

## **“Food Consumption habits of youngsters of Indore City: An Empirical Study”**

**\*.PROF.MUSILEK, Research Scholar, Oriental University Indore**

**\*Dr DINESH KUMAR, Associate Professor, Oriental University Indore**

**Abstract:** *Adolescents and young adults are found to have fast food as more tempting and to be relatively more interested in soft drinks consumption. The frequency of consumption of fast foods is found more among people in their teens and in their twenties. Fast foods are quick to prepare, easy to access, moderately inexpensive, and favored by people of most age groups contain high levels of energy, sugar, and salt, along with low levels of micronutrients and fiber. The present study is to comprehend fast food consumption habits amongst youngsters in Indore City and their awareness for nutritional value, weight gain and health hazards with fast food consumption. The study was conducted in District Indore, quantitative techniques were used for this study to capture all the possible aspects of food consumption habits, the study comprised of structured questionnaire survey, data was collected through self developed questionnaire, t-test was used to test the hypotheses and percentage analysis were used to analyze the rest of the data.*

**KeyWords:** Fast food, Health hazards, youngsters, awareness, home cooked foods

### **Introduction**

Food habits, in general are culture specific, but in the last few decades dramatic changes have taken place due to the fast growing economy, a shift from traditional to modern technologies, globalization, urbanization, travelling to different countries have become very economic and extreme economic internet access have changed the lifestyle of youngsters, now they go for higher studies to abroad so their tastes have evolved and increased demands for “fast” and processed foods can be observed throughout India and across the globe. And these days students prefer to eat in college canteens or in various food chains like KFC, McDonald, Dominos, Barista, Starbucks rather than carrying breakfast and lunch from home and these food chains appeal them like anything. And a decline in purchase of healthy food and adequate nutritional

diet due to amalgamation of various cultures is taking place. Otherwise Indian traditional diets were having great variety and used to offer not only the whole range of nutrients but also used to keep digestion active. Until a few decades ago, Indians used to prefer natural foods over refined foods, and light foods (less oily) (*satvic*) over heavy foods. Our traditional meals used to be mostly plant based (as animal foods were expensive) with spices, and were cooked and eaten fresh at home. They were a combination of cereals, millets, pulses, and spices such as pepper, cumin, asafetida and coriander with curd and coconut satisfying energy and protein requirements.

Lifestyle of students' fraternity is changing dramatically, so the food trend is also tremendously changing, many fast food chains are mushrooming Schmidt et al. concluded that dietary intake of fast food is a determinant of diet quality in adolescents; hence, efforts to reduce fast-food consumption may be useful in improving the diet and risk for future cardiovascular diseases. With the changing life style, an increasing number of people are becoming keen in eating out and visiting fast-food restaurants (Dave et.al,2009) According to the results of Thornton et al.'s study, fast food demand and supply are surging. Rouhani et al. (2012) observed that consumption of fast-food rose in recent past, especially among children and adolescents. The present study is an endeavor to study the fast food consumption habit of students of Indore City.

## Objectives of the Study

- To study the fast food consumption habit of students of Indore City.
- To study the effect of gender on awareness for Nutrition.
- To study the effect of gender on obesity.

## Review of literature

Hassen et al.(2020) in their study investigated the immediate impact of COVID-19 on Qatari consumer awareness, attitudes, and behaviors related to food consumption as the way people were purchasing and consuming food drastically changed during lockdown. People started working from home and spending more time at home and were unable to have access to fast food outside a tremendous change came in their eating habits, attitude and behaviour. Due to lockdown and health awareness due to Corona a massive shift was observed in lifestyle and food and health habits in Qatar. Consumption of unhealthy foods such as fast food like Burger, Pizzas,

Pasta, Sandwiches, French fries and other unhealthy snacks and soft drinks, candy, cookies, cakes, and pastries reduced like anything and a shift towards consumption of healthier food like fruits, healthy home cooked snacks, detoxinating drinks was observed. Through the various social media government of Qatar was motivating people to raise their immunity by avoiding fast foods and for taking healthier diet and Vitamin C. Qatar Government was consistently trying to optimize public health, emphasized upon vulnerabilities to Corona if people will not do dietary changes and stop consuming unhealthy food like fast food.

**Lamarco(2018)**Fast food popularity is increasing every year. Despite the health issues people have irresistible temptation for taste and variety of fast food. Since the 1970's, the fast food industry in the United States has been growing at a enormous speed and the revenue was growing by a multiple of 30.**Saghaian and Mohammadi(2018)** analyzed factors affecting the frequency of fast food consumption among households in Mashhad, Iran. Entertainment and lack of time to prepare food at home were found as biggest reason for consumption of fast food. From negative binomial regression (NBR) model income, education, spouse occupation, other meat consumption, awareness about composition of fast food, availability of fast food restaurants, and advertising variables were estimated as having significant effect on the consumption frequency of fast food by households.

**Lee and Lien (2015)** through their study found that advertisements of fast food and other promotion tools by fast food marketers attract the attention of children and makes the fast food consumption irresistible and reap profits at the expense of children's health.**Chandran et al.(2014)**hypothesized in their study that there was a significant association between fast food consumption and breast cancer among women of 18-75 years as frequent intake of fast food increases dense fat and there is lack of nutritive value.

**Hearst et al. (2013)** said that frequent consumption of fast food menu items are high in fat, sugar, and sodium contribute to poor dietary quality, increases individuals' risk for diet-related chronic diseases. (**Omari and Frempong, 2016**) from their study in some developing countries found that consumption of fast food was associated with food safety problems. It is always heard that fast food consumption has the potential to be harmful to human health. **Afolabi, et al. (2013)** observed that fast foods are high in cholesterol, low in fiber and concentrated sources of energy and can develop cardiovascular health hazards. Also, the excess amount of salt in fast food

enhances the risk of heart attacks, and consumption of fast food and high amount of calorie condiments such as carbonated beverages and sugary sauces all the more multiply such health problems.

**Majabadi et al.(2016)** study indicated that whether it is developing or developed country, fast food consumption is growing at a rapid speed. They did a qualitative study was conducted in 2012 - 2013 in Tehran, the capital of Iran to examine the factors influencing fast-food consumption among adolescents in Tehran. and they collected data through individual semi-structured in-depth interviews and analyzed the data using MAXQDA 10 software. After transcribing the interviews, the findings were divided into three main themes as follows: social factors, personal opinions and family factors, these three again had several categories and subcategories, and the transcribed statements and phrases were placed under each category and subcategory. And the findings of this study indicated that the number of factors promoting fast-food consumption were more tempting than the inhibiting factors and that the diverse factors at the individual and social level influenced fast-food consumption among adolescents.

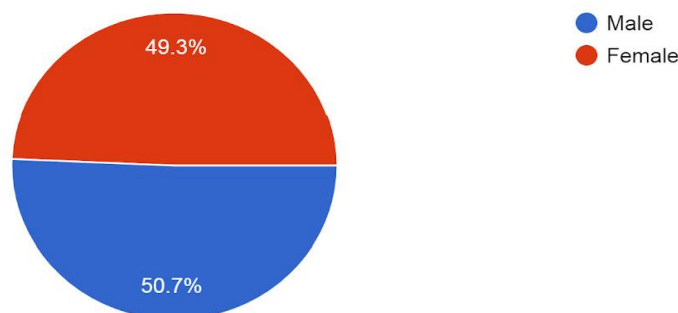
## **Research Methodology**

The study was conducted in District of Indore, quantitative techniques were used for this study to capture all the possible aspects of food consumption habits, The study comprised of structured questionnaire survey, data was collected through self developed questionnaire. The data was organized into tables and figures based on the questions in the questionnaires given to respondents. The result were then analyzed and converted into percentages and pie charts. Rest of the responses or data were analyzed by applying descriptive tools and Chi-Square Method and Independent Sample T-test was applied using SPSS and results are shown different tables and diagram in this paper. Out of 100 respondents only 73 respondents properly responded, only those respondents were considered as sample size of the study. This study was

## Results and Findings

Your Gender:

73 responses

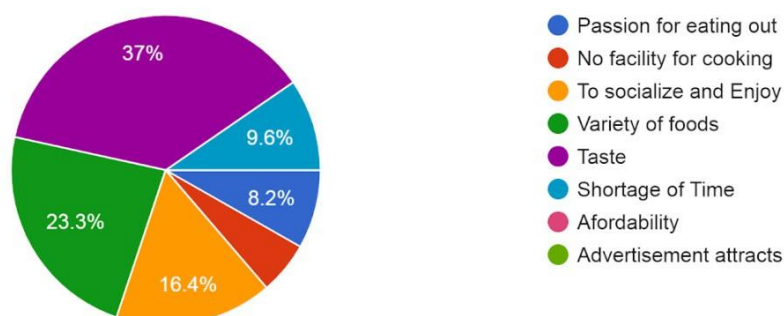


Graph 1

From the above Graph 1 it can be observed that there were almost equal respondents participated in this study, 49.3% were male and 50.7% were female.

What makes you to have fast food?

73 responses

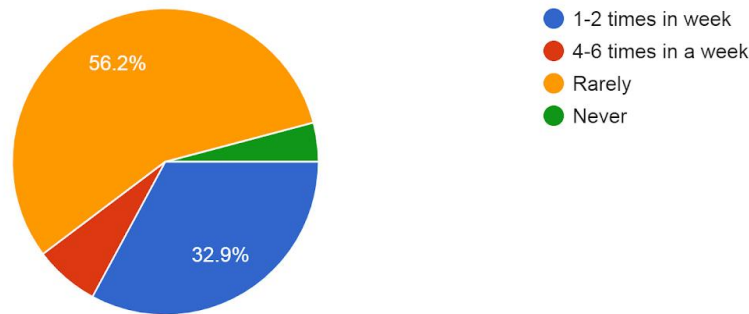


Graph 2

From the above Graph 2 it can be deduced that when respondents were asked what makes you to have fast food 37% indicated that they consume fast food for amazing taste, 23.3% preferred fast food because of variety of fast foods, and 16.4% visit restaurants for fast food to socialize and enjoy, 9.6% preferred fast food for shortage of time and 8.2% had passion for eating out and 5% revealed that they consume fast food as they did not have cooking facility.

How frequently you order Fast Food in a week or Visit a Restaurant

73 responses

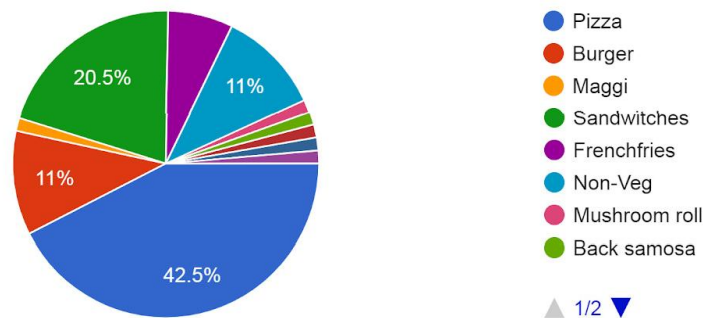


Graph 3

The above **graph 3** indicates that 32.9% order fast food 1-2 times in a week, where as 6.8% order fast food 4-6 times in a week and 56.2% rarely order fast food where as 4.1% never order fast food. So it can be concluded from this study that young students frequently order fast food.

What you like to order most?

73 responses



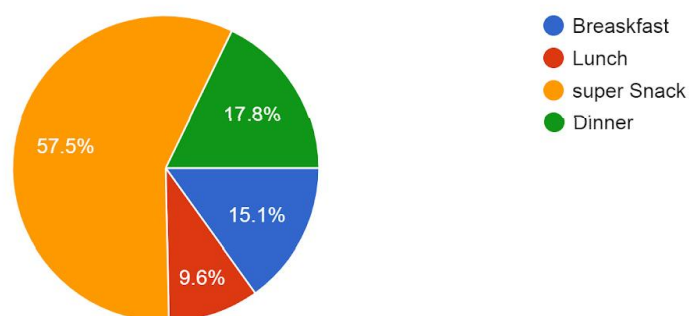
Graph 4

And when they were asked which fast food item they order most 42.5% order pizza most of the times, 20% of the respondents preferred sandwiches and 11% preferred Non-Veg, 11% preferred Burger over other fast food items, 1.4% maggi, 1.4% Back Samosa, 1.4% Momos, 1.4% mushroom rolls, 1.4% preferred to order Pavbhaji and another 1.4% used to order French fries. So from the above it can be concluded that Pizza is most demanded by the youngsters and it is made

up of refined flour (maida) which is not good for health. Most of the food items snacks, pastas, noodles, samosas, the endless list is made of maida are very tasty, Maida is found in all junk food, but these actually affect people's health as it has a high glycaemic index (GI 71), processed foods like white flour, refined sugar, soft drinks are not good for health as they lack nutritional value and thus does not create any reserve of vitamins and minerals and protein, thus no nourishment takes place. When maida containing foods are fried e.g. samosas, Pav, pizzas chaklis, fried noodles, kachori, puran poli, cheese pastas, the body gets an overdose of fat and refined carbs, which disrupts metabolism, Wheat, in its refined form, is harmful to the body as it is not only fatten the body, but also develops many diseases, thus it needs to be avoided.

When do you typically eat fast food?

73 responses

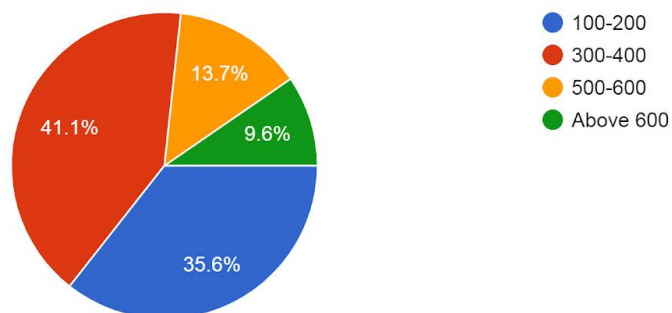


Graph 5

Graph 5 57.5% used to take fast food as super snack, 17.8% used to take fast food in dinner, 15.1% used to take fast food in breakfast, 9.6% used to take fast food in lunch.

How much you spend on purchasing fast food?

73 responses

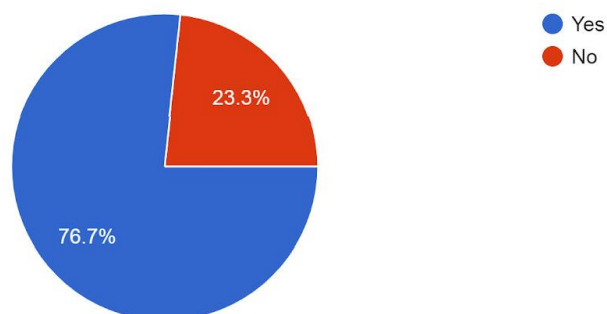


Graph 6

Graph 6 above indicated that 41.1% youngsters used to spend 300-400 rs., 13.7% used to spend 500-600 Rs. on fast food, 9.6% youngsters used to spend above 600 Rs. and 35.6% used to spend between 100-200 Rs. So the above shows youngsters spend good amount on fast food, this clearly indicates they find them tasty and enjoyable.

Do you use app to order?

73 responses



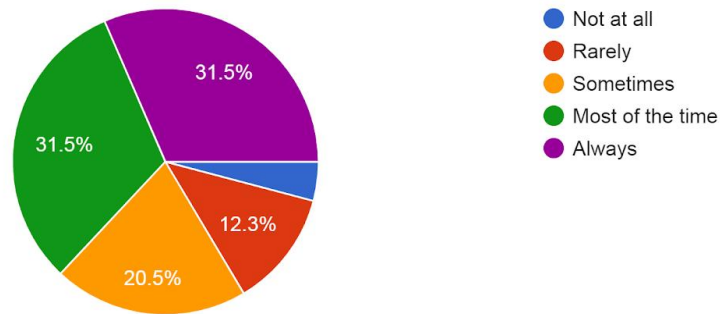
Graph 7

When respondents were asked do they use e-app to order fast food 76.7% said they use e-app to order fast food but 23.3% did not use e-app to order fast food.



How does quality of food influence your choice regarding fast food?

73 responses

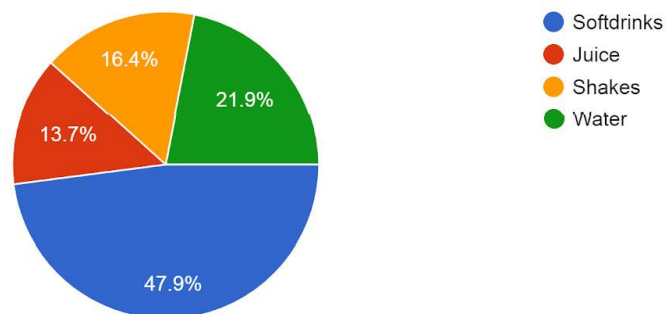


Graph 8

On quality their opinion was 31.5% of the respondents used to always take care of quality and another 31.5% used to take care of quality most of the time, 20.5% used to take care of quality sometimes and 12.3% rarely used to take care of quality of fast food and 4.2% not at all bothered for quality. So from this study it can be deduced that quality was one of the important parameter for most of them while consuming fast food.

Which drink you prefer along with fast food?

73 responses

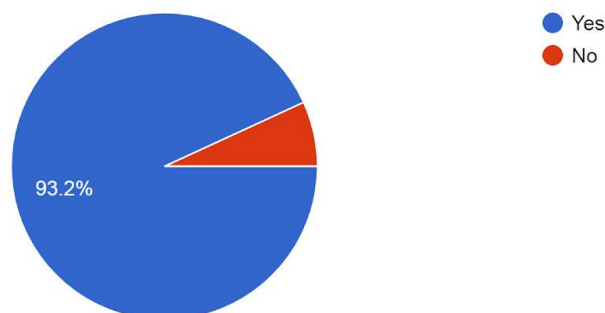


Graph 9

When respondents were asked which drink they prefer along with fast food 47.9% said they take softdrinks along with fast food,16.4% take shakes along with fast food,13.7take juice along and 21.9% take water only.Studies showed that students who take softdrinks consume 22% more calories and 60 percent increase in obesity

Are you aware about health problems with the consumption of fast food?

73 responses

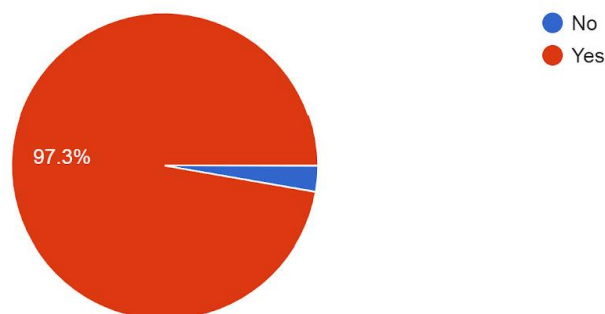


Graph 10

From the above graph it can be deduced that 93.2% respondents were aware that fast food and softdrinks give rise to many health challenges due to excess oil,salt and sugar in softdrinks, the body gets an overdose of fat and refined carbs, which disrupts metabolism, Wheat, in its refined form, is harmful to the body as it is not only fatten the body, but also develops many diseases, thus it needs to be avoided.

Do you think home cooked foods are healthy and safe?

73 responses

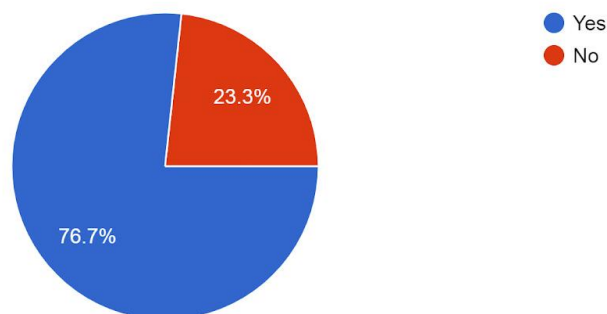


Graph 11

From the above graph one can observe it very well that 97.3% of the youngsters agreed that home cooked foods are much healthier and safe. Home cooked foods are fresh, nutritious and healthful and reduce fat and preserve more of the nutritional value, also when youngsters eat together as a family, parents can control what their children eat. Parents can also start conversations about food and nutrition choices so children will learn how to make better decisions for themselves. Those children who eat with family are less likely to take drugs, drink, or smoke, thus they also tend to perform better in school and colleges. Other studies suggest that children who eat meals at home may suffer less from psychological challenges and because of healthier eating, healthy cookware, fresh food, low carb diets also reduces cardiovascular diseases and diabetes. On an average in America, 46% of Americans eat alone, thus they are more prone to psychological diseases like depression.

Are you concerned about your body weight?

73 responses

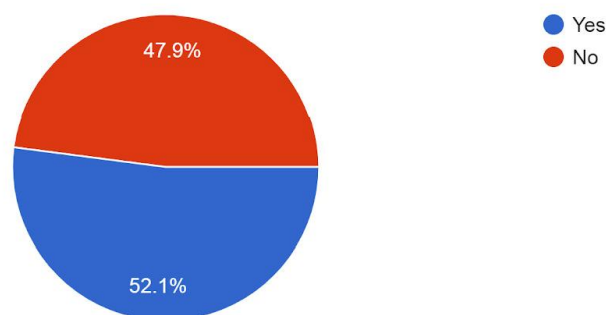


Graph 12

From the above it can be indicated that 76.7% of youngsters were concerned about bodyweight where as 23.3 did not bother for body weight and had tremendous passion for eating fast food.

You think there should be more fast food restaurants in your neighborhood.

73 responses

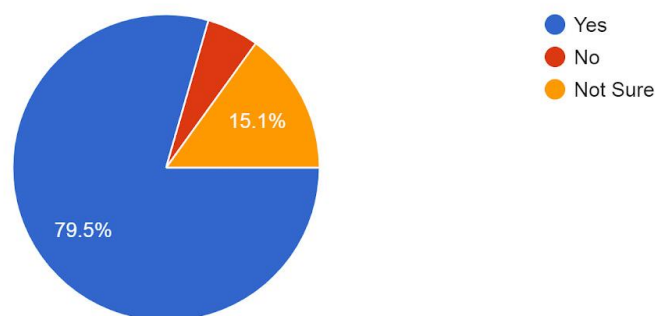


Graph 13

When youngsters were asked do they wish more restaurants in neighborhood 52.1% revealed that they want more restaurants nearby, this shows how passionate they were more consuming fast food, whereas 47.9% did not show any such interest.

After COVID-19 have you reduced consumption of Fast food?

73 responses



Graph 14

From the above graph it can be deduced that youngsters have reduced consumption of fast food after COVID-19 as 79.5% has agreed to the same. as the coronavirus pandemic spreaded widely the way people purchase and consume food has changed since food is obviously the most vital item, COVID-19 also changed people's eating and dietary habits otherwise it would have led to a deterioration of nutritional and health status first at individual and then at country levels. Also, meat consumption decreased because of fear of virus as animals meat may contain

virus (as animals might be hosts of the virus) and instead other higher-value products like fruits and vegetables' consumption increased even though consumers were stocking up nonperishable items.

### Hypotheses:

H01: There is no significant difference between the mean score of male and female with reference to their perception for fast food cause obesity.

H02: There is no significant difference between the mean score of male and female with reference to awareness for nutritional content.

### Independent t-test Results

**Table 1**

Parameters Tested	Gender	t-Value	p value	Mean-Value	Hypothesis
Fast food consumption cause Obesity	Male	-1.874	(.485) Insignificant at 5% level of Significance	3.50	Null hypothesis not Rejected
	Female			3.97	

When respondents were asked are they aware that consumption of fast food cause obesity no significant difference in their mean value was seen hence the t-value(-1.874) was found to be insignificant at 5% level of Significance with a p value of (.485), this showed that both male and female took it same.

**Table 2**

Parameters Tested	Gender	t-Value	p value	Mean-Value	Hypothesis
Taking care of Nutritional Content while purchasing fast food.	Male	-.194	(.824) Insignificant at 5% level of Significance	3.36	Null hypothesis not Rejected
	Female			3.42	

When respondents were asked do they take care of Nutritional Content while purchasing fast food, no significant difference in their mean value was observed hence the t-value(-.194) was found to be insignificant at 5% level of significance with a p value of (.824),this showed that both male and female took it same.

## Conclusion

Fast food consumption is increasing massively day by day, during author's survey it was computed that people prefer fast food out of taste and variety, to socialize, because of advertisement appeal convenience, passion to eat out and food packets which they can just take away from drive through also. And no significant difference between the mean score of male and female with reference to their perception for fast food cause obesity was found and neither for nutritional awareness, male and female students were equally aware.

And these days students prefer to eat in college canteens rather than carrying breakfast and lunch from home and various food chains like KFC, McDonald, Dominos, Barista, Starbucks appeal them like anything. Fast food consumption is definitely harmful to the young students' health. Students who eat fast food have higher intake of energy, fat, saturated fat, sodium, carbonated soft drink, and lower intake of vitamins A and C, milk, fruits and vegetables than those who do not take Traditional Indian foods had higher contents of calcium, iron, phosphorous, and magnesium than rice or wheat. They were also high in fiber, low in fat, and were gluten free. They had the potential to reduce blood cholesterol and sugar and hence were considered good for health chronic diseases such as diabetes, heart disorders, etc. Traditionally, millets and wheat were unrefined, and rice was hand pounded and parboiled which used to ensure better retention of vitamins, minerals, fiber, and a host of useful phytonutrients such as antioxidants. From the above study it was found that youngsters were quite aware of health problems and nutrition deficiency, even though they were very keen for fast food, so the fast food restaurants need to take care on the nutritional value as Food or '*annam*' is the basic necessity of life and existence and '*annam*' is "*aham*". Adolescents and young college students all need food to eat, to grow, to develop physically and mentally, as they are going to become future managers and would be entrepreneurs and to work with optimal capacity, they need to have healthy nutritional food and in present time of COVID-19, it is all the more important, to develop defense against infections, and to keep good health so various fast food chains and local fast food restaurants need to take

due care for the healthy menu having low fat and low carbs and healthy quality ingredients which give adequate nutrition.

## References

Anand, R. (2011), "A study of determinants impacting consumers food choice with reference to the fast food consumption in India", *Society and Business Review*, Vol. 6 No. 2, pp. 176-187. <https://doi.org/10.1108/17465681111143993>

Afolabi, W., O. Oyawoye, S. A. Sanni, and O. O. Onabanjo. 2013. "Proximate and Cholesterol Composition of Selected Fast Foods Sold in Nigeria." *Nigerian Food Journal* 31(1):70– 76.

Beiranvandpour N, Karimi-Shahanjarini A, Rezapur-Shahkolai F, Moghimbeigi A. Factors Affecting the Consumption of Fast Foods Among Women Based on the Social Cognitive Theory . J Educ Community Health. 2014; 1 (1) :19-26  
URL: <http://jech.umsha.ac.ir/article-1-26-en.html>

Factors Affecting the Consumption of Fast Foods Among Women Based on the Social Cognitive Theory, Volume 1, Issue 1 (Spring 2014) J Educ Community Health 2014, 1(1): 19-26

Anand, R. (2011), "A study of determinants impacting consumers food choice with reference to the fast food consumption in India" *Society and Business Review*, Vol. 6 No. 2, pp 176-187.

Bauer KW, Larson NI, Nelson MC, Story M, Neumark-Sztainer D. Socio-environmental, personal and behavioural predictors of fast-food intake among adolescents. *Public Health Nutr.* 2009;**12**(10):1767– 74. doi: 10.1017/S1368980008004394. [PubMed: 19105866]

FAO. Q&A: COVID-19 Pandemic-Impact on Food and Agriculture Q1: Will Covid-19 Have Negative Impacts on Global Food Security? FAO: Rome, Italy, 2020.

Rasmussen M, Krolner R, Klepp KI, Lytle L, Brug J, Bere E, et al. Determinants of fruit and vegetable consumption among children and adolescents: a review of the literature. Part I: Quantitative studies. *Int J Behav Nutr Phys Act.* 2006;**3**:22. doi: 10.1186/1479-5868- 3-22. [PubMed: 16904006]

Dave JM, An LC, Jeffery RW, Ahluwalia JS. Relationship of attitudes toward fast food and frequency of fast-food intake in adults. *Obesity* (Silver Spring). 2009;17(6):1164–70. doi: 10.1038/oby.2009.26. [PubMed: 19247277]

Fanning, J., T. Marsh, and K. Stiegert. 2002. Determinants of Fast Food Consumption, Paper presented at WAEA annual meeting, Long Beach, California, July 28–31.

Hearst, M. O., L. G. Harnack, K. W. Bauer, A. A. Earnest, S. A. French, and J. M. Oakes. 2013. “Nutritional Quality at Eight U.S. Fast-Food Chains: 14-Year Trends.” *American Journal of Preventive Medicine* 44(6):589–594.

Saghaian and Mohammadi (2018). Factors Affecting Frequency of Fast Food Consumption *Journal of Food Distribution Research* Volume 49, Issue 1

Omid Ghoochani, Razieh Torabi, Mohammad Hojjati, Mansour Ghanian, Miranda Kitterlin (2018). Factors influencing Iranian consumers' attitudes toward fast-food consumption, *British Food Journal*, ISSN: 0007-070X.

Lee, S., and N. Lien. 2015. “The Influence of Adult Family Members on Children's Fast Food Consumption: A Health Belief Perspective.” *Journal of Communication in Healthcare* 8(3):185–196.

Omid Ghoochani, Razieh Torabi, Mohammad Hojjati, Mansour Ghanian, Miranda Kitterlin (2018). Factors influencing Iranian consumers' attitudes toward fast-food consumption, *British Food Journal*, ISSN: 0007-070X.

Chandran, U., McCann, S. E., Zirpoli, G., Gong, Z., Lin, Y., Hong, C., Bandera, E. V. (2014). Intake of energy-dense foods, fast foods, sugary drinks, and breast cancer risk in African American and European American women. *Nutrition and Cancer*, 66(7), 1187-1199. doi:10.1080/01635581.2014.951737.

Sayed Saghaiana! and Hosein Mohammadi (2018). Factors Influencing Fast-Food Consumption Among Adolescents in Tehran: A Qualitative Study *Iran Red Crescent Med J*. 2016; In Press (In Press): e23890. Volume 49, Issue 1.

Krolner R, Rasmussen M, Brug J, Klepp KI, Wind M, Due P. Determinants of fruit and vegetable consumption among children and adolescents: a review of the literature. Part II:



qualitative studies. *Int J Behav Nutr Phys Act.* 2011;8:112. doi: 10.1186/1479-5868- 8-112. [PubMed: 21999291]

Monge-Rojas R, Smith-Castro V, Colon-Ramos U, Aragon MC, Herrera-Raven F. Psychosocial factors influencing the frequency of fast-food consumption among urban and rural Costa Rican adolescents. *Nutrition.* 2013;29(7-8):1007–12. doi: 10.1016/j. nut.2013.01.021. [PubMed: 23644009]

European Journal of Economics, Finance and Administrative Sciences ISSN 1450-2275 Issue 48 (2012) Review of Trends in Fast Food Consumption Aysha Karamat Baig Scholars, Management Sciences Department Riphah International University, Islamabad, Pakistan Tel: +0092-300-6649567 E-mail: ayshakaramat@gmail.com Munazza Saeed Scholars, Management Sciences Department Riphah International University, Islamabad, Pakistan Tel: +0092-345-7800230 E-mail: myz\_munaza@yahoo.com

Kipke MD, Iverson E, Moore D, Booker C, Ruelas V, Peters AL, et al. Food and park environments: neighborhood-level risks for childhood obesity in east Los Angeles. *J Adolesc Health.* 2007;40(4):325– 33. doi: 10.1016/j.jadohealth.2006.10.021. [PubMed: 17367725]

Krolner R, Rasmussen M, Brug J, Klepp KI, Wind M, Due P. Determinants of fruit and vegetable consumption among children and adolescents: a review of the literature. Part II: qualitative studies. *Int J Behav Nutr Phys Act.* 2011;8:112. doi: 10.1186/1479-5868- 8-112. [PubMed: 21999291]

Lee, S., & Lien, N. (2015). The influence of adult family members on children's fastfood consumption: a health belief perspective. *Journal of Communication inHealthcare*, 8(3), 185-196. doi:10.1179/1753807615Y.0000000017.

Monge-Rojas R, Smith-Castro V, Colon-Ramos U, Aragon MC, Herrera-Raven F. Psychosocial factors influencing the frequency of fast-food consumption among urban and rural Costa Rican adolescents. *Nutrition.* 2013;29(7-8):1007–12. doi: 10.1016/j. nut.2013.01.021. [PubMed: 23644009]

Hyun-Sun Seo <sup>1</sup>, Soo-Kyung Lee, Soyoung Nam Affiliations expand."Factors influencing fast food consumption behaviors of middle-school students in Seoul: an application of theory of planned behaviors, PMID: 21556232

Types of Economic Factors That Can Affect the Fast Food Industry By Nicky LaMarco Updated December 10, 20, **Economics**

The United Nations System Standing Committee on Nutrition Food Environments in the COVID-19 Pandemic. Available online: <https://www.unscn.org/en/news-events/recent-news?idnews=2040> (accessed on 8 June 2021).