Role of junk food consumption as a health hazard among University students in Jammu region: A cross sectional study

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Abstract

Background: The twentieth century heralded nutrition transition, wherein a shift from healthy food choices to junk has occurred; thereby, adding to risk of occurrence of chronic diseases. Junk food is the processed and snack food, which has high fat and/or sugar. This study was carried out among university students, an age phase when health-related behaviours mostly establish or are reinforced.

Methods: A Cross-sectional study was conducted on 150 university students belonging to Post graduate departments of University of Jammu, hailing from different regions of Jammu, Kashmir and Ladakh. A subset of key questions from WHO STEPS Survey was used.

Results: 11.66% students in our study were regularly eating outside, higher tendency seen among males (25%) as compared to their female counterparts (21%). 68% students consume soft beverages more females (72%) than male students (64%) consume soft beverages. 71.66% students in our study consumed junk foods.

Conclusion: Consumption of junk food leads to a myriad of ill effects. Control measures especially in the prevalent group needs to be undertaking to curb the already risen burden of health diseases related to junk food intake.

Keywords: Junk food, NCD, STEPS

Introduction

Junk foods have gain tremendous popularity among young generation owing to Globalization and westernization. Junk food is defined as energy dense food with high amount of refined sugar, white flour, trans-fat, polyunsaturated fat, salt and numerous additives, and low nutrient value in terms of protein, fibre, vitamin, and mineral content1. With the burgeoning burden of Non Communicable diseases (NCDs), the dark side of junk food consumption cannot be sidelined.

Lifestyle and food eating habits in younger age are important determinants of both their present and future health [2, 3]. However, their eating pattern is influenced by various factors like easy availability, cost, convenience, mass media advertising, parental modelling, peer influences, body image, etc. [4]

A plenty of data regarding trends of junk food consumption among adolescents in relation to gender, age and other variables in developed countries is available. 5-7However, data on the food intakes of Indian adolescents is meagre. This scarcity of evidence has, in turn, posed a significant barrier to the development of effective nutrition promotion and disease prevention measures. Therefore, the present study was undertaken to examine junk food consumption as a health hazard on students residing in Jammu region.

Material and Methods

Study Design: Cross-sectional study

Research site: This institution-based study was carried out on students studying in Post-graduate Mathematics and Political Science Departments of Jammu University.

Study Population: 150 students from Jammu University.

Sampling Technique: Simple Random Sampling method.

Sampling method: A sample of 150 students from Jammu University was taken. Sampling was done in such a way that equal number of males and females (i.e. 75 each), and students in paid and private courses; again 75 each, could be achieved. Students were selected from
attendance register by simple random sampling technique while the PG departments were selected by draw of lot method.

Method of data collection: After taking ethical clearance from Institutional Ethics Committee GMC, Jammu (IECGJ), permission and direction to the departments to solicit support for proper conduction of the study was obtained from the Registrar Jammu University. Thereafter, a list of departments was procured from Department of research. Using the draw of lot method, 2 departments namely Department of Mathematics and Political Science were selected. Their respective Heads were approached and briefed about the study and suitable time to carry out the research was taken so that routine work would not get hindered. Selection of classes/ streams/ courses was done as per suggestions by the Heads. Each selected student was met in person and his/her consent for participation was obtained.

Information regarding dietary habits was collected using WHO STEPS Survey. For the purpose of analysis; always and often were grouped together as ‘Frequently’ and; Sometimes and rarely as ‘Infrequently’. Similarly, number of days as 0-1 and 2-3 were clustered as ‘Infrequently’ and 4-6 and 7 or more as ‘Frequently’. Consumption of more than 5 meals outside home/week, frequent consumption of soft beverages and junk food have been considered as ‘Unhealthy diet’. Each student was interviewed in person. Data was analyzed in terms of numbers and proportions.

Results
Out of 150 students, 75 are males (50%) and 75 are females (50%). Predominant population is of Hindus (82%), followed by Muslims (11%), Sikh (5%) and others constitute a small proportion i.e. 2%. (Table 1)

Table 1: Distribution of students as per age

| Parameters | Category | n % |
|------------|----------|-----|
| Gender     | Male     | 75 (50) |
|            | Female   | 75 (50) |
| Religion   | Hindu    | 123(82) |
|            | Muslim   | 17(11) |
|            | Sikh     | 7 (5) |
|            | Others   | 3 (2) |

Table 2: Distribution of students based on consumption of meals outside home

| Category | Parameter | Variable n=75 | n= 75 (%) | n= 150 (%) |
|----------|-----------|---------------|-----------|------------|
| Meals outside home /week | Gender | Male | 19 (25) | 35 (23) |
|                     | Female | 16 (21) | | |
|                     | Course | Paid | 18 (24) | | |
|                     |        | Free | 17 (23) | | |

Table 3: Distribution of students based on consumption of soft beverages

| Category | Parameter | Variable n=75 | n (%) | n= 150 (%) |
|----------|-----------|---------------|-------|------------|
| Frequent consumption of soft beverages (per week) | Gender | Male | 48 (64) | 102 (68) |
|                     | Female | 54 (72) | | |
|                     | Course | Paid | 62 (82.66) | | |
|                     |        | Free | 38 (50.66) | | |

Fig 1: Genderwise distribution of Junk food

As per Table 3, majority (68%) of students consume soft beverages. Maximum consumption is seen among females (72%). It is also observed that students studying in paid courses have higher consumption (62.66%) of soft beverages than in free courses (50.66%). Overall prevalence of consumption of Junk food is 26.66%, maximum consumption was seen among male students (27%) as compared to their female counterparts (13%) Fig 1.
Discussion
11.66% students in our study were regularly eating outside (i.e., >5 meals outside home/week) which is quite less as reported by others [8, 10]. Reasons like easy access to eating facilities and outside eateries offering a lot of meal choices can drive students towards eating outside. Higher tendency was seen among males (25%) as compared to their female counterparts (21%) and this can be attributed to still prevalent decreased parental control on males, 'increased' freedom that makes them go for unhealthy eating behaviour. Majority (68%) of students consume soft beverages including aerated as well as non aerated drinks. This tendency was found to be more among female students (72%) as compared to their male counterparts (64%), these results are contrary to the findings by Hazza M-Al Hazzaa (2011), where higher percentage of males (67.2%) take aerated drinks as compared to females (57.4%), this discrepancy can be explained on cultural grounds, that adolescent males in Saudi Arabia have more opportunity than females to go outside. Intake was higher among students studying in paid (72%) than in free courses (64.66%) which can again be due to cost factor and affordability. 71.66% students in our study consumed junk foods. This finding is in line with a study conducted on individuals from mid adolescence period by Neha Rathi et al. (2017) [101], where three-quarter of (75%) individuals consumed junk food. Another study by Kumar et al., revealed that 76.7% of Professional University preferred fast food just to satisfy their craving for different tastes. Strength of the study- Data on diet from the region of Jammu is limited, hence this study could be considered as a first step in assessing the consumption of Junk food (a lifestyle factor driving towards Non-communicable diseases). Limitations- Results obtained from the study should be cautiously generalised for the whole population as the sample size is small; study design is cross-sectional which has inherit issues regarding generalizability.

Conclusion
There is an alarming need to curtail the consumption of junk food in the younger age group before it further leads detrimental health effects. This can be achieved by implementation of effective canteen policies to improve the availability, variety and affordability of healthy food choices in canteens, thus supporting students in consuming nutritious foods; restricting food advertising to children; introduction of food labelling on the front of packaged foods and on fast-food restaurant menus.

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