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Junk and Sink: A Comparative Study on Junk Food Intake among Students of India

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Abstract

Background: Adequate and balanced nourishment is vital for upholding health and quality of life. Maintaining the right eating habits of college students means a lot for the prevention of many diseases that could occur in the adult period. Thus the purpose of the study is to assess the junk food consumption of college students.

Aim: To study the dietary habits concerning junk food consumption of college students

Results: About 16% consume junk foods daily. Hungry was the main reason to consume junk foods; Ice cream was the most preferred food for most of the participants. Majority of the participant mentioned taste as the major factor influencing the food intake.

Conclusion: Nutrition professionals should take up the role and spread awareness in the general public and give them better guidance. A well-balanced diet, periodic physical activity, sufficient sleep, with good life style habits help in sound mind and healthy body leading to a happy life.

Keywords: Junk foods, Balanced diet, Overweight, snacking habit, food preferences and fast food

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Introduction

Adequate and balanced nourishment is vital for upholding health and quality of life. However, students tend to choose fast food due to their palatability, availability, and convenience. **Their dietary behavior is characterized by skipping meals, consuming unconventional meals, fast foods, and frequent "snacking."** Overall, their eating patterns are frequently erratic, and often these eating practices of young people contribute to obesity, eating disorders, and increase the risk for several important chronic diseases later in life.

The year's college students' spend long been the period that turns into the adult period, and since then, their eating habits will begin to reflect their life style and attitude that would later be customized in the next adult period. Maintaining the right eating habits of college students means a lot for the prevention of many diseases that could occur in adult period.

It is reported that college students at this period rather hardly recognize the importance of nutrition intake, and have never established value about eating habits, so they are appeared to have inappropriate eating habits because of the irregular meal, frequent meal skip, overeating, over drink and smoking, and overmuch interest in their appearance. Students are also influenced by taste preferences, time, convenience, social networks, including friends and peers. Their immediate environment, including availability, access, prices of foods, and the macro-environment such as media and advertisements, also influence the eating habits. This resulted in increased consumption of fast food, snacks, and meat with significantly reduced intake of fruits, vegetables, and whole wheat cereal products.

Primary Objectives: To study the junk food consumption of college students.

Secondary Objectives: To study the frequency, reasons for junk food intake and also to study the factors influencing food intake of the participants.

Review of Literature

Many researchers documented various poor eating habits among college groups in many recent studies. Brown et al. experimented on vending machine revenues at a university campus where they introduced interventions. Many college students tended to choose fast and tasty options, which were usually available through vending machines. Some students have poor eating habits and prefer to choose foods according to convenience, time, taste, and price available to them, rather than their nutritional values. Establishing good eating habits during this time is critical. Because these behaviors usually continue through adulthood and can be very challenging to change once they are established. Brown et al. also stated, “overweight college students have a high possibility of becoming overweight adults and are at a higher risk for diet-related chronic diseases including diseases of the heart, type 2 diabetes, cancers as well as hypertension”.

Youth in the cities have easier access to shopping malls, supermarkets, etc., which continually give advertisements on unhealthy food and high-calorie products. Young adults are more vulnerable to unhealthy eating habits owing to rapid changes in growth and psychosocial development, and hence their dietary requirements are not fulfilled. Skipping meals, eating outside the home, snacking and consumption of fast foods are some of the unhealthy food habits among adolescents.

College students particularly have poor dietary and physical activity habits. Regardless of the professional field, the students have chosen, healthy eating and adequate physical activity are not considered as high priorities among them. Therefore, interventions focusing on the adoption of healthy nutrition habits, incorporating regular physical activity in day-to-day life, and refraining from substance abuse should be implemented. As a result, there is an urgent need to develop effective life-style intervention strategies at an early stage of life for long-term health benefits.

Methodology

This study was conducted among 1000 students. Among them, 500 participants were male, and 500 participants were female. The samples are selected using stratified sampling and simple random sampling techniques

Inclusion Criteria

Consent: Willingness of the participants to participate in the undertaken study was confirmed.

Age: Participants aged between 19-22 years were selected.

Gender: Both male and female participants agreed on.

Permission: Permission was obtained from the concerned authorities of the institution

Stream: Government and Government aided Arts and Science College students were selected.

Exclusion Criteria

- Participants with any other disease complications were excluded.
- Pregnant and lactating women were excluded
- Participants taking steroids or immune suppressants were excluded from the study.
- Physically challenged students were excluded.

Steps in Conducting the Study

(a) Ethical clearance: Ethical clearance was obtained from the Universal Ethics Committee (UEC) before the commencement of the study. UEC reviewed the study methodology, and questionnaire, and rendered ‘Full Board Approval’ to conduct the study.

(b) Permission from college authorities: After selecting the colleges for research purposes, permission was obtained from the respective college authorities for conducting the study.

(c) Selection of Participants: As per the above-mentioned methodology, along with inclusion and exclusion criteria, 1000 students were randomly selected from North Chennai colleges.

(d) Consent and Orientation: Since all our study participants were majors (aged 18 years and), written consent to participate in the study was obtained from all of them. The selected participants who agreed to be part of the study were told by the researcher about the study and its significance to cooperate and

allow them to collect the information necessary for the study.

(e) Collection of Data: After finishing the preliminary procedures, including obtaining ethical clearance, permission from college authorities, and consent from selected study participants, data collection was started. The interview schedule was

used for the collection of the details regarding junk food consumption.

(f) Statistical Analysis: The data collected have been coded and loaded into Microsoft Excel. The coded raw data were subjected to statistical analysis using Statistical Package for Social Science (SPSS) version 20.0.

Results and Discussion

Table 1: Frequency of Junk foods consumption

Frequency of Junk foods	Male (N=500)	Female (N=500)	Total (N=1000)	Chi-square level	P value
Daily	74 (46.3)	86 (53.8)	160 [16.0]	109.165	<0.001**
4 to 6 times per week	154 (65.5)	81 (34.5)	235 [23.5]		
1 to 3 times per week	132 (32.6)	273 (67.4)	405 [40.5]		
Rarely	106 (66.3)	54 (33.8)	160 [16.0]		
Never	34 (85)	6 (1.2)	40 [4.0]		
Total	500 (50)	500 (50)	1000 [100]		

Note: Values within () denote row percentage; Values within [] denote column percentage; ** denote 1% level significance

About 16% of the total population consumed Junk food daily (7.4% male and 8.6% female), followed by 23.5% consumed four to six times per week (15.4% male and 8.1% female). Greater number of our study participants (40.5%) consumed junks one

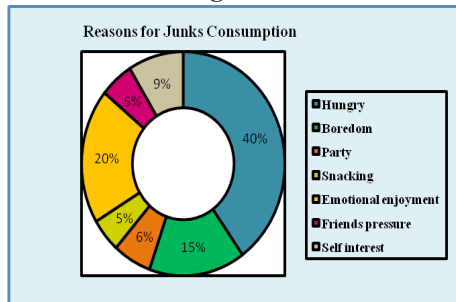
to three times per week, among them male consists of 13.2% and female consists of 27.3%. About 16% consumed it rarely, and about 4% never consumed junk foods.

Table 2: Reasons for junks consumption and Food preferences

Reasons and preferences		Male	Female	Total	Chi –square level	P value
Reasons for junks	Hungry	195 (48.6)	206 (51.4)	401 [40.1]	29.503	<0.001**
	Boredom	66 (43.1)	87 (56.9)	153 [15.3]		
	Party	40 (65.6)	21 (34.4)	61 [6.1]		
	Snacking	18 (36.7)	31 (63.3)	49 [4.9]		
	Emotional enjoyment	119 (61)	76 (39)	195 [19.5]		
	Friends pressure	30 (56.6)	23 (43.4)	53 [5.3]		
	Self interest	32 (36.4)	56 (63.6)	88 [8.8]		
	Total	500 (50)	500 (50)	1000 [100]		
Like to eat more	Ice creams	97 (29)	237 (71)	334 [33.4]	299.170	<0.001**
	Sweets	87 (49.4)	89 (50.6)	176 [17.6]		
	Chocolates	15 (25.9)	43 (74.1)	58 [5.8]		
	Fried foods	107 (100)	0 (0)	107 [10.7]		
	Bakery	22 (25.6)	64 (74.4)	86 [8.6]		
	Pizza	24 (75)	8 (25)	32 [3.2]		
	Fruits	15 (28.3)	38 (71.7)	53 [5.3]		
	Carbonated beverages	133 (86.4)	21 (13.6)	154 [15.4]		
	Total	500 (50)	500 (50)	1000 [100]		

Note: Values within () denote row percentage; Values within [] denote column percentage; ** denote 1% significance

Figure 1



“Junk foods comprise of anything quick, tasty, convenient and fashionable.” They are energy-dense foods with high sugar/fat/salt content and low nutrient value in terms of proteins, fibers, vitamins, and mineral content such as chips, chocolate, ice cream, soft drinks.

The above table presents the reason for the consumption of junk foods and the food preferences of the participants. When the reason for junk food consumption was elicited, it is revealed from the above table that about 40.1% reported hunger as the preliminary and foremost reason for junk food consumption followed by 19.5% reported emotional enjoyment and 15.3% stated boredom as the reason. About 8.8% and 6.1% reported self-interest and partying respectively. Friend’s pressure was the reason said by 5.3%, and snacking was the reason reported by 4.9% of the participants. Similarly,

Hesamedin, in his article, reported that the frequent consumption of fast foods among people in their teens and their twenties might be attributed to the specific qualities of such types of foods that could be prepared in a very less period, convenient, and relatively inexpensive.

According to the findings of the current study, the majority of the participants reported their food preferences as ice-cream (33.4%). Sweets and chocolates were preferred by 17.6% and 5.8%, respectively. Fried foods and bakery foods were liked by 10.7% and 8.6%, respectively. Pizza and fruits were preferred by 3.2 % and 5.3% of the participants, respectively. About 15.4% recorded their likes on carbonated beverages. It is interesting to note that ice-creams, chocolates, bakery foods, and fruits are preferred by more female subjects than the males, whereas fried foods, pizza, and carbonated beverages are preferred by more male participants than the females.

Similar to our research, a study conducted by Shubha Devi reported that all her study participants consumed ‘chat-pat’ and noodles. Panipuri and doughnuts were preferred by 97.2% and 93%, respectively. Chocolate, biscuits, ice cream, and cold drinks were preferred by 92.3%, 95.8%, 65.5%, and 65.5%, respectively.

Table 3: Factors Influencing Food intake of the Study Group

Influence of Food	Male	Female	Total	Chi-square level	P value
Taste	202 (57.7)	148 (42.3)	350 [35]	91.533	<0.001**
Appearance	24 (24.7)	73 (75.3)	97 [9.7]		
Advertisement	90 (65.7)	47 (34.3)	137 [13.7]		
Culture	5 (35.7)	9 (64.3)	14 [1.4]		
Influence of parents	9 (42.9)	12 (57.1)	21 [2.1]		
Influence of friends	51 (72.9)	19 (27.1)	70 [7.0]		
Easy availability	37 (35.2)	68 (64.8)	105 [10.5]		
Cost	58 (50)	58 (50)	115 [11.5]		
Health and Nutrition	24 (26.7)	66 (73.3)	90 [9.0]		
Total	500 (50)	500 (50)	1000 [100]		

Note: Values within () denote row percentage; Values within [] denote column percentage; ** denote 1% level significance

As can be seen in the table, the majority of the study participants are influenced by taste (35%), followed by advertisements (13.7%), cost (11.6%), easy availability (10.5%), the appearance of the food

(9.7%), health and nutrition (9%), the influence of friends (7%), the influence of parents (2.1%) and culture (1.4%).

A study conducted by Amir A, Alakazam showed

that students referred food environment, individual preference, religion, time, and campus environment as the major factors that influence dietary habits.

Conclusion

Consumption of junk food is in rising trends among youngsters, especially college students. Taste, easy availability are the reasons mentioned to consume junk foods. Junk foods are completely loaded with fat, sugar, and excess salt. Thus this leads to the incidence of noncommunicable diseases like obesity, diabetes, cardiovascular diseases, hypertension, cancer. The excess salt in processed and junk foods is the major reason for renal diseases. Media and advertisements focus on processed and junk foods, which increased the willingness of youngsters towards junk food. As per the wording, “Prevention is better than cure,” preventing noncommunicable disease is vital in today’s world. Bad eating habits are the main reason for noncommunicable; it is essential to educate our youngsters on the right eating habits by consuming a balanced diet, which is rich vitamins, minerals, protein, and good fat. They must be instructed to avoid the intake of processed, fried, and fatty foods, which are the causes of obesity and other non-communicable diseases. If the nutrition and health status of students remains good, then they help to formulate a healthy and productive nation.

Limitation of the Study

1. Students from other metropolitan cities could study for junk food consumption
2. Students only from Arts and Sciences colleges were selected

Recommendation for Future Research

1. School students can be included.
2. A comparison between rural and urban college students can be carried out.
3. Weight and BMI can be correlated with junk food intake.

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