



Junk Food Survey Report

Authors

Kanika Arora

Assistant Professor

Shri Ram College of Commerce, Delhi University

4/52 1st Floor Roop Nagar

Delhi – 110007

E-mail: arora_kanika@ymail.com

Nidhi Tanwar

Assistant Professor

Shri Ram College of Commerce

Delhi

House no. 1039, Sector – 7, Urban estate

Kurukshetra, Haryana

Email: tanwarnidhi24@gmail.com

Abstract

Background and Aim: Junk foods are rich in calories, salt and fats. Excess consumption of junk foods would lead rise to wide variety of health disorders. The aim of the present study was to know about junk food eating habits of students, their ingredients, nutritive value and their impact on human health.

Subjects and Methods: Self-administered questionnaire was used to collect the data. Students from Shri Ram College Of Commerce, University Of Delhi were selected for this study as a sample population and the total sample size was represented by 300 students.

Results: The analysis showed that around 28% of students were completely aware about harmful chemicals & 25% of respondents were completely ignorant of harmful chemicals present in junk foods. In the questionnaire almost 76% of students gave their opinion about the junk food as unhealthy. Based on the study, it was found that 27% were taking junk food as an alternative to breakfast, 41% of individuals like junk foods for their taste & 35% for it's easy availability & time saving nature & is one of the predominant factor for the choice of junk foods.

Note: our results are based on the assumption that all the respondents have answered the questions honestly

INTRODUCTION

Junk food is a term for food that is of little nutritional value and often high in fat, sugar, salt, and calories. Junk foods typically contain high levels of calories from sugar or fat with little protein, vitamins or minerals. Most of the junk foods are rich in fats and poor in other nutrients. Common junk food includes Fast food, chips, candy, gum, sweet desserts, sugary carbonated beverages as well as alcoholic beverages. Many

foods such as hamburgers, pizzas can be considered either healthy or junk food depending on their ingredients and preparation methods. The more highly processed items usually fall under the junk food category. What is and is not junk food can also depend on the person's class and social status, with wealthier people tending to have a broader definition while lower-income consumers may see

fewer foods as junk food, especially certain ethnic foods.

HARMFUL INGREDIENTS OF JUNK FOODS

1. **PALM OIL:** These are evil anti-nutrients in the form of trans fats which help packaged foods to stay "fresh," meaning that the food can sit on the supermarket shelf for years without ever getting stale or rotting.

2. **ARTIFICIAL SWEETENERS:** Aspartame (NutraSweet, Equal), saccharin (Sweet'N Low, SugarTwin), and sucralose (Splenda) are some examples of artificial sweeteners added to our foods which may be even harder on our metabolic systems than plain old sugar.

3. **SODIUM BENZOATE AND POTASSIUM BENZOATE:** These are preservatives which sometimes are added to soda to prevent mold from growing, but benzene is also linked with its serious thyroid damage.

4. **BUTYLATED HYDROXYANISOLE (BHA):** BHA is another potentially cancer-causing preservative, but it has been deemed safe by the FDA

HARMFUL EFFECTS OF JUNK FOODS ON HUMAN HEALTH:

A no. of studies have been conducted worldwide which had proved the harmful effects of junk food consumption. Through these examples we have tried to bring your attention towards this subconscious threat of junk food.

EXPERIMENT @ SCRIPPS RESEARCH INSTITUTE USA: A study by Paul Johnson and Paul Kenny at the Scripps Research Institute in 2008 suggested that junk food consumption alters brain activity in a manner similar to addictive drugs like cocaine and heroin. For this study a set of rats were selected and were given junk foods. After many weeks with unlimited access to junk food, the pleasure centers of rat brains became desensitized, requiring more food for pleasure. After the junk food was taken away and replaced with a healthy diet, the rats starved for two weeks & died instead of eating nutritious food.

REPORT OF BRITISH JOURNAL OF NUTRITION

A similar study by 2007 British Journal of Nutrition found that female rats who eat junk food during pregnancy increased the likelihood of unhealthy eating habits in their offspring.

REPORT OF FEDERATION OF AMERICAN SOCIETIES FOR EXPERIMENTAL BIOLOGY: suggests that babies of mothers with a high-sugar and high-fat diet while pregnant are more prone to junk food themselves. The study was conducted on rats and suggests that pups "whose mothers eat excessive amounts of high-fat, high-sugar junk foods when pregnant or breastfeeding are likely to have a greater preference for these foods later in life."

INDIAN FAST FOOD INDUSTRY

The Indian fast Food Industry has witnessed high growth strides in the past years, with increasing disposable income; exposure to a number of cuisines; and consumers' willingness to experiment a mix of both Western and local menu. It has not only provided convenience to people who shuttle between home and work for a bigger part of the day but also eliminated the requirement of conventional cutlery.

As per a new research report titled 'Indian Fast Food Market Analysis', currently the Indian fast food industry stands at a massive size of 47 billion, driven by a growing number of working professionals and increasing westernization.

As per an ongoing study on the Indian fast food industry, there has been a major shift in food habits in the metropolitan cities encouraging the manufacturers to introduce innovative flavors in noodles and pastas to suit Indian consumers. Further, the enhancement of fried instant noodles' condiment, good performance of non-fried noodles, and the subsequent release of coarse cereal noodles are some of the main trends currently prevailing in the Indian market. About 86 per cent of households prefer to consume instant food over traditional food due to steep rise in dual income level & standard of living, convenience and influence of Western

countries. As a result, fast food menus comprising pizza, burger, sandwiches, etc are gaining wider acceptance from the Indian consumers.

Major players in this sector are creating a competitive environment for future growth. And in order to cater to this augmented customer base, Nirula's is increasing its existence in metro cities along with the Tier-2 and Tier-3 cities through different formats. The new outlets in cities, such as Amritsar, Patna, Bhopal, Pune and Ludhiana would mainly be Family Style Restaurants (FSR), ice cream kiosks and parlors. Likewise, KFC has plans to increase its existence from 21 cities at present to around 75 cities through its objective to operate 500 restaurants in India by 2015. The company is eager to spread wings to new cities such as Hubli, Madurai, Salem and Mysore in the south, and in the north in Kanpur, Allahabad.

SUBJECTS AND METHODS OF OUR SURVEY

The present survey was conducted in Delhi, India. The population sample included students from Shri Ram College Of Commerce, University Of Delhi. The sample population 300 individuals were chosen for the study. Questionnaires were distributed to the students present in the classrooms. Among the 300 respondents, 175 were males and 125 females. All the participants were in the age group from 17-28 years and the mean age was 21.8 years. The questionnaire was distributed and data collected in the month of October, 2012. A single page questionnaire containing set of 15 multiple choice questions was prepared and distributed. The students were given a brief overview about junk foods and their ill health effects. The responses were collected and counted manually based on the options specified for each question framed. The participants were provided 15 minutes to complete the questionnaire framed.

RESULTS

Favourite Junk food:

The total sample size includes (N=300 individuals). The type of junk foods preferred by the individuals

is given in table 1. Nearly 53% of respondents preferred fast food, followed by 23% of individuals who liked snacks, 15% consumed soft drinks and the remaining 7% preferred to take candies.

Favorite Fast Food	Respondent's count(n=300)
Pizzas , Burgers	159
Beverages	69
Chocolates	45
Potato Chips & Other Snacks	27

Table 1: Respondent's favorite junk food

A. Junk food Eating Habit

Three Out of ten questions were asked to analyze the eating habit of the students.

Q1.Consumption Of Junk Foods As An Alternative To Breakfast: Around 41% of individuals indicated that they do not take junk food as an alternative to breakfast, 32% of students indicated that they would take rarely and that to very least quantity, 27% indicated they would take junk food as breakfast. It is shown by fig. 1 as follows:

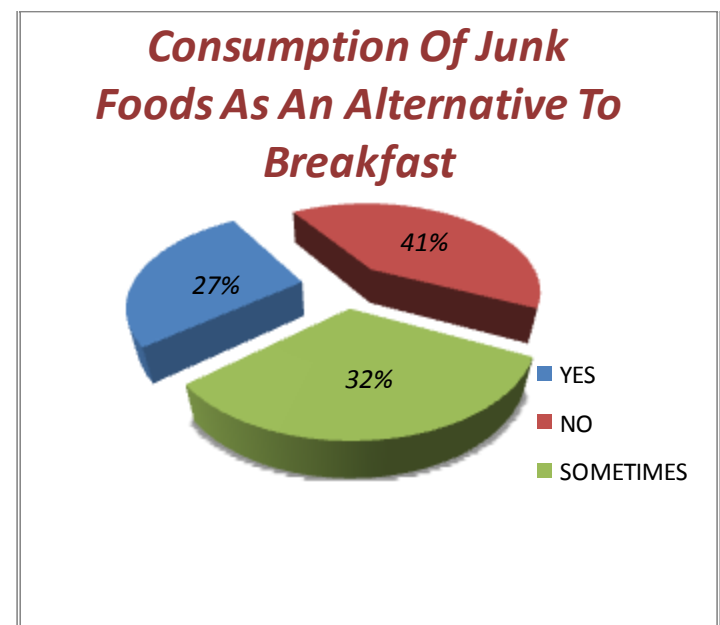


Figure 1: Junk Foods as an Alternative to Breakfast

Q2. Factors Influencing Consumption Of Junk Foods: When the students were asked to select the factor that influenced them in selecting the type of the junk food, 41% opted for taste, 35% due to its ease in availability & less time consuming, 13% said they are influenced by advertisements and only 11% accepted it as a part of their lifestyle. The factors influencing the choice of selecting a junk food is given in figure 2 as follows:

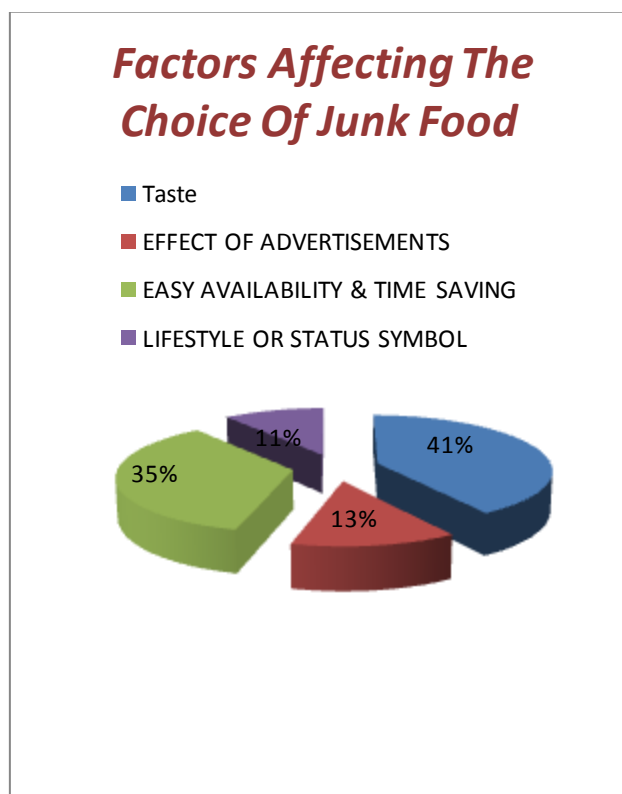


Figure 2: Consumption of junk food products as breakfast

Q3. Frequency of Junk Food Consumption:

The frequency of junk food intake by the individual per week is given in figure 3. It is found that 26% opted for more than times per week, 45% percentage of students opted for two times per week and 29% for once a week.

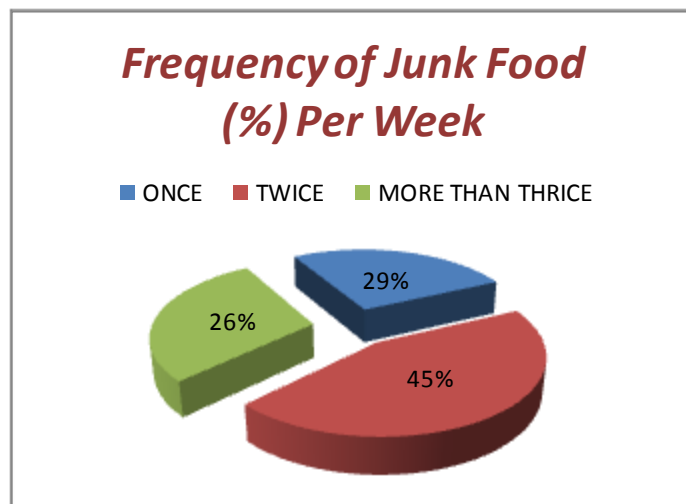


Figure 3: Number of servings of junk food by individuals per week.

B. Awareness about the Junk Food:

Out of ten questions, four were asked to analyze the student awareness about the junk food facts. Nutrient Fact Labels: for the question related to nutrient facts labels awareness 22% checked the label more often, 49% do not check label, and 29% individuals checked rarely.

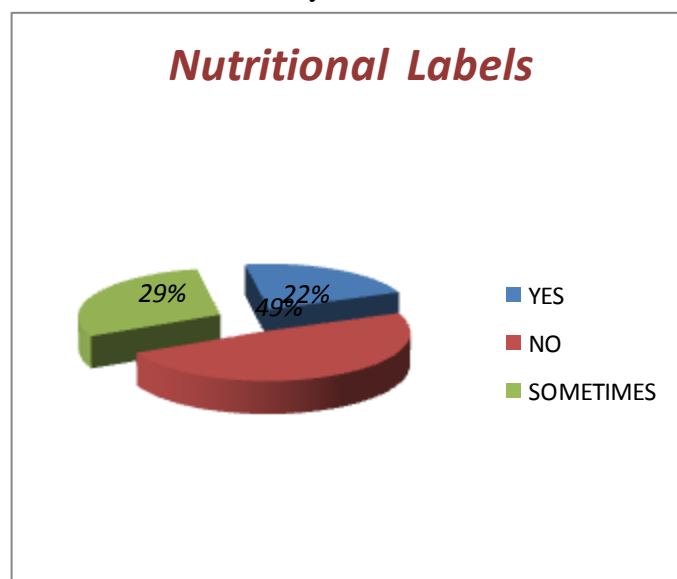


Fig.4 Awareness of Nutritional Labels On Junk Foods

2. Awareness about Presence of Chemicals in Junk Foods: In case of chemicals and their safety level information, 28% of the students were aware of it, 47% of students were unaware, and 25% of the students have specified that they had some idea about some chemicals and their safety levels.

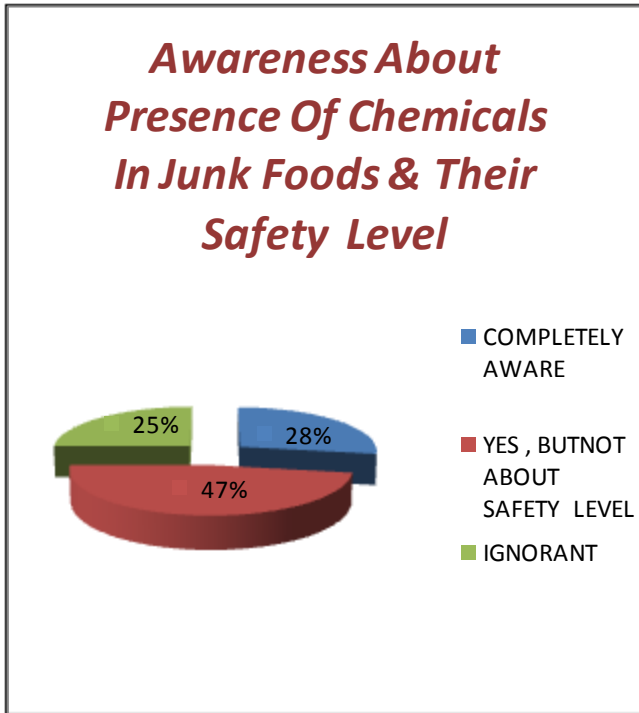


Fig.5 presence of chemicals in junk foods

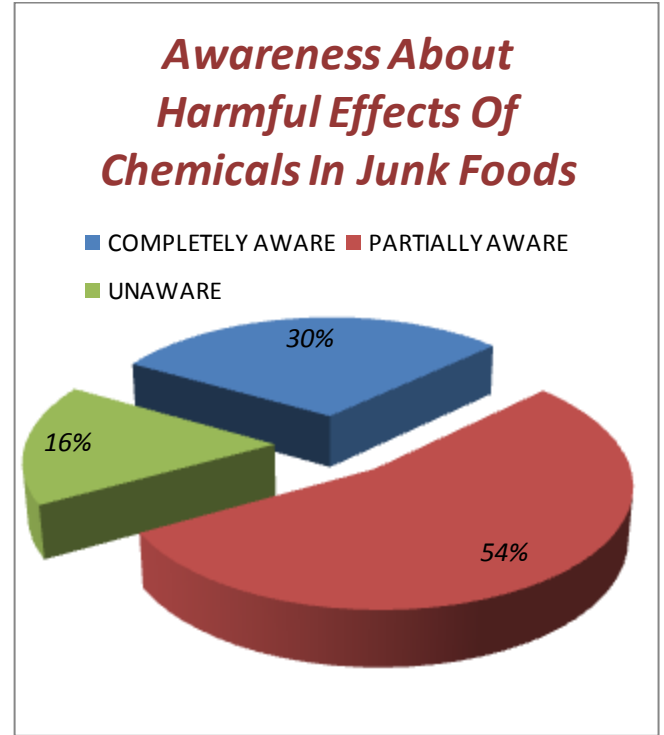


Fig. 6 awareness about harmful effects of junk foods

Q3.Harmful Effects of Chemicals Present When asked about the harmful effects of chemicals in junk food, 30% of the students said they were completely aware of the consequences, 54% partially aware and only very few 16% students have said they were completely unaware of the chemicals present in junk food consequences.

Above Data Can Be Presented The In A Single Diagram As Follows:

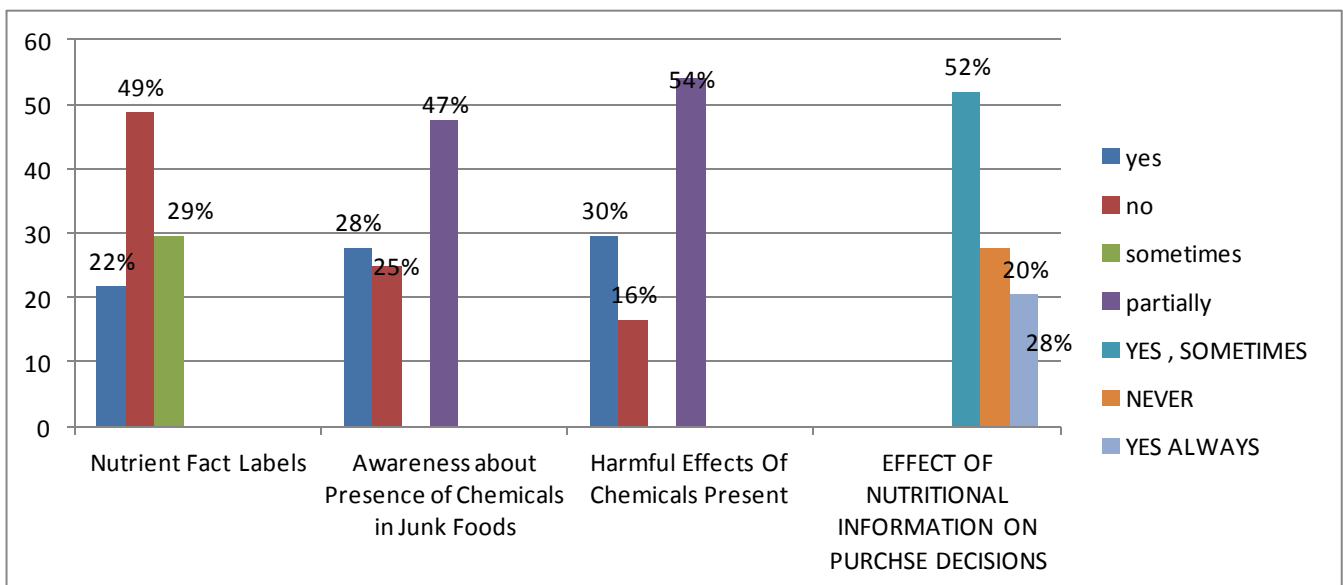


Figure 8: Response to various parameters such as quality, nutrient fact label, chemicals safety and its harmful effects.

B.Opinion about the Junk Food

1. Perception about Junk Food: under this section a question was asked whether you consider junk food healthy or not. In the figure five it is evident that about 24% of the respondents considered junk food as unhealthy and remaining 76% considered junk food as healthy.

It is shown with the help of following fig. (9)

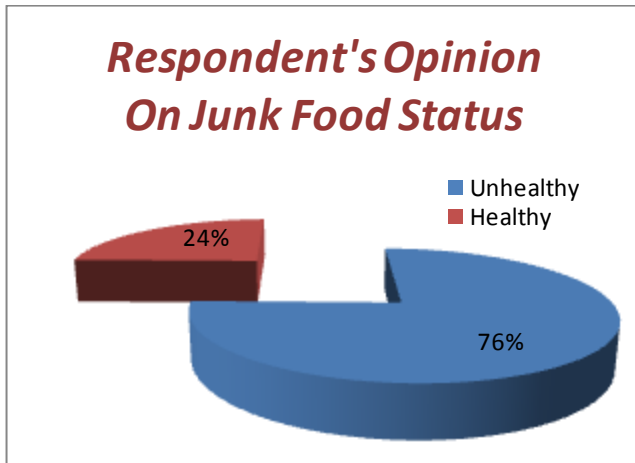


Figure 9: Data representing the percentage of responses about junk food being health or not.

2. **Junk Food Addiction:** under this, question was asked whether you consider junk food addictive or not. 44% of the respondents considered junk food as addictive, 29% considered junk food as non addictive while 27% of the respondents were unable to answer.

It is shown with the help of following fig (10):

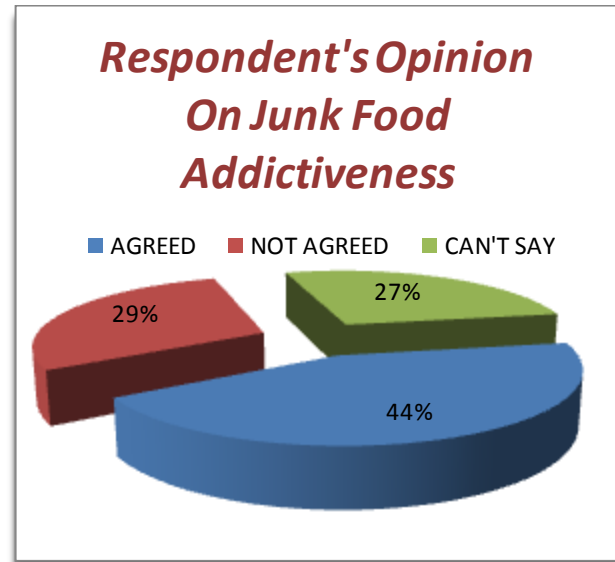


Figure 10: Data represents the opinion of the study population on whether junk food is addictive or not :

RELATIONSHIP BETWEEN JUNK FOOD CONSUMPTION, RESIDENTIAL STATUS & PERCENTAGE OF INCOME SPENT ON JUNK FOODS

For establishing a relationship between junk food consumption & residential status three questions were asked:

Are you a permanent resident of Delhi?

Percentage of income spent on junk foods?

How many times you take junk food during a week time?

Out of 300 students surveyed by us 59.36% respondents were non Delhiites & 40.54% were Delhiites.

42.13% of Non delhiites take junk food more than or equal to thrice a week ,53.3% of them take junk food twice a week & only 4.49 % of them take junk food once a week.

In case of delhiites , 9.1 % of them take junk food more than or equal to thrice a week ,31.9% of them take junk food twice a week & 59% of them take junk food once a week.

However, if we talk in terms of finance available & frequency of junk food consumption, we found that 37% of non delhiites spent more than rs.3000 in a month over junk foods as compared with with delhiites in case of which only 16.39% of them spent more than rs 3000 a month over junk food

consumption. Thus, we can safely conclude that students belonging to other states are more

exposed to junk foods than the students belonging to Delhi only. It is shown by fig. 11

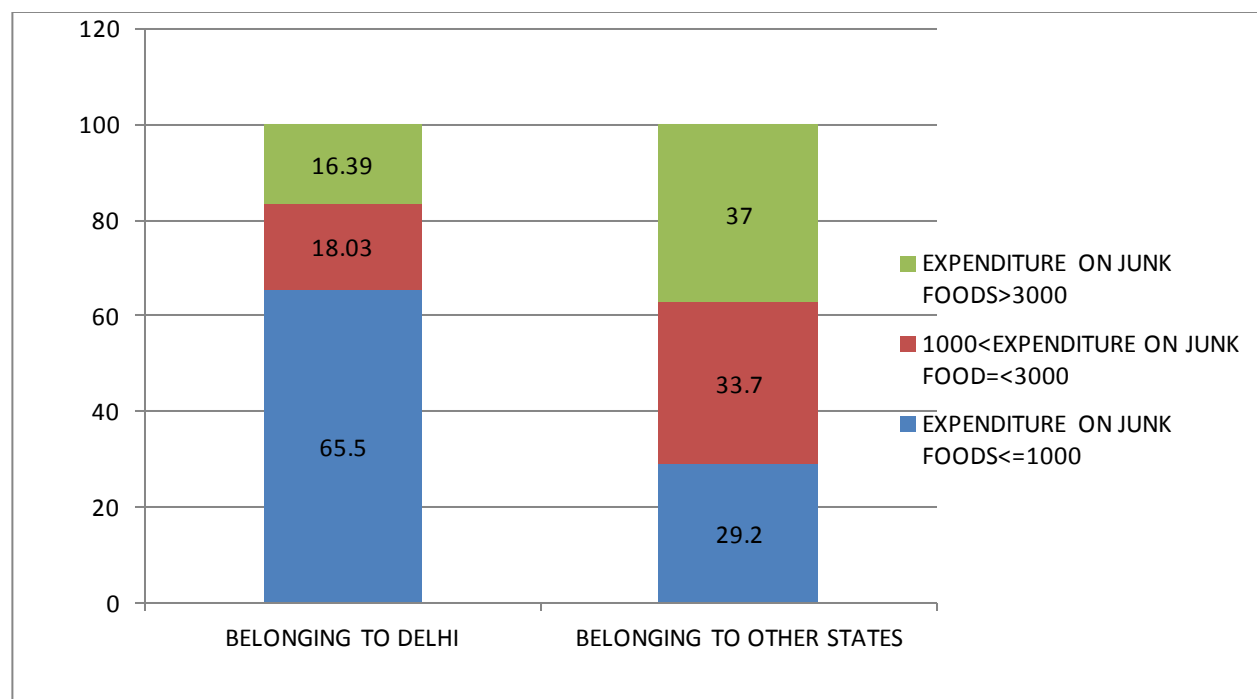


Fig.11. relationship between junk food consumption, residential status & amount spent.

THUS, from the above figure it is absolutely clear that consumption of junk foods depend upon the residential status of an individual. A student residing in a pg is more likely to consume junk food as he will be having no access to homemade food, and thus, falling in vicious circle of junk foods.

Another reason may be the easy availability and instant nature of junk food. Since, students residing away from their homes are shy to cook their own or go to some special places for home made foods because of lack of time.

Thus, Non Delhiites Are More Prone To The Harmful Effects Of Junk Foods. A Tiffin Delivery Service To The Door Steps Of Students By Any Entrepreneurial Organisation Will Prove A Boon In Curbing This Menace Of Junk Foods..

CONCLUSION

The focus of my finding include the views of adolescents on junk foods, causes of their inclination towards junk food, the harmful health effects of overconsumption of junk food products. From our study we have identified certain factors responsible for increased eating habits of junk foods that include: First, the outstation students

residing in Delhi has no alternatives for food which are both cost effective & time saving. Second, the role of television advertisements attracts the college students to junk foods. Thirdly, there is a greater need for the younger generation to understand the nutrient facts and various chemical additives that are added to enhance junk food eating since the matter of junk food eating is of personal choice rather than any governmental regulations.

APPENDIX

Questionnaire

Are you a permanent resident of Delhi?

A. Yes B. No

In your opinion do you consider junk food is healthy or not?

A. Yes B. No

3. What are the factors influencing the choice of junk food?

A. Time B. Taste
C. Changing Lifestyles D. Influence Of Advertisements

4. What is your favorite junk food?

A. Fast Food B. Snacks
C. Soft Drinks D. Candies

5. Where do you often have junk food?

A. Food Joints B. Canteen
C. Kiosks & Roadside Stands

6. How many times do you eat junk food on an average per week?
 A. Once B. Twice
 C. Thrice D. Three Times or More
7. Do you take junk food as an alternative to breakfast?
 A. Yes B. No
 C. Sometimes
8. Do you consider junk food as addictive?
 A. Yes B. No
 C. Can't Say
9. Do you check the nutrient fact label in the junk food?
 A. Yes B. No
 C. Sometimes
10. Are you aware about the chemicals present in the junk food and its safety level?
 A. Yes I Know B. Partially Aware
 C. Unaware
11. Do you really know the harmful effects of chemical present in junk food?
 A. Yes, Completely Aware B. No
 C. Others
12. Does the nutritional information about a product really influence your decision to buy junk food?
 A. Yes, Always B. Yes, But Sometimes
 C. never
13. Have you noticed any adverse impact on your health due to junk food?
 A. Yes, Substantial. B. Yes, But Not Substantial
 C. No
14. Do you think government is adequately monitoring junk food quality?
 A. Yes B. No
 C. Maybe
15. How much amount (approx) do you spend on junk food consumption?
 A. <1000. B. Rs 1000 – Rs 3000
 C. >3000.

REFERENCES

1. Phillips SM, Bandini LG, Naumova N, et al. Energy-dense snack food intake in adolescence: longitudinal relationship to weight and fatness. *Obes Res* 2004; 3: 461-472. Doi: 10.1038/oby.2004.52
2. Hu FB, Malik VS. Sugar-sweetened beverages and risk of obesity and type 2 diabetes: epidemiologic evidence. *Physiol*

- behave 2010; 1:47-54. Doi: 10.1016/j.physbeh.2010.01.036
3. Gideon Yaniv, Odelia Rosin, Yossef Tobol. Junk food, home cooking, physical activity and obesity: The effect of the fat tax and the thin subsidy. *J Public Economics* 2009; 93: 823-830. Doi:10.1016/j.jpubeco.2009.02.004
 4. Martin SB, Rhea DJ, Greenleaf CA, Judd DE, Chambliss HO. Weight control beliefs, body shape attitudes and physical activity among adolescents. *J Sch Health* 2011; 5: 244-250. Doi:10.1111/j.17461561.2011.00585.x.
 5. Scaglioni S, Salvioni M, Galimberti C. Influence of parental attitudes in the development of children eating behavior. *Br J Nutr* 2008; 99: S22-S25. Doi: 10.1017/S0007114508892471
 6. Martha Y. Kubik, Melanie Wall, Lijuan Shen, Marilyn S. Nanney, et al. State but not District Nutrition Policies Are Associated with Less Junk food in Vending Machines and School Stores in US Public Schools. *Journal of Am Diet Assoc* 2010; 110: 1043-1048. Doi:10.1016/j.jada.2010.04.008.
 7. Mikolajczyk RT, Maxwell AE, Naydenova V, Meier SE, et al. Depressive symptoms and perceived burdens related to being a student: Survey in three European countries. *Clin Pract Epidemiol Ment Health* 2008; 4:19. Doi: 10.1186/1745-0179-4-19.
 8. Von Ah D, Ebert S, Ngamvitroj A, Park N, Kang DH. Predictors of health behaviours in college students. *J Adv Nurs* 2004; 48: 463-474. Doi: 10.1111/j.1365-2648.2004.03229.x.
 9. Subar AF, Krebs-Smith SM, Cook A, Kahle LL. Dietary sources of nutrients among U. S. children. *Pediatrics* 1998; 102: 913-23.
 10. Neuhouser ML, Kristal AR & Patterson RE. Use of food nutrition labels is associated with lower fat intake. *J Am Diet Assoc* 1999; 99: 45-53. Guthrie JF, Morton JF. Food sources of added sweeteners in the diets of Americans. *J Am Diet* 2000; 100:43-51 Doi: 10.1016/S000.28223(00)000183