

## Prevalence of Fast Food Intake among Urban Adolescent Students

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### Abstract

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Consumption of fast foods has become almost a global phenomenon, as more and more people are lured by it day in and day out irrespective of demographic traits. But to know how students are attracted by fast foods has assumed importance in recent times. So the research subject of the study was to find out the “Prevalence of Fast Food Intake among Urban Adolescent Students”. For the collection of data a representative sample of 80 urban adolescent students were randomly selected in the target area. A structured questionnaire was administered and interviews were carried out on the students in different schools and colleges of the Srinagar city to gather the data related to the subject. Study showed interesting results. On one hand sex and economic status were found chief variable in fast food consumption as girls are leading in former and adolescent students reading in private schools are up in the latter. On the other hand, flavor, variety, brand, fast service and availability were found main driving force in fast food intake. Also exposure to advertisements, media influence and urbanization were found chief factors in fast food in take.

**Key Words:** Fast food, adolescents, prevalence.

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Date of Submission: 21, January, 2013



Date of Publication: 05, February 2013

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### I Introduction

Fast food denotes food which is prepared and served quickly at outlets called fast food restaurants. Finger food comprises most of the fast food, and can be eaten without cutlery. Fast foods include chips, sandwiches, hamburgers, fried chicken, French fries, chicken nuggets, fish, pizza or ice-cream, although many fast food restaurants offer slower foods like chilly mashed potatoes or salads. Fast food is often highly processed and prepared in an industrial fashion, i.e., with standard ingredients and methodical and standardized cooking and production methods. It is usually rapidly served in cartons or bags or in a plastic wrapping, in a fashion which minimizes cost. The phenomenal growth of the fast food industry continues. Fast food restaurants appeal especially to person less than 35 years. For those who eat a meal or a snack in a fast food restaurant once a week or so, the effect on the nutritive adequacy of the diet is not great. But for workers and teenagers who might eat a meal daily at these places the nutritive contributions must be carefully considered. A typical meal in a fast food restaurant (Ham burger, French-fries, Milk shake) furnish about half of the caloric requirement of a teen age boy, 40 percent or more of his protein allowance, and up to one-third of his thiamin, riboflavin, and niacin allowances. The meal also provides significant amounts of calcium and iron. But if coffee or soft drink is substituted for the milk shake the calcium content of the meal is very low. Most fast food meals are low in fiber, vitamin A and C, folacin and some trace minerals (Robinson & Lawyer, 1990). Many are low in calcium and iron. Gradually fast food restaurants are introducing break-fast items, orange juice, frozen yogurt and salad bars to provide wider choice and more opportunity to meet the nutrient requirements. Fast food is growing component in diet, and the frequency of fast food use has increased dramatically since the early 1970s. Fast food is especially popular among adolescents, who on an average visit a fast food outlet twice per week. Many people have raised concerns about the nutritional quality of fast food, not only for children and adolescents but also for adults. Several factors have contributed to this phenomenal increase in the use of fast food, including a greater number of working women, dual-career families, more diverse schedule of family members, an aging population and an increasing number of one and two person households. Fast foods meet the needs of many people because they are quick, reasonably priced and readily available. Also currently these restaurants are responding to the health concerns of their customers by changing some of their practices, such as the continued trend towards the use of vegetable oils instead of animal fats for frying, an increase in the number of low-fat menu items, and more fruits and vegetables available at salad bars. Food industry analysis even predict a future of increasing

home delivery services, high-quality vending machine foods and ready to eat packages for microwave equipped homes. Adolescence is the time of rapid growth and development in life. Nutrient needs are at the peak. Diet in this age has repercussions on the future health. High intake of fat, cholesterol and salt is associated with heart disease, cancer, osteoporosis and diabetes. Improper intake of nutrients and inactivity may even lead to lifelong obesity. Adolescent are least bothered about what they eat, so adults around them have to keep watch what, where and with whom they eat because it determines their eating patterns. Urban adolescents tend to enjoy soft drinks, breads, potato chips, popcorn and ready to eat meals. These foods are rich sources of carbohydrates but have low nutrient density. For adequate intake of micro nutrients, fruits, vegetables are must. One of the marked changes in the urban eating habits is the trend of dining out. A number of factors contribute to the increasing popularity of eating out. Smaller families, working mothers, double income households, higher income, more fast food outlets and increased advertising are some of them. Increased availability of food away from home may adversely affect nutrition intake. Children tend to consume foods higher in fat and lower in fiber and calcium when they eat outside. Advertisements showing sodas with fast meals instead of milk of juice motivate children to select less nutritious foods. Eating low nutrient density food in moderation does not pose a serious threat to the nutritional status of an adolescent whose basic food habits are nutritionally sound. However when carried to extremes or when practiced by the adolescent who does not and/ or has not good food habits these practices may compromise growth and maintenance of body functions.

## **II Scope Of The Study**

As the adolescence is the most crucial period of transition in the overall human development, so the nutritional requirements in proper proportions particularly in this period assume pivotal role for over all growth process. Clinically it has been proved that the nutrient value of fast foods is well below the required levels and its intake leads to many disorders. Also, the fast foods are main agents responsible for many diseases and disorders like obesity which is likely to cause cardiovascular diseases later on. Moreover fast food related concerns have alarmed people all over the globe, so India and the vale of Kashmir is no exception to it. Hence the study was undertaken to generate awareness among the people especially in adolescents about the harmful effects of fast food consumption, which will lead to improvement in the health of people. Further, more it will provide adolescents an option to invest their pocket money in buying nutrient rich foods.

### **Objectives of the study**

The study has been undertaken with the following objectives:

- To figure out the prevalence of fast food consumption among urban adolescents.
- To study the fast food consumption by adolescents in urban areas.
- To explore various factors contributing to fast food consumption by adolescents.

## **III Review Of Literature**

According to Harris (1979) eating away from the home is the top leisure-time activity in America- higher than watching television or listening to radio. One of the most popular places to eat is in one of the fast food chain restaurants. Popular foods in these restaurants are hamburgers of various types, hot dog on a bun plus cheese or chilly( if desired),fried chicken, fish sandwiches, breaded oysters, clams or other seafood, pizzas, French fries, burritos, tacos, and tostadas,, shakes, pie, ice cream and sundaes, ice cream cones and soft drinks.

The cost of eating out is another factor to consider. A U.S. Department of Agriculture study compared the costs of a meal consisting of a special hamburger, French fries, and a soft drink as purchased at a restaurant and as prepared at home. This meal at the time of the study when purchased at a fast food restaurant cost \$1.61. An equivalent meal prepared at home \$.83. The cost difference primarily represents a return on the time and effort spent in preparing a meal at home. Labour and energy costs at home were not included (Matsumoto, 1979).

Other observations about fast food made by Isom,( 1979) shows that regular type hamburgers and cheeseburgers from McDonald's, Burger kin, and burger chef are remarkably similar in nutritive composition. The higher caloric content of most fast foods means that the foods for the remainder of the day must be carefully selected to include recommended nutrients. In a survey on the effect of family dinners on diet quality, the more was the consumption of fruits, vegetables and other nutritious items. Hence there was higher intake of fiber, calcium, fat, vitamin B6, B12, C, E and iron. Goyal and Singh (2007) reported that the young Indian consumer has passion for visiting fast food outlets for fun and change but home food is their first choice. They feel homemade food is much better than food served at fast food outlets. They have the highest value for taste and quality (nutritional values) followed by ambience and hygiene. Three dimensions (service and delivery dimension, product dimension, and quality dimension) of fast food outlets attributes are identified based on factor analysis results. The two fast food outlets rating differs significantly on the seven attributes. McDonald's scores are higher on all attributes except "variety". Further, consumers feel that fast food outlets must provide additional information on

nutritional values and hygiene conditions inside kitchen. Nelia et al. (2011) in their study found that large percentage of the population purchase street foods and fast foods. This is of some concern when one notes the high prevalence of soft drink consumption in terms of its association with obesity and non-communicable diseases. These findings need to be taken into consideration when evaluating dietary patterns and nutritional adequacy of population data. In 2009 Feeley et al. published data on fast food consumption among 17 years old in the birth to twenty Cohorts in Soweto and Johannesburg. They found that 30% of the participants consumed fast food 5-7 times a week with another 20 percent having it 2-4 times a week. They postulated that street foods would probably make a significant contribution to total dietary intake since many items were substantial meals in terms of energy value. Anderson et al. (2011) in their study found that the prevalence of fast food consumption is high in the US across education, income and racial groups and is strongly associated with obesity. A positive relationship between the density of fast food outlets per area and the obesity status of children has been reported by Frazer and Edwards (2010). Kerri et al. (2006) in their study found that fast food purchases for family meals were positively associated with the intake of fast foods and salty snack foods for both parents and adolescents; and weight status among parents. Fast food purchases for family meals were negatively associated with parental vegetable intake. Findings from project EAT (Eating Among Teens) shows that families may struggle with family needs due to time constraints and busy schedules of adolescents and their parent’s purchasing fast food for meals provides a convenient alternative for busy families. Neumark et al. (2000)

#### IV Materials And Methods

The study was undertaken to access the prevalence of fast food intake among urban students in the age group of 14-19 years. The data regarding the study was collected from both the sources viz. primary and the secondary sources. Collection of primary data was carried out by perceiving the views and ideas from the girls and boys through filling up of structured questionnaire and interview. Collection of secondary data was carried out by information obtained from various books, journals, news papers, websites and university libraries. A sample of eighty students (including both boys and girls) from different schools and colleges residing in urban areas were randomly selected for the present study. The information gathered and obtained for the study was carefully interpreted and condensed into a master chart. The data was then arranged, tabulated and discussed upon and was presented with the help of tables and figures. The data was further statistically analyzed by presenting the information through percentages, mean, standard deviation ( $\delta$ ), coefficient of variation, etc.

#### V Results And Discussions

The study shows that all of the respondents in the age group of 14-18 years eat fast foods. It was only in the age group of 19 years that 4.16 percent respondents were not eating fast foods. Majority of the respondents do not skip lunch. However in the age group of 15 and 18 years, around 50 percent of the respondents skipped lunch. It was revealed that parents were not in favour of their children eating fast foods.. They seem to be very health conscious and possessed adequate knowledge with regard to the health hazards of fast foods. The study further showed that the pocket money of adolescents is affected by eating fast foods. More than 60 percent of the respondents in the age group of 16 and 18 years spend their entire pocket money on fast foods. Where as in the age group of 17 and 19 years only 50 percent and 41.66 percent respondent’s pocket money is affected by eating fast foods respectively. Study highlighted that frequency of consumption of fast food was higher in all the age groups. It was only in the age group of 18 and 19 years that some children were very rarely consuming fast foods. Consumption of fast food was highest during pre-lunch period. During mornings none of the children were consuming fast foods this was because of the fact that children usually spent that time period at their homes.

**Table 1 Main attraction for consuming fast food.**

Age in years	Flavor/taste		Presentation		Variety		Brand		Price	
	No.	%age	No.	%age	No.	%age	No.	%age	No.	%age
14	3	60	-	-	-	-	2	40	-	-
15	2	50	-	-	-	-	2	50	-	-
16	6	75	1	12.5	1	12.5	-	-	-	-
17	7	58.33	1	8.34	1	8.33	3	25	-	-
18	20	74.07	2	7.41	3	11.11	2	7.41	-	-
19	10	41.66	2	8.34	8	33.34	4	16.66	-	-

Table 1 highlights that flavor or taste is the main attraction for consuming fast foods as revealed by majority of the respondents, 75 percent at 16 years of age, whereas the least percentage of respondents bother about brand and presentation of fast food, i.e. 7.4 percent at 18 years of age. Influence of media is the major cause of consuming fast foods among adolescents in urban areas. This was revealed by 80 percent respondents at 14 years of age, 75 percent at 15 year and 50 percent at 17 years. 8.34 percent of respondents at 17 years of age are provided with more pocket money for consuming fast foods. Majority of the respondents at 14, 15 and 17 years of age always purchase branded fast foods. Majority of the adolescents were ready to spend Rs.20-50 per day over buying fast food. Also good number of respondents was ready to spend more than Rs.50 per day over buying fast food.

**Table2: Opinion of respondents about different aspects of fast foods.**

S.No.	Statement	Mean	S.D*	C.V.
1.	You prefer fast foods for taste, convenience and fast service.	4.28	0.86	20.09
2.	The availability of fast foods in different varieties forces you to eat them.	3.83	0.96	25.06
3.	You get lured by the attractive presentation of fast foods.	4.01	0.92	22.94
4.	Eating fast foods occasionally does no harm to your health	3.53	1.02	28.89
5.	Consumption of fast foods is related to your independence making you feel that you have a sort to freedom.	2.7	1.20	44.44
6.	Consumption of fast foods with your friends and family is a form of entertainment for you.	3.38	1.40	41.42
7.	Hi-tech life is more responsible for habit of consuming fast foods in school and college going students.	3.7	1.32	35.68
8.	Advertisements mould your mind in such a way that you are forced to consume certain type of fast foods.	2.95	1.28	43.38
9.	Urbanization has greater influence on changing food habits of urban children	3.86	1.10	28.49
10.	A number of factors contribute to the habit of eating fast food such as working mothers, higher income, more fast food outlets and increased advertising.	3.48	1.14	32.76
11.	Fast food intake for many is largely controlled by availability and cost	3.6	0.98	27.22

\* S.D.: Standard Deviation.

\*\* C.V.: Coefficient of Variations.

When the survey was conducted on the statement that whether the respondents prefer fast food for their taste, convenience and fast service, it was inferred that most of the respondents agreed to it. The similarity in the opinion would be attributed to the fact that most of the teenagers today do not like spending more time on eating and are always in a hurry. Adolescents are attracted by variety. Monotony in the foods offered may cause fatigue in them and they may reject the food. The observation from table 1 indicates that some of the respondents agreed to the fact that the availability of fast food in different varieties force the respondents to consume them, as is reflected from the mean score of 3.83, while the majority of respondents shared a different view point as is clear from coefficient of variation of 25.06 percent. Regarding the opinion of the respondents on whether they get lured by the attractive presentation of fast foods, it was found that most of the respondents agreed to this statement. It is well known fact that even high quality food may be rejected if it is poorly presented and attractively presented food may be accepted well despite of its poor quality. Further the responses on the statement that whether eating fast food occasionally does not cause any harm to health, it was found that majority of the respondents agreed to it, as is suggested from the mean score of 3.53 and coefficient of variation of 28.89 percent. The statements that consumption of fast food is related to respondent's independence, making them feel that they have a sort of freedom, was disagreed by majority of respondents. Regarding the opinion of respondents on the statement that whether consumption of fast food with friends and family is a form of entertainment to them, it was found that most of the respondents from the selected sample disagreed to this. The results did not blame Hi-tech life for habit of consuming fast foods among schools and college students. The

responses on the statement that whether urbanization has a greater influence on changing food habits of urban students, it was found that most of the respondents agreed to it .Regarding opinion of respondents about contribution of various factors like working mothers, high income, etc. to the habit of eating fast food, it was found that majority of respondents agreed to it, as could be inferred from the mean value of 3.48 and coefficient of variation of 32.76 percent. The responses over the statement that consumption of fast foods for many is largely controlled by the availability and cost, was agreed by majority of the respondents. In response to the statement on whether advertisement moulds the mind of people to consume certain types of fast foods, it was found the majority of respondents differed in their opinion, while some had a similar view point.

**Table 3: Opinion of respondents about the Nutritional value of Fast Foods**

S.No.	Statement	Mean	S.D*	C.V** (%)
1.	Knowing that fast foods are low in nutritive value, still you go for them.	2.93	1.20	40.96
2.	Fast foods are high in empty calories (i.e., high in fat) yet you have no objection in consuming them.	3.65	1.34	36.71
3.	Adolescents are more susceptible to nutritional deficiency diseases due to growth spurt, yet they prefer fast foods.	2.61	1.24	47.50
4.	Consumption of fast foods leads to obesity.	3.24	1.10	33.95
5.	Foods of low nutritional density are harmful only when they replace foods that supply required nutrients.	2.92	1.28	43.84
6.	If selections are wisely made fast foods can too be nutritive .	3.68	1.17	31.79

\* S.D.: Standard Deviation.

\*\* C.V.: Coefficient of Variations.

Fast foods have poor nutritional quality as they do not provide any proteins, vitamins and minerals but only supply empty calories to our body. Thus, the excessive consumption of fast foods can lead to many nutritional deficiency diseases and can also result in obesity a life threatening condition. Regarding the opinion of respondents about nutritional value of fast foods, some of them agreed that they have poor nutritional standard while a majority disagreed to this.. The consumption of fast food among adolescents was found to be rising despite of their low nutritional status. Regarding the opinion of the respondents on whether the consumption of fast foods leads to obesity, it was found that majority of respondents were undecided about their view point while some agreed to this fact. This could further be inferred from the mean value of 3.24 and coefficient of variation of 33.95 percent. The response on the statement that whether foods of low nutritional density harm only when they replace foods that supply required nutrients, it was found that majority of respondents agreed as suggested from the mean value of 2.92 while some disagreed as could be inferred from coefficient of variation of 43.84 percent. Opinion of the respondents about the statement that if selections are wisely made fast foods can be nutritive was agreed by majority. Most of respondents disagreed to the statement that adolescents are more susceptible to nutritional deficiency disease due to growth spurt, yet they prefer fast food.

**Table 4: Miscellaneous**

S.No.	Statement	Mean	S.D*	C.V** (%)
1.	Eating of fast foods is the way of showing that you belong to a high society	3.78	1.17	30.95
2.	Consumption of fast foods in more among girls than in boys.	3.64	1.32	36.26
3.	Most popular fast food items are unhealthy.	3.06	1.38	45.09

\* S.D.: Standard Deviation.

\*\* C.V.: Coefficient of Variations.

The responses over the statement that eating of fast food is the way of showing that the respondents belong to a high society was agreed by majority of respondents. When the survey was evaluated for the subject response on the statement that whether consumption of fast food is more among girls than boys, it was found that majority of respondents agreed as is suggested from the mean value of 3.64 and coefficient of variation of 36.26 percent. Regarding the opinion of respondents on the statement that most popular fast food items are unhealthy, it was found that majority of respondents agreed while some disagreed to this and some were undecided about the statement.

## **VI Summary And Conclusion**

The observations of the study are summarized as following:

- Majority of the respondents were girls and most of them in 18 years of age group.
- The majority of them belonged to nuclear families. 35 percent were first born, 30 percent were second born and 35 percent were third born.
- The monthly income of respondent's fathers earning was between Rs.5000-15000 for 30 percent, Rs.15000-25000 for 25 percent and Rs.25000-35000 for 35 percent and Rs.35000-50000 for 10 percent.
- The pocket money for respondents per month ranged between Rs.100-300 for 30 percent, Rs.300-500 for 40 percent, Rs.500-700 for 5 percent, Rs.700-900 for 2.5 percent, Rs.900-1100 for 15 percent and Rs.1300-1500 for 7.5 percent.
- About 35 percent of the respondent's father's occupation was business while as 65 percent respondents father's occupation was Govt. service.
- All the respondents eat fast food. The maximum fast food eaters belonged to the age group 14-18 years. Majority of the respondents do not skip lunch in the school/college and go for fast food.
- It was reported that consumption of fast foods was highest during pre-lunch period.
- It was seen that flavor/taste attracts maximum percent of respondents while going for fast food. Also adolescents in the urban areas consume more fast food due to media influence.
- Most of the respondents prefer branded fast food items and are willing to spend daily Rs.20-50 or more than Rs.50 on buying fast food
- Adolescents prefer fast food for their taste, convenience and fast service and some of the respondents agreed that availability of fast foods in different varieties force them to eat fast foods.
- Majority of respondents disagree that consumption of fast foods is related to their independence and is a form of entertainment for them. It was also seen that they did not blame hi-tech life for habit of consuming fast foods.
- It was observed that majority of the respondents agreed that urbanization has a greater influence on changing food habits of urban students. Opinion of respondents about contribution of various factors like working mothers, higher income, etc to the habit of eating fast foods was accepted by majority of respondents.
- The majority of respondents differed in their opinion that advertisements mould the mind of people to consume certain type of fast food while some had a similar viewpoint.
- It was reported by some of the respondents that fast foods have poor nutritional quality while majority of them disagreed to this fact. The consumption of fast foods among adolescents was found to be rising despite of their low nutritional status.
- Majority of the respondents disagreed that adolescents are more susceptible to nutritional deficiency disease due to growth spurt, yet they prefer fast foods.
- Regarding the opinion of respondents on whether the consumption of fast foods leads to obesity it was found that majority of respondents were undecided about their viewpoint while some agreed to this fact. It was also seen that majority of respondents agreed that foods of low nutritional density are harmful only when they replace nutritious foods, while some disagreed to it.
- Majority of the respondents agreed over the statement that eating of fast food is the way of showing that the respondents belong to a higher society.
- It was also seen that majority of the respondents agreed that consumption of fast foods is more among girls than boys.
- Majority of the respondents agreed that most popular fast food items are unhealthy. The study was assessed with the remark that adolescents in the urban areas consume more fast foods and junk foods than caloric and protein rich foods.

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