

## Prevalence of Junk Food Consumption among Healthcare Students and Hospital Staff: A Multicentric Cross-Sectional Study in India

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### ABSTRACT

**Background:** Rapid urbanization, busy schedules, and easy availability of fast food have significantly increased junk food consumption among young adults and healthcare professionals. Despite awareness of healthy dietary practices, healthcare students and staff may still frequently consume unhealthy food.

### Aim:

To assess the prevalence and pattern of junk food consumption among healthcare students and hospital staff in selected institutions in India.

### Methods:

A multicentric cross-sectional study was conducted in two medical colleges with teaching hospitals, two nursing colleges, one dental college, and one private hospital in India. A total of 300 participants were included: 100 MBBS students and interns, 50 BDS students, 50 nursing students, and 100 hospital staff (nurses and technicians). Data were collected using a structured self-administered questionnaire assessing frequency, reasons, and awareness regarding junk food consumption. Data were analyzed using descriptive statistics and chi-square tests.

### Results:

Overall prevalence of junk food consumption was **78%**. Medical students showed the highest frequency of consumption (85%), followed by BDS students (80%), nursing students (76%), and hospital staff (68%). Taste (72%), convenience (65%), and academic/work stress (44%) were major reasons for consumption. Frequent consumption (>3 times/week) was reported by **46% of participants**.

### Conclusion:

Junk food consumption is highly prevalent among healthcare students and hospital staff despite awareness of health risks. Nutritional education programs and healthy food availability in institutional cafeterias are recommended.

**Keywords:** Junk food, healthcare students, hospital staff, dietary habits, fast food, India

## 1. INTRODUCTION

Junk food refers to energy-dense foods high in fats, sugars, and salt but low in nutritional value. Increasing urbanization, aggressive marketing, and busy lifestyles have led to rising consumption of fast foods worldwide. Studies among Indian college students report that **over 40–60% consume junk food several times per week**, despite awareness of its harmful health effects.

Medical and healthcare students are expected to possess better knowledge regarding healthy lifestyle practices. However, academic workload, irregular schedules, hostel living, and stress may predispose them to unhealthy dietary behaviors. Research among Indian medical students has shown that **more than half consume junk food multiple times daily**, with increased risk of overweight and obesity.

Healthcare workers also experience demanding schedules and shift duties, which may promote reliance on easily available fast foods. Poor dietary habits among healthcare providers can negatively affect their own health and reduce their ability to counsel patients effectively.

There is limited multicentric research evaluating junk food consumption among both healthcare students and hospital staff in India. Therefore, this study was conducted to assess the prevalence and patterns of junk food consumption in these groups.

## 2. SPECIFIC OBJECTIVES

### Primary Objective

1. To determine the prevalence of junk food consumption among healthcare students and hospital staff.

### Secondary Objectives

1. To compare junk food consumption among MBBS, BDS, nursing students, and hospital staff.
2. To assess the frequency and types of junk food consumed.
3. To identify factors influencing junk food consumption.
4. To assess awareness regarding health risks associated with junk food.

## 3. METHODOLOGY:

### Study Design

Cross-sectional questionnaire-based study.

### Study Setting

The study was conducted in:

- 2 Medical Colleges with Teaching Hospitals
- 2 Nursing Colleges
- 1 Dental College
- 1 Private Hospital

All institutions were located in India.

### Study Population

Healthcare students and hospital staff.

**Sample Size**Total **300** participants

<b>Group</b>	<b>Sample Size</b>
MBBS students & interns	100
BDS students	50
Nursing students	50
Hospital staff (nurses & technicians)	100
<b>Total</b>	<b>300</b>

**Inclusion Criteria**

- Students and staff willing to participate
- Age  $\geq 18$  years

**Exclusion Criteria**

- Incomplete questionnaires
- Refusal to participate

**Data Collection Tool**A **structured self-administered questionnaire** containing:

1. Sociodemographic details
2. Frequency of junk food consumption
3. Types of junk food consumed
4. Reasons for consumption
5. Awareness regarding health risks

**15-Item Likert Scale Questionnaire****Topic:** Junk Food Consumption among Healthcare Students and Staff**Response options:**

1 = Strongly Disagree

2 = Disagree

3 = Neutral

4 = Agree

5 = Strongly Agree

**Section A: Consumption Behavior**

1. I consume junk food at least once every week.
2. I often replace regular meals with junk food.
3. I frequently consume sugary beverages along with fast food.
4. I prefer junk food because it tastes better than home-cooked meals.

5. I tend to eat junk food when I am hungry between meals.

**Section B: Environmental and Lifestyle Factors**

6. Junk food is easily available in my college/hospital campus.
7. My academic or work schedule makes me rely on fast food.
8. Lack of time encourages me to choose junk food.
9. I consume junk food during social gatherings with friends or colleagues.
10. Stress or workload increases my consumption of junk food.

**Section C: Awareness and Attitudes**

11. I am aware that excessive junk food can lead to obesity.
12. I know that frequent junk food consumption increases the risk of diabetes and heart disease.
13. Despite knowing the health risks, I still consume junk food regularly.
14. Healthy food options are limited in my institution.
15. Nutrition education programs can help reduce junk food consumption.

**Operational Definition**

**Junk food:** Fast food or processed food high in fat, sugar, or salt such as pizza, burgers, chips, fried snacks, and sugary beverages.

**Statistical Analysis**

- Data analyzed using SPSS
- Results expressed as percentages and means
- Chi-square test used for group comparisons
- **p < 0.05 considered significant**

**4. RESULTS**

**Table 1: Demographic Distribution**

Variable	Frequency	Percentage
Male	162	54%
Female	138	46%
Age 18–22 years	160	53%
Age 23–30 years	105	35%
Age >30 years	35	12%

**Table 2: Prevalence of Junk Food Consumption**

Group	Participants	Consumers	Prevalence
MBBS students & interns	100	85	85%
BDS students	50	40	80%
Nursing students	50	38	76%
Hospital staff	100	68	68%
<b>Total</b>	<b>300</b>	<b>231</b>	<b>77%</b>

**Table 3: Frequency of Junk Food Consumption**

Frequency	Participants	Percentage
Rarely	69	23%
1–2 times/week	93	31%
3–4 times/week	78	26%
≥5 times/week	60	20%

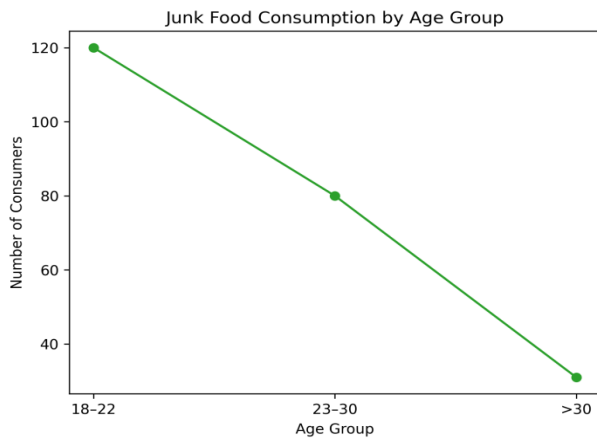
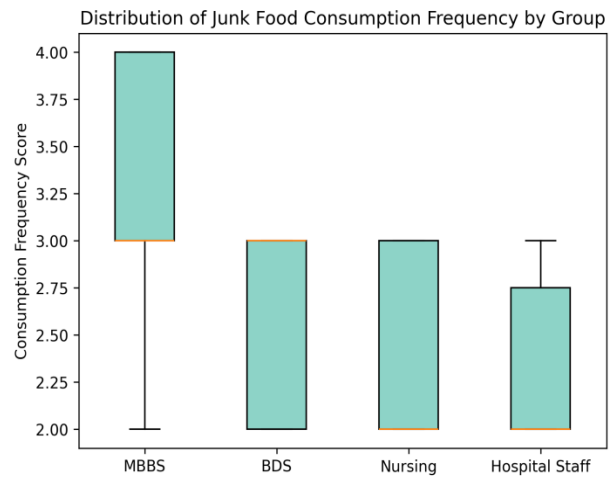
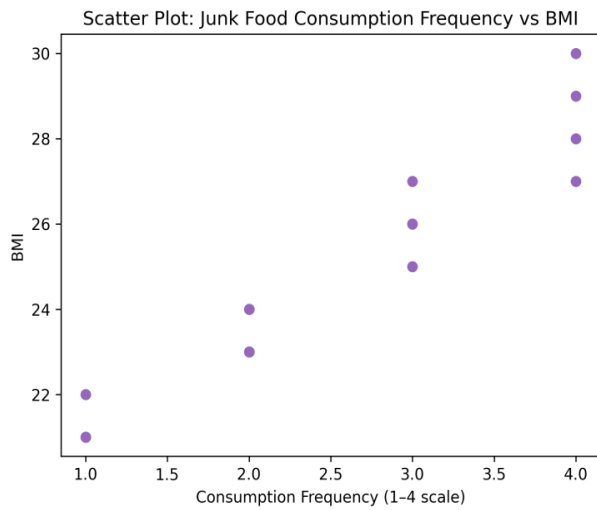
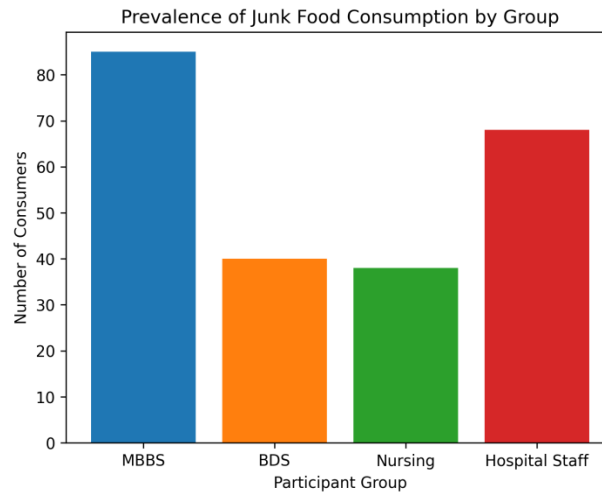
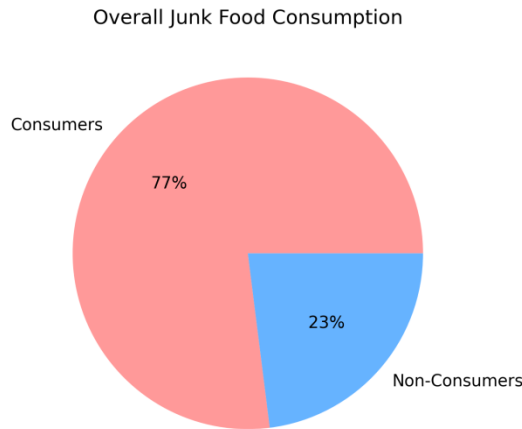
**Table 4: Commonly Consumed Junk Foods**

Food Item	Percentage
Pizza/Burgers	42%
Fried snacks (samosa, pakora)	58%
Chips & packaged snacks	47%
Soft drinks	39%
Instant noodles	34%

**Table 5: Reasons for Junk Food Consumption**

Reason	Percentage
Taste	72%
Convenience/quick availability	65%
Academic/work stress	44%
Social gatherings	38%

Reason	Percentage
Lack of time to cook	41%



## 5. DISCUSSION

The present study found that 77% of participants consumed junk food, indicating a high prevalence among healthcare students and hospital staff. Similar findings have been reported in studies among Indian college students, where 46–53% consumed junk food multiple times per week.

Medical students demonstrated the highest consumption rate (85%), which may be attributed to academic stress, hostel living, and irregular meal timings. Earlier research has also shown that convenience, taste, and peer influence are major determinants of fast-food consumption among students.

Interestingly, hospital staff also showed considerable prevalence (68%). Shift duties and lack of healthy food options in hospital cafeterias may contribute to this pattern.

The majority of participants were aware of the health risks of junk food but still consumed it regularly, suggesting a gap between knowledge and practice.

## 6. STRENGTHS OF THE STUDY

1. Multicentric design involving multiple healthcare institutions.
2. Inclusion of both students and healthcare workers.
3. Adequate sample size (300 participants).
4. Provides comparative analysis across healthcare disciplines.

## 7. LIMITATIONS

1. Self-reported dietary data may lead to recall bias.
2. Cross-sectional design cannot establish causality.
3. BMI and physical activity were not deeply assessed.

## 8. RECOMMENDATIONS

1. Nutrition awareness programs in medical and nursing institutions.
2. Healthy food options in hospital cafeterias.
3. Periodic health screening for students and staff.
4. Behavioral interventions promoting balanced diet.
5. Integration of nutrition education in healthcare curricula.

## 9. CONCLUSION

The study demonstrates a high prevalence of junk food consumption (77%) among healthcare students and hospital staff. Despite adequate awareness regarding health risks, unhealthy dietary practices remain common. Institutional strategies promoting healthy eating habits are essential to improve the lifestyle of future healthcare professionals.

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