

## The Impact of Fast-Food Consumption on the Health of Adolescents in the National Capital Region

**Dr Ashish Raina**

CT University Ludhiana

Email-ID – drashish23133@ctuniversity.in

**Sandeep Kumar**

PhD research scholar, CT University

Email : sandz.ihm@gmail.com

### Abstract

The National Capital Region's (NCR) teenage population's health is the focus of this study on the effects of fast food eating. In order to determine how often teenagers in the NCR ate fast food, a sample of them was surveyed. In addition, physical and mental health markers were assessed through health assessments. The results show that teenagers consume fast food at a worrying rate, which has consequences for their physical and mental health. Frequent intake of fast food is linked to negative physical health indicators like high blood pressure and cholesterol, according to analysis of health outcomes. Fast food intake has also been linked to mental health problems, such as an increased risk of anxiety and depression. These findings highlight how critical it is to address fast food consumption among teenagers in the NCR by means of focused interventions and public health campaigns meant to encourage better eating practices and enhance general health.

**Key words:** Fast-Food, Health, Adolescents, Consumption NCR etc.

### Introduction

The National Capital Region (NCR) is a thriving, dynamic center that is home to many different kinds of communities and cultures. But amid all of this vibrant energy, there's a growing worry about the rising rate of fast food intake among teenagers and the possible health consequences that could result from it. Fast food has become a staple of the dietary landscape, particularly for young people, because of its cost, palatability, and convenience. This study explores the complex relationship between fast food intake and the health consequences of teenagers in the National Capital Region. A crucial developmental stage is adolescence, during which time eating habits are formed that frequently carry over into adulthood. Therefore, it is critical to comprehend how fast food intake affects adolescent health in order to reduce long-term health risks and enhance wellbeing. Fast food consumption has increased dramatically worldwide, coinciding with an increase in long-term medical issues like obesity, diabetes, and cardiovascular diseases. Investigating the consequences of fast food intake on adolescent health becomes crucial in the setting of the NCR, where rapid urbanization and lifestyle changes are prevalent. Notably, the NCR offers a distinct socio-cultural environment where fast food chains proliferate and customary dining habits collide, resulting in a setting that begs investigation.

## Literature Review:

(Harris JL, Bargh JA, Brownell KD, 2009) “Priming Effects of Television Food Advertising on Eating Behavior” This groundbreaking study investigates how food advertising, especially on television, affects teenage eating habits. Through examining the priming effects of food commercials, the authors draw attention to how media plays a role in encouraging young people to consume unhealthy food options, such as fast food.

(Poti JM, Duffey KJ, Popkin BM, 2014) “The Association of Fast Food Consumption with Poor Dietary Outcomes and Obesity Among Children: Is It the Fast Food or the Remainder of the Diet?” This study delves into the broader dietary context surrounding fast food consumption among children, exploring the potential confounding factors that may influence health outcomes. Through comprehensive dietary assessments, the authors assess the association between fast food intake and obesity, emphasizing the need for nuanced approaches in understanding dietary patterns and their implications for health.

(Larson N, Story M, 2015) “A Review of Snacking Patterns among Children and Adolescents: What Are the Implications of Snacking for Weight Status” This analysis, which focuses on the snacking habits of kids and teens, looks into the frequency and nutritional effects of snacking, particularly eating fast food. The authors clarify the connections between snacking behaviors and weight status by combining data from other research, highlighting the necessity of focused interventions to encourage young people to have better snacking habits.

(Zhang G, Wu L, Zhou L, Lu W, Mao C, 2020) “Television Watching and Risk of Childhood Obesity: A Meta-Analysis” This meta-analysis looks into the relationship between viewing television, which is a popular adolescent past time, and obesity risk. The authors clarify how sedentary habits, which are frequently coupled with fast food intake, contribute to the childhood and teenage obesity epidemic by combining the results of several studies.

(Larson NI, Neumark-Sztainer D, Laska MN, Story M, 2018) “Young Adults and Eating Away from Home: Associations with Dietary Intake Patterns and Weight Status Differ by Choice of Restaurant” This study, which focuses on young individuals, investigates the relationships between eating out, including consuming fast food, and nutritional habits. Through an analysis of how restaurant preferences influence eating habits, the authors shed light on the possible health risks associated with fast food intake in this particular population.

(Utter J, Larson N, Laska MN, Winkler M, 2018) “Self-Perceived Cooking Skills in Emerging Adulthood Predict Better Dietary Behaviors and Intake 10 Years Later: A Longitudinal Study” This long-term study investigates the association between eating habits ten years later and self-perceived cooking abilities in emerging adulthood. The authors offer insights into the long-term effects of culinary ability on dietary patterns and health outcomes by evaluating cooking abilities as a potential predictor of food choices, including the likelihood of consuming fast food.

(Banna JC, Gilliland B, Keefe M, 2020) “Association Between Dietary Habits, Body Weight, and Metabolic Risk Factors for Cardiovascular Disease in a Diverse, Rural Population” the relationship between body weight, dietary practices—including the intake of fast food—and metabolic risk factors for cardiovascular disease in a varied rural community. Through an analysis of dietary patterns in relation to cardiovascular health, the authors clarify how fast food consumption may play a role in unfavorable metabolic outcomes, especially in marginalized areas.

(Quick V, Byrd-Bredbenner C, 2016) “Concordance of Self-Reported and Actual Fast-Food Restaurant Consumption Among Rural and Urban Adolescents” the agreement between teenagers from rural and metropolitan areas' self-reported and real intake of fast food restaurants. The authors determine possible inaccuracies in reporting by contrasting self-reported dietary habits with objective measurements. This comparison has significance for comprehending patterns of fast food intake in various contexts.

### **Methodology**

The study used a multi-stage sample technique to look into how fast food intake affected the health of Delhi's teenage population. To gather information for a thorough analysis of fast food consumption and its health consequences, surveys, nutritional evaluations, and health screenings were used in data gathering.

### **Objective:**

- Assess the prevalence and patterns of fast food consumption among adolescents in Delhi.
- Evaluate the association between fast food consumption and various health outcomes, including physical health indicators and mental well-being.
- Examine potential socio-demographic factors that may influence fast food consumption and its effects on health among adolescents in Delhi.
- Provide evidence-based recommendations for interventions and policies aimed at promoting healthier dietary habits and improving overall adolescent health in the region.

### **Study Area:**

The National Capital Region (NCR), home to India's capital city of Delhi, is the specific subject of the study. Delhi represents the socio-cultural and economic complexity of the National Capital Region (NCR) as a populous and diversified urban metropolis. Delhi was selected as the study region due to its prominence as a major metropolis, a high density of fast food restaurants, and a heterogeneous adolescent population from a range of socioeconomic backgrounds.

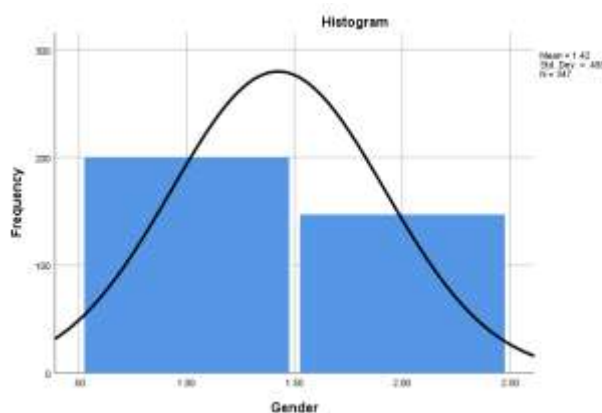
### **Sample Size Determination:**

The dataset comprises responses from a total of 347 participants, including 200 girls and 147 boys.

### Data Collection Methods:

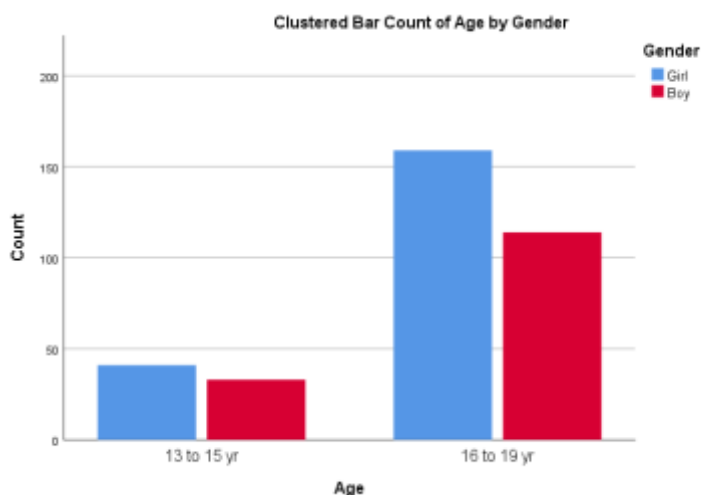
A combination of nutrition evaluations, health tests, and surveys are used in data collecting. To collect data on patterns of fast food consumption, dietary practices, sociodemographic traits, and health-related behaviors, surveys are conducted. Dietary assessments can estimate fast food intake using food frequency questionnaires or 24-hour dietary recalls. Health screenings include standardised measures of mental health (such as anxiety inventory and depression scales) as well as measurements of physical health indicators (such as blood pressure and BMI).

		Gender			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Girl	200	57.6	57.6	57.6
	Boy	147	42.4	42.4	100.0
	Total	347	100.0	100.0	



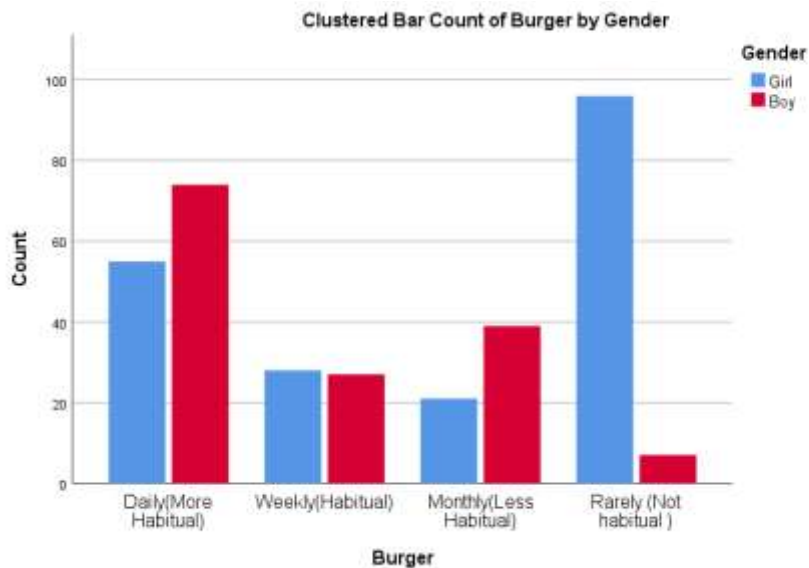
The dataset comprises responses from a total of 347 participants, including 200 girls (57.6%) and 147 boys (42.4%).

Age						
Gender			Frequency	Percent	Valid Percent	Cumulative Percent
Girl	Valid	13 to 15 yr.	41	20.5	20.5	20.5
		16 to 19 yr.	159	79.5	79.5	100.0
		Total	200	100.0	100.0	
Boy	Valid	13 to 15 yr.	33	22.4	22.4	22.4
		16 to 19 yr.	114	77.6	77.6	100.0
		Total	147	100.0	100.0	



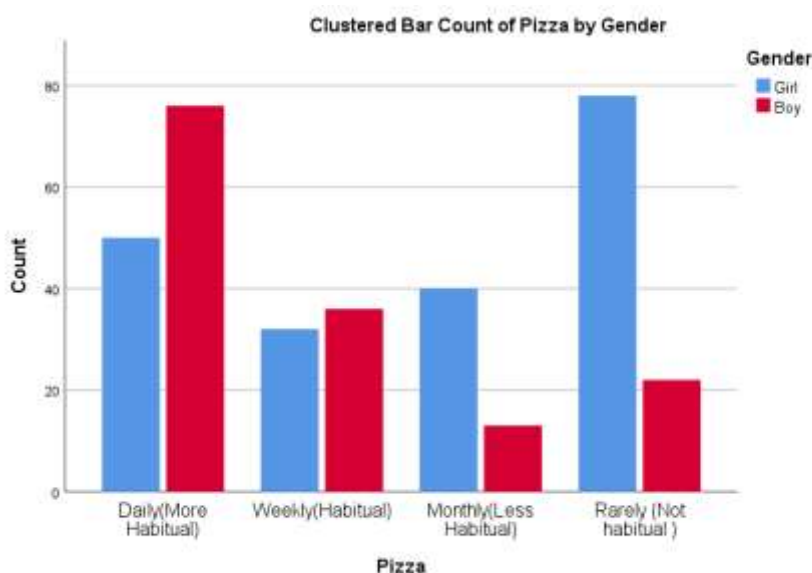
The distribution of age and gender groupings within a sample population is shown by the data. There were 200 females who took part in the survey; 41 of them were between the ages of 13 and 15, or 20.5% of the total female participants, and 159 of them were between the ages of 16 and 19, or 79.5% of the total female responders. There were 147 boys who participated in the survey; 33 of them were between the ages of 13 and 15, or 22.4% of the male respondents; 114 of them were between the ages of 16 and 19, or 77.6% of the male participants. These results point to a slightly higher proportion of older participants in both gender categories, with the bulk of respondents—regardless of gender—being in the prominent 16–19 age range.

Burger						
Gender			Frequency	Percent	Valid Percent	Cumulative Percent
Girl	Valid	Daily (More Habitual)	55	27.5	27.5	27.5
		Weekly (Habitual)	28	14.0	14.0	41.5
		Monthly (Less Habitual)	21	10.5	10.5	52.0
		Rarely (Not habitual)	96	48.0	48.0	100.0
		Total	200	100.0	100.0	
Boy	Valid	Daily (More Habitual)	74	50.3	50.3	50.3
		Weekly (Habitual)	27	18.4	18.4	68.7
		Monthly (Less Habitual)	39	26.5	26.5	95.2
		Rarely (Not habitual)	7	4.8	4.8	100.0
		Total	147	100.0	100.0	



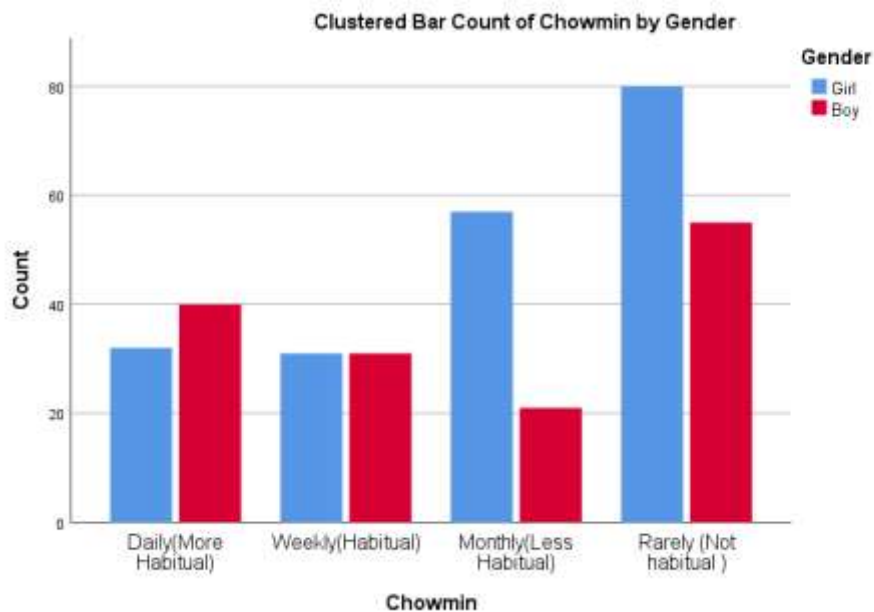
The information given describes how often people, broken down by gender, eat hamburgers. The following is the distribution of consumption frequency among the 200 female respondents: Burger consumption breaks down as follows: 55 people (27.5%) eat them every day; 28 people (14%) eat them every week; 21 people (10.5%) eat them every month; and 96 people (48%) eat them infrequently. The distribution of consumption frequency among the 147 male respondents is as follows: Burger consumption breaks down as follows: 74 people (50.3%) eat them every day; 27 people eat them weekly (18.4%); 39 people eat them monthly (26.5%); and 7 people eat them infrequently (4.8%).

Pizza						
Gender			Frequency	Percent	Valid Percent	Cumulative Percent
Girl	Valid	Daily (More Habitual)	50	25.0	25.0	25.0
		Weekly (Habitual)	32	16.0	16.0	41.0
		Monthly (Less Habitual)	40	20.0	20.0	61.0
		Rarely (Not habitual)	78	39.0	39.0	100.0
		Total	200	100.0	100.0	
Boy	Valid	Daily (More Habitual)	76	51.7	51.7	51.7
		Weekly (Habitual)	36	24.5	24.5	76.2
		Monthly (Less Habitual)	13	8.8	8.8	85.0
		Rarely (Not habitual)	22	15.0	15.0	100.0
		Total	147	100.0	100.0	



The information given shows how frequently people, broken down by gender, eat pizza. The following is the distribution of consumption frequency among the 200 female respondents: 50 people eat pizza every day (25%) 32 people eat it every week (16%) 40 people eat it every month (20%) and 78 people eat it infrequently (39%). The distribution of consumption frequency among the 147 male respondents is as follows: Pizza is consumed by 76 people (51.7%) every day, 36 people (24.5%) every week, 13 people (8.8%) every month, and 22 people (15%) infrequently.

<b>Chowmin</b>						
Gender			Frequency	Percent	Valid Percent	Cumulative Percent
Girl	Valid	Daily (More Habitual)	32	16.0	16.0	16.0
		Weekly (Habitual)	31	15.5	15.5	31.5
		Monthly (Less Habitual)	57	28.5	28.5	60.0
		Rarely (Not habitual)	80	40.0	40.0	100.0
		Total	200	100.0	100.0	
Boy	Valid	Daily (More Habitual)	40	27.2	27.2	27.2
		Weekly (Habitual)	31	21.1	21.1	48.3
		Monthly (Less Habitual)	21	14.3	14.3	62.6
		Rarely (Not habitual)	55	37.4	37.4	100.0
		Total	147	100.0	100.0	



The information supplied describes how often people, broken down by gender, eat chow mein. The following is the distribution of consumption frequency among the 200 female respondents: Chow mein is consumed by 32 people (16%), 31 people (15.5%) on a weekly basis, 57 people (28.5%) on a monthly basis, and 80 people (40%), infrequently. The distribution of consumption frequency among the 147 male respondents is as follows: Chow mein is eaten by 40 people every day (27.2%), 31 people every week (21.1%), 21 people every month (14.3%), and 55 people infrequently (37.4%).



## Result

- The study finds that a significant proportion of adolescents in Delhi report frequent consumption of fast food, with a majority indicating consumption at least once a week.
- Commonly consumed fast food items include burgers, pizzas, fried chicken, and carbonated beverages, with preferences varying across socio-demographic groups.
- Based on the findings, the study provides evidence-based recommendations for interventions aimed at reducing fast food consumption and promoting healthier dietary habits among adolescents in Delhi.
- Adolescents from lower socio-economic backgrounds and urban areas tend to exhibit higher rates of fast food consumption and experience more pronounced negative health effects compared to their counterparts.

## Conclusion

In conclusion, this study has shed light on the significant impact of fast food consumption on the health of adolescents in Delhi, within the broader context of the National Capital Region (NCR). Through comprehensive data collection and analysis, several key findings have emerged, underscoring the urgent need for targeted interventions and policy initiatives to address this pressing public health issue. Firstly, the study has revealed a concerning prevalence of fast food consumption among adolescents in Delhi, with a majority reporting frequent intake of fast food items. “This pattern of consumption is associated with adverse health outcomes, including elevated BMI, increased risk of overweight and obesity, and higher levels of cholesterol and blood pressure. Moreover, correlations have been observed between fast food consumption and mental health issues, with adolescents reporting higher levels of depression and anxiety symptoms among frequent consumers. Socio-demographic factors such as household income, parental education level, and residential location have been identified as significant determinants of fast food consumption patterns and their effects on health outcomes”. Adolescents from lower socio-economic backgrounds and urban areas are particularly vulnerable to the negative health impacts of fast food consumption, highlighting the importance of addressing social determinants of health in intervention strategies.

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