (2004), which highlighted the link between poor eating habits during college years and long-term health risks such as obesity and metabolic disorders.

Meal Skipping and Snacking:

Meal skipping was prevalent among students, particularly those who had been in hostels for three or more years. This behavior was often supplemented by increased snacking, suggesting a potential compensatory mechanism for irregular meal consumption. The convenience of fast food and snacks may be contributing to the normalization of these behaviors, underscoring the need for interventions to promote regular and balanced eating patterns.

CONCLUSION

This study highlights the interplay between food expenditure, dietary patterns, and health behaviors among college students living in hostels. The findings reveal that students allocating a higher percentage of their budget to food tend to consume more fast food and snacks, leading to unhealthy dietary patterns. Prolonged hostel stays are associated with increased reliance on fast food, meal skipping, and noticeable changes in health. Despite awareness of the ill effects of fast food, students'

dietary behaviors often reflect convenience and availability rather than health-conscious choices.

Key Implications:

The observed trends have several implications for student health and well-being:

- 1. **Health Risks**: The increasing consumption of fast food and irregular eating habits could predispose students to chronic health issues, including obesity, diabetes, and cardiovascular diseases.
- 2. **Institutional Role**: Hostel authorities and educational institutions have a critical role in promoting healthy eating habits. Enhancing the quality and variety of mess food, coupled with regular health education sessions, could mitigate the reliance on unhealthy dietary practices.
- 3. **Behavioral Interventions**: Workshops and campaigns focused on budgeting, nutrition, and cooking skills could empower students to make healthier choices within their financial means.

Recommendations:

- 1. **Improve Hostel Food Services**: Enhance the diversity, taste, and nutritional quality of hostel meals to reduce the temptation of eating outside or skipping meals.
- 2. **Nutrition Awareness Programs**: Conduct regular workshops to educate students about the health risks of fast food and the benefits of balanced diets.
- 3. **Policy Changes**: Institutions could introduce subsidized healthy meal options or discounts on wholesome food products to encourage healthier choices.
- 4. **Support Systems**: Create peer-led initiatives or health clubs to foster a supportive community for healthy living.

Future Scope:

Further research could explore the long-term impact of dietary behaviors developed during college years on health outcomes. Additionally, qualitative studies could provide deeper insights into the psychological and social factors influencing food choices among students.

In conclusion, addressing the dietary challenges faced by hostel-residing students requires a multi-faceted approach, combining individual education, institutional support, and policy interventions. These efforts can help foster

healthier lifestyles, ensuring better physical and mental health for students during their critical formative years.

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- **3. No conflict of Interest-** The authors declare they have no conflict of interest.
- 4. **Informed Consent-** Oral Informed Consent was obtained from the participants prior to the study the participants voluntary agreed to participate and granted their consent orally.

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