

An Investigation of Patterns and Its Implications on Junk Food Consumption Among Individuals in the Hyderabad Region

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ABSTRACT

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In modern world, junk food has become a prevalent part of many people's diets. Consumption of fast foods has gradually become a common lifestyle especially in urban areas and among young people in spite of the associated adverse health consequences. This study was conducted to evaluate the patterns of fast-food consumption and the perception of it as a potential risk factor. We explore why individuals are drawn to junk food, examining factors such as convenience, taste preferences, and marketing strategies. Additionally, analyzed the impacts of excessive junk food consumption on physical health. By understanding these patterns and consequences, individuals can make more informed choices about their dietary habits, leading to better overall health and well-being.

The study of junk food consumption behavior among people is aimed to have an in-depth analysis of food consumption trends. The research was descriptive approach and used primary data from survey through questionnaire. A simple random sampling method was used in the study. Spearman's Correlation and Chi square tests were carried out to analyze the data. The research suggests that priorities such as accessibility, taste, price, and ambience influence people's choice of selection of food outlets in consuming junk food in Hyderabad.

Keywords: Fast foods, Fast food consumption pattern, health consequences, junk food, implications on health, consuming frequency.

INTRODUCTION

The Centre for Science and Environment defines junk food as any food that is low in essential nutrients but high in calories, sodium, and other less desirable components. These foods provide little to no proteins, vitamins, or minerals while being rich in salt, sugar, and fats, making them calorie-dense. As a result, junk food is generally viewed negatively and considered unsuitable for a healthy diet due to its poor nutritional value. However, research over the years has shown that consumers frequently choose junk food in various situations, and the industry itself has proven to be highly profitable. This study aims to explore the reasons behind consumer preferences for junk food, assess their consumption patterns, and evaluate their awareness of what they are eating. Previous research across the globe has identified multiple factors contributing to this trend, and this study seeks to examine these aspects within a different context.

In today's fast-paced world, junk food has become a staple in many people's diets. From crispy fries to sugary sodas, these tempting treats often find their way into our hands and mouths without much thought. But have you ever stopped to consider the patterns and implications behind this seemingly harmless indulgence?

In this article, we'll take a closer look at the world of junk food consumption. We'll explore why we're drawn to these tasty but nutritionally lacking options, the patterns of consumption that have emerged over time, and the far-reaching implications for our health and well-being.

But first, let's define what exactly constitutes junk food. Simply put, junk food refers to highly processed foods that are high in calories, sugar, salt, and unhealthy fats, while lacking in essential nutrients like vitamins, minerals, and fiber. Think of your favorite snacks and fast-food items – chances are, many of them fall into this category.

But perhaps most importantly, we'll explore the implications of junk food consumption on our health and society as a whole. From rising rates of obesity and chronic diseases to environmental concerns stemming from food production and waste, the consequences are far-reaching and multifaceted. By understanding the patterns and implications of junk food consumption, we can make more informed choices about what we eat and advocate for healthier food environments in our communities.

LITERATURE REVIEW

Numerous studies have been conducted in diverse contexts to explore perceptions of junk food and the factors influencing its consumption.

Mark K. Jekanowski (2001) stated that the demand for fast food is largely driven by how easily consumers can access it. The fast-food industry has consistently worked to enhance accessibility, with outlets now located in diverse places such as office buildings, department stores, and airports. A significant factor contributing to the rise in fast-food consumption is the growing emphasis on convenience.

Firdause Abdullah (2011) highlighted that several factors influence customer preferences in the food service industry. These include reasonable pricing, special offers on menu packages, discounts, loyalty pricing for regular customers, promotional pricing for new items, and the incorporation of local delicacies. The study also found that elements such as brand reputation, ample seating space, sufficient parking, a diverse menu selection, and appealing interior design play a significant role in attracting customers.

Oyedunni S. Arulegun and Modupe (2011) found that although respondents had a high level of awareness and knowledge about the ingredients in fast food and its potential risks for developing non-communicable diseases in the future, they continued to consume these foods.

Vinay Gopal J and his colleagues (2012) conducted a study highlighting the influence of television advertisements in attracting college students to junk food. A significant portion of the participants admitted to developing an addiction to these foods. The study emphasizes the urgent need for young individuals to recognize the presence of chemical additives in junk food and its minimal nutritional value, encouraging them to adopt a safer and healthier balanced diet.

Naheed Vaida (2013) reported that fast food consumption was highest during pre-lunch hours. The primary factor attracting most respondents to fast food was its flavor and taste. The study found that a majority preferred branded fast-food items and were willing to spend between Rs. 20-50 or more daily on such purchases. Additionally, most respondents agreed that eating fast food is often perceived as a symbol of higher social status. The report also noted that fast food consumption was more prevalent among girls than boys and highlighted the significant influence of urbanization on changing students' eating habits.

Anita Goyal (2007) found that young Indian consumers prioritize taste and quality the most, followed by factors such as ambience and hygiene.

Ya-li Huang (1994) found that students skipped breakfast (22%), lunch (8%), and dinner (5%), while 80% reported consuming snacks at least once daily. The study also indicated no significant differences between males and females in meal-skipping frequency or snack consumption.

A study by Sahaspor Paeratakul (2003) explains that fast-food use may decline at the highest levels of education. In this study, people with 4 or more years of college education reported lower fast-food consumption compared with those with high school or some college education.

OBJECTIVES

- To identify the demographic profile of individuals who consume junk food in the Hyderabad region.
- To evaluate the level of awareness regarding the health risks associated with junk food consumption.

- To provide recommendations for reducing junk food consumption and promoting healthier dietary behaviors.

RESEARCH METHODOLOGY:

The study was descriptive, cross-sectional research design to find junk food consumption patterns and their implications among a diverse sample in the Hyderabad region. A total of 122 participants (71 males and 51 females) from various age groups and socioeconomic backgrounds were selected using a random sampling method. Primary data was obtained through a structured questionnaire, while secondary data was gathered from existing literature for the purpose of the literature review. Inferential statistical analysis, including Spearman's Rho Correlation and Chi-Square tests, were applied to interpret the data.

HYPOTHESES:

- There is no significant relationship between individuals' efforts to reduce or limit junk food intake and their perception of the availability of information regarding the health risks associated with junk food consumption.
- There is no significant relationship between individuals' experiences of health issues after consuming junk food and their attempts to reduce or limit junk food intake.
- There is no significant relationship between gender and consumption of junk food.
- There is no significant relationship between annual income of respondent and junk food consumption.

ANALYSIS AND DISCUSSION:

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	51	41.8	41.8	41.8
	Male	71	58.2	58.2	100
	Total	122	100	100	

Source: Primary Data

The table and pie chart show the **gender** distribution of respondents. Out of 122 participants, 58.2% are male (71 respondents) and 41.8% are female (51 respondents). More male respondents participated in the study.

Age of the respondent					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	15-20 years	35	28.7	28.7	28.7
	20-25 years	69	56.6	56.6	85.2
	25-30 years	18	14.8	14.8	100
	Total	122	100	100	

Source: Primary Data

The table displays the age distribution of the 122 respondents. The majority (56.6%) are between 20–25 years old (69 respondents). This is followed by 28.7% in the 15–20 years group (35 respondents) and 14.8% in the 25–30 years group (18 respondents). This shows that most participants are young adults, predominantly in the 20–25 age range.

Annual income of the respondent				
	Frequency	Percent	Valid Percent	Cumulative Percent
Not earning	78	63.9	63.9	63.9
2,00,000/- to 5,00,000/-	28	23	23	86.9
5,00,000/- to 8,00,000/-	9	7.4	7.4	94.3
8,00,000/- to 10,00,000/-	4	3.3	3.3	97.5
>10,00,000/-	3	2.5	2.5	100
Total	122	100	100	

Source: Primary Data

The majority of respondents (63.9%) reported not earning any income, indicating that a large portion of the sample may consist of students or individuals financially dependent on others. Only 23% fall in the ₹2,00,000–₹5,00,000 income range, and a very small group (13.1%) earn above ₹5,00,000 annually. This suggests a relatively low-income profile for the sample group.

How often do you consume junk food?				
	Frequency	Percent	Valid Percent	Cumulative Percent
Everyday	17	13.9	13.9	13.9
Alternate days	25	20.5	20.5	34.4
Once a week	35	28.7	28.7	63.1
No set pattern	45	36.9	36.9	100
Total	122	100	100	

Source: Primary Data

Consumption habits vary significantly, with the largest group (36.9%) having no set pattern. A substantial portion consumes junk food once a week (28.7%) or on alternate days (20.5%), while daily consumption is comparatively low at 13.9%. This shows that while junk food is popular, it's not part of most respondents' daily routine.

What situations lead to increased junk food consumption?				
	Frequency	Percent	Valid Percent	Cumulative Percent
Just for a change	8	6.6	6.6	6.6
On special occasions	20	16.4	16.4	23
With my friends	44	36.1	36.1	59
Others	15	12.3	12.3	71.3
All of the above	35	28.7	28.7	100
Total	122	100	100	

Source: Primary Data

The most common trigger is social interaction—36.1% say they eat junk food with friends. Additionally, 28.7% chose “All of the above,” indicating that multiple factors like boredom, occasions, and social settings influence their habits. This highlights that junk food consumption is often context-driven rather than purely based on hunger or preference.

Preferred place for consuming junk food?				
	Frequency	Percent	Valid Percent	Cumulative Percent
Food courts	12	9.8	9.8	9.8
Restaurants	20	16.4	16.4	26.2
Street food	21	17.2	17.2	43.4
At home through delivery apps like swiggy/zomato etc.	17	13.9	13.9	57.4
All of the above	52	42.6	42.6	100
Total	122	100	100	

Source: Primary Data

The most preferred option is ordering from home using delivery apps like Swiggy or Zomato (42.6%), reflecting modern convenience-based habits. Other common venues include street food (17.2%) and restaurants (16.4%), indicating that junk food is consumed both casually and in formal settings.

Average amount spent on every meal?				
	Frequency	Percent	Valid Percent	Cumulative Percent
<100/-	25	20.5	20.5	20.5
100/- to 200/-	44	36.1	36.1	56.6
200/- to 500/-	36	29.5	29.5	86.1
>500/-	17	13.9	13.9	100
Total	122	100	100	

Source: Primary Data

Most respondents (36.1%) spend between ₹100–₹200 per junk food meal, while 29.5% spend ₹200–₹500. A smaller portion (13.9%) spends over ₹500, showing that junk food spending is moderate and varies depending on individual habits and financial means.

Does junk food advertising influence your food choices?				
	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	38	31.1	31.1	31.1
No	52	42.6	42.6	73.8
Maybe	32	26.2	26.2	100
Total	122	100	100	

Source: Primary Data

A notable 42.6% claim that advertisements do not affect their food choices, while 31.1% acknowledge being influenced. The remaining 26.2% are unsure. This suggests that while ads play a role, a significant portion of the population believes they make food choices independently.

Do you think your junk food consumption affects your overall health?				
	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly disagree	2	1.6	1.6	1.6
Disagree	5	4.1	4.1	5.7
Neutral	28	23	23	28.7
Agree	52	42.6	42.6	71.3
Strongly agree	35	28.7	28.7	100
Total	122	100	100	

Source: Primary Data

A majority (71.3%) agree or strongly agree that their junk food intake affects their overall health. Only 5.7% disagree, and 23% are neutral. This suggests that most respondents are aware of the negative health implications, even if it doesn't always change their behavior.

How does nutritional awareness affect your junk food consumption?				
	Frequency	Percent	Valid Percent	Cumulative Percent
Not at all	16	13.1	13.1	13.1
Rarely	27	22.1	22.1	35.2
Sometimes	61	50	50	85.2
Most of the times	18	14.8	14.8	100
Total	122	100	100	

Source: Primary Data

For 50% of respondents, nutritional awareness sometimes affects their eating choices, while 13.1% say it has no effect at all. Others are only rarely influenced (22.1%) or mostly influenced (14.8%). This shows that while awareness exists, it doesn't consistently translate to healthier behavior.

Do you think there is enough information available about the health risks associated with junk food consumption?				
	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	60	49.2	49.2	49.2
No	27	22.1	22.1	71.3
Maybe	35	28.7	28.7	100
Total	122	100	100	

Source: Primary Data

Nearly half (49.2%) believe there is sufficient information about the health risks of junk food, suggesting awareness campaigns may be having an impact. However, 22.1% disagree and 28.7% remain unsure, indicating that more accessible and impactful information may still be needed.

Have you ever tried to reduce your junk food intake?				
	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	91	74.6	74.6	74.6
No	12	9.8	9.8	84.4
Maybe	19	15.6	15.6	100
Total	122	100	100	

Source: Primary Data

A large majority (74.6%) have tried to cut down on junk food, showing strong health-conscious behavior. Only a small number (9.8%) have not made such attempts, while 15.6% are undecided. This reflects growing concern about the health implications of junk food.

Have you faced any health issues after consuming junk food?				
	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	54	44.3	44.3	44.3
No	42	34.4	34.4	78.7
Maybe	26	21.3	21.3	100
Total	122	100	100	

Source: Primary Data

44.3% of respondents have experienced health problems after consuming junk food, such as digestive issues or fatigue. However, 34.4% reported no issues, and 21.3% were unsure. This indicates a significant awareness of negative health effects among consumers.

Do you think the trend of fast food will...				
	Frequency	Percent	Valid Percent	Cumulative Percent
Increase	77	63.1	63.1	63.1
Decrease	14	11.5	11.5	74.6
Stable	31	25.4	25.4	100
Total	122	100	100	

Source: Primary Data

A strong majority (63.1%) believe that fast food consumption will continue to rise. Only 11.5% think it will decrease, and 25.4% expect it to remain the same. This points to an expected ongoing shift toward fast food culture, likely due to lifestyle changes and convenience.

Correlations				
			Have you ever tried to reduce or limit your junk food intake?	Have you faced any health issues after consuming junk food?
Spearman's rho	Have you ever tried to reduce or limit your junk food intake?	Correlation Coefficient	1	.271**
		Sig. (2-tailed)	.	0.003
		N	122	122
	Have you faced any health issues after consuming junk food?	Correlation Coefficient	.271**	1
		Sig. (2-tailed)	0.003	.
		N	122	122

** . Correlation is significant at the 0.01 level (2-tailed).

Hypotheses 1:

Null Hypothesis (H₀):

There is no significant relationship between individuals' experiences of health issues after consuming junk food and their attempts to reduce junk food intake.

Alternative Hypothesis (H₁):

There is a significant relationship between individuals' experiences of health issues after consuming junk food and their attempts to reduce junk food intake.

Interpretation Using Spearman's Rho:

- Spearman's correlation coefficient (ρ) = 0.271
- p-value (Sig. 2-tailed) = 0.003
- Sample size (N) = 122

Since the p-value (0.003) is less than 0.01, the result is statistically significant at the 0.01 level.

However, the correlation coefficient ($\rho = 0.271$) indicates a positive but weak association between the variables. This suggests that individuals who have experienced health issues after consuming junk food are somewhat more likely to attempt to reduce their junk food intake.

- Therefore, we reject the null hypothesis (H₀) and accept the alternative hypothesis (H₁).
- There is a statistically significant and positive correlation between experiencing health issues and trying to reduce junk food consumption.

Correlations				
			Have you ever tried to reduce or limit your junk food intake?	Do you think there is enough information available about the health risks associated with junk food consumption?
Spearman's rho	Have you ever tried to reduce or limit your junk food intake?	Correlation Coefficient	1	.332**
		Sig. (2-tailed)	.	<.001
		N	122	122
	Do you think there is enough information available about the health risks associated with junk food consumption?	Correlation Coefficient	.332**	1
		Sig. (2-tailed)	<.001	.
		N	122	122

** . Correlation is significant at the 0.01 level (2-tailed).

Hypotheses 2:

Null Hypothesis (H₀):

There is no significant relationship between individuals' perception of available health risk information and their attempts to reduce junk food intake.

Alternative Hypothesis (H₁):

There is a significant relationship between individuals' perception of available health risk information and their attempts to reduce junk food intake.

Interpretation Using Spearman's Rho:

- Spearman's correlation coefficient (ρ) = 0.332
- p-value (Sig. 2-tailed) = < 0.001
- Sample size (N) = 122

Since the p-value is less than 0.01, the correlation is statistically significant at the 0.01 level (2-tailed).

The correlation coefficient of 0.332 indicates a positive and moderate relationship. This means that individuals who believe there is enough information available about the health risks of junk food are more likely to try to reduce their consumption of it.

- We reject the null hypothesis (H₀) and accept the alternative hypothesis (H₁).
- There is a significant moderate positive correlation between awareness of health risk information and efforts to reduce their junk food intake.

Gender * How often do you consume junk food? Crosstabulation							
			How often do you consume junk food?				Total
			Everyday	Alternate days	Once a week	No set pattern	
Gender	Female	Count	5	12	11	23	51
		Expected Count	7.1	10.5	14.6	18.8	51
	Male	Count	12	13	24	22	71
		Expected Count	9.9	14.5	20.4	26.2	71
Total		Count	17	25	35	45	122
		Expected Count	17	25	35	45	122

Source: Primary Data

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	4.619 ^a	3	0.202
Likelihood Ratio	4.685	3	0.196
Linear-by-Linear Association	1.404	1	0.236
N of Valid Cases	122		
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 7.11.			

Source: Primary Data

Hypotheses 3:

- **Null Hypothesis (H₀):** There is no relationship between gender and junk food consumption.
- **Alternative Hypothesis (H₁):** There is relationship between gender and junk food consumption.

Interpretation using Chi-Square test:

- Chi-Square Value (χ^2): 4.619
- Degrees of Freedom (df): 3
- Significance (p-value): 0.202
- Sample Size (N): 122

Since $p = 0.202 > 0.05$, the result is not statistically significant. We fail to reject the null hypothesis. This means there is no significant association between gender and how frequently junk food is consumed.

Annual income of the respondent * How often do you consume junk food? Crosstabulation							
			How often do you consume junk food?				Total
			Everyday	Alternate days	Once a week	No set pattern	
Annual income of the respondent	Not earning	Count	6	16	24	32	78
		Expected Count	10.9	16	22.4	28.8	78
	2,00,000/- to 5,00,000/-	Count	6	8	7	7	28
		Expected Count	3.9	5.7	8	10.3	28
	5,00,000/- to 8,00,000/-	Count	4	0	3	2	9
		Expected Count	1.3	1.8	2.6	3.3	9
	8,00,000/- to 10,00,000/-	Count	1	1	0	2	4
		Expected Count	0.6	0.8	1.1	1.5	4
	Greater than 10,00,000/-	Count	0	0	1	2	3
		Expected Count	0.4	0.6	0.9	1.1	3
Total		Count	17	25	35	45	122
		Expected Count	17	25	35	45	122

Source: Primary Data

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	17.838 ^a	12	0.121
Likelihood Ratio	19.787	12	0.071
Linear-by-Linear Association	1.178	1	0.278
N of Valid Cases	122		
a. 13 cells (65.0%) have expected count less than 5. The minimum expected count is .42.			

Source: Primary Data

Hypotheses 4:

- **Null Hypothesis (H₀):**
There is no significant relationship between the annual income of the respondent and junk food consumption frequency.
- **Alternative Hypothesis (H₁):**
There is a significant relationship between the annual income of the respondent and junk food consumption frequency.

Interpretation using Chi-Square test:

- Pearson Chi-Square Value: 17.838
- Degrees of Freedom (df): 12
- Asymptotic Significance (p-value): 0.121

Conclusion:

Since the p-value (0.121) is greater than the significance level (typically $\alpha = 0.05$), we fail to reject the null hypothesis. This means there is no statistically significant association between the respondent's annual income and how frequently they consume junk food.

FINDINGS:

- Most respondents were young adults (20–25 years) and predominantly male. A large proportion were non-earning, suggesting many were students.
- 71.3% believe junk food affects health; 74.6% have tried to reduce intake.
- Most spend ₹100–₹200 per meal and prefer ordering via delivery apps.
- 42.6% say advertisements don't influence them.
- 49.2% believe enough health information is available.
- Significant positive correlations were found between:
 - a) Health issues and attempts to reduce intake.
 - b) Awareness of health risks and efforts to limit consumption.
- No significant relationship was found between junk food consumption and gender.
- No significant relationship was found between junk food consumption and annual income.

CONCLUSION:

The study highlights that junk food consumption is common among young adults in Hyderabad. Despite being aware of the health risks, many individuals continue to consume junk food regularly, often without a fixed pattern. The research found a positive correlation between individuals experiencing health issues and their efforts to cut down on junk food. Similarly, those who believe there is enough health-related information are more likely to try reducing their intake. However, no significant relationship was found between consumption and variables such as gender or income.

REFERENCES:

- [1] Anita Goyal, N.P. Singh. (2007). Consumer perception about fast food in India: an exploratory study. *British Food Journal*, 109, 182 – 195.
- [2] Firdaus Abdullah, Abg Zainoren, Abg Abdurehman, Jamil Hamel. (2011). Identifying the dimension of customer preference in food service industry. *International Conference on Innovation, Management and Service*, 14
- [3] Mark D. Jekanowski, James K. Biknkley, and James Eales. (2011). Convenience, accessibility and demand for fast food. *Journal of Agricultural and Resource Economics Association*, 26, 58-74.
- [4] Naheed Vaida. (2013). Prevalence of Fast-Food intake among Urban Adolescent students. *The international Journal of Engineering and Science (IJES)*, 2, 2319-1805

- [5] Oyedunni S. Arulogan, Modupe O. Owalabi. (2011). Fast food consumption pattern among under graduate of the university of Ibadan, Nigeria: Implication for nutrition education. *Journal of Agricultural and Food Technology*, 1, 89-93.
- [6] Sahasporn Paeratakul, Daphne P. Ferdinand, Catherine M. Champagne, Donna H. Ryan, George A. Bray. (2003). Fast-food consumption among US adults and children: Electronic copy available at: <https://ssrn.com/abstract=2502101> xvi | P a g e Dietary and nutrient intake profile. *Journal of The American Dietetic Association*, 103, 1332-1338.
- [7] Vinay Gopal J., Sriram S., Kannabiran K. and Seenivasan R. (2012). Student's perspective on junk foods: Survey. *Sudanes journal of public health*, 2, 21-25.
- [8] Ya-Li Huang, Won O.Song, Rachel A. Schemmel, and Sharon M. Hoerr. (1994). What do college students eat? Food selection and meal pattern. *Nutritional research*, 14, 1143–1153.
- [9] Shakiran, D. R. (2012). Fast foods and their impact on health. *Journal of Krishna Institute of Medical Sciences University*, 1: 7-15.
- [10] Ajzen, I. (2015). Consumer attitudes and behavior: The theory of planned behavior applied to food consumption decisions. *Italian Review of Agricultural economics*, Anno LXX (2): 121-138.
- [11] Anand, R. (2011). A study of determinants impacting consumers' food choice with reference to the fast-food consumption in India. *Society and Business Review*, 6(2): 176-187.
- [12] Bhaskar, R. (2012). Junk food: Impact on health. *Journal of Drug Delivery & Therapeutics*, 2(3): 67-73.
- [13] Chaplin, H. (1999). Food fight! *Am Demographics*, 21(6): 64–65.
- [14] Isobel, R. C., Williams, S. S., Michela, J. L., & Franklin, A. B. (2006). Understanding the food choice process of adolescents in the context of family and friends. *Journal of Adolescent Health*, 38(5): 575 - 582.