

## **AWARENESS ON ILL EFFECTS OF JUNK FOOD AMONG HIGHER SECONDARY STUDENTS IN TIRUNELVELI DSTRICT**

**Dr. M. Maria Saroja,**

**Associate Professor of Biological Science and Research Director,**

St. Ignatius college of Education, Palayamkottai

**E. Michael JeyaPriya,**

**Assistant Professor of Biological Science,**

St. Ignatius college of Education, Palayamkottai.

### **Abstract**

Junk foods are rich in calories, salt and fats. Excess consumption of junk foods leads rise to wide variety of health disorders. Foods rich in high fat and sugar leads to weight gain along with other problems like infections, food poisoning, cancer, ulcer and dental diseases. Nutrition counselling regarding the importance of balanced diet, harmful effects of junk foods will help to curb the junk food addiction and improving their nutritional status. The main objective of the study was to find out the awareness on the ill effects of Junk food among Higher Secondary Students in Tirunelveli district. Survey method was adopted in this study. Sample consists of 300 Higher Secondary Students in Tirunelveli. Junk Food Awareness Scale was developed by Maria Saroja. M and Michael JeyaPriya.E (2018) has been used for collecting data. Mean, SD and 't' - test was used for analysis the data. Present study revealed that, there was a significant difference among Higher Secondary Students in their awareness about the ill effects of Junk food.

**Key words:** Junk food, food poisoning, Food addiction.

### **INTRODUCTON**

**“Let food be thy medicine and medicine be thy food” –**

#### **Hippocrates**

Junk food has serious health and social effects. The children exposed to such foods with high in energy, fats, added sugars and low in nutrients may lead to serious health hazards. The prevalence of fast food consumption among school children is high they spend their pocket money in buying such unhealthy foods (Pizza, burgers, soft drinks, cookies and fast food items). School children are getting addicted to junk food, which indicates a serious public health

emerging major public health problem throughout the world among adolescents. Junk food is an energy dense food with high amount of refined sugar, white flour, trans-fat, polyunsaturated fat, salt and numerous addictive (Arya.G&Mishra.S,2013). Food like chips, chocolate, soft drinks, pizza, noodles etc. are generally taken as junk food. Junk food eating habits start from young and depend on the environment to cultivate healthy habits in children, the school being the next-best home of learning and nurturing. Most of the school children during their meal time eat junk food and get addicted to its taste, but it has low nutritive value and high calories which results in obese. With the rise in the incidence of obesity and overweight amongst youngsters and adults, the dark side of 'junk food' should be focused among the school children.(Ashakran and Deepthi,R, 2012). Junk food is also laced with colours which are often inedible, carcinogenic and harmful to the body. Food colouring can cause hyperactivity and lapse in concentration in children, resulting in child disabilities (Sharma,V,2013). The aim of the present study was to know about the awareness on the ill effects of junk food.

### **SIGNIFICANCE OF THE STUDY**

Junk food has become a major problem in our society. Teenagers are now-a-days known as junk food generation. Many countries are taking action in banning junk food advertising in children's programme. The improper diet has both short- term and long-term ill effects in the body. School students give much importance to taste and deliciousness of junk food. They are unaware of the phosphate containing soda drink children who consume junk food with high amount of fat, salt and sugar is linked with growing non-communicable disease such as diabetes and hyper tension. Intake of junk food increase the risk of prostate and breast cancer , clogging of arteries at the age of 30, osteoporosis at an early age, vulnerability to slow growth, tooth decay and obesity. The students must be aware of the chemicals, addictive and colouring agents present in the junk food to increase the taste and flavour. It is necessary for adolescents to know about the harmful effects of Junk food so that they can control the disease conditions and improve their health status. Students are partly aware of the risks related to prolonged consumption of high sodium, Trans fatty acids rich sodium carbonated drinks. The significance of this research is to enlighten the students about the dangerousness of junk food in harming the health.

### **OBJECTIVE OF THE STUDY**

To find whether there is any significance difference between Higher secondary students in their awareness towards the ill effects of Junk food with reference to the following background variables

- (i) Gender
- (ii) locality of residence
- (iii) Medium of Instruction
- (iv) Parent's educational qualification

**HYPOTHESIS OF THE STUDY**

There is no significant difference between Higher Secondary Students in their awareness towards ill effects of Junk food with reference to the following background variables.

- (i) Gender
- (ii) locality of residence
- (iii) Medium of Instruction
- (iv) Parent's educational qualification

**POPULATION**

The population includes Higher Secondary Students of Tirunelveli.

**SAMPLE**

The investigators used simple random sampling technique and randomly selected 300 Higher Secondary Students in Tirunelveli District.

**TOOL**

Ill Effects of Junk Food Awareness Scale was developed and validated by Maria Saroja .M and Michael JeyaPriya.E (2018).

**STATISTICAL TECHNIQUES USED**

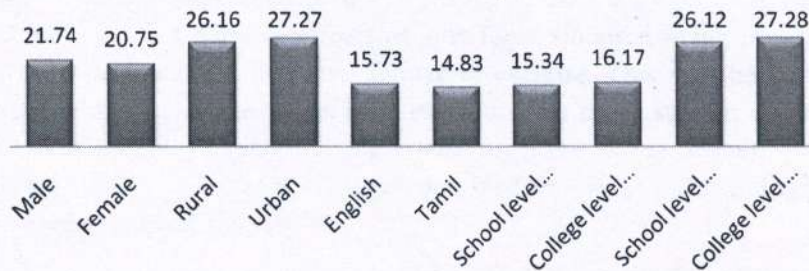
Mean, Standard deviation and 't' test were used to analyse the data.

**ANALYSIS OF DATA**

**Table.1. Showing the Awareness on ill effects of Junk food among Higher Secondary Students in Tirunelveli District**

Variable	Categories	N	Mean	SD	Calculated 't' Value	Table Value	Remark
Gender	Male	152	21.74	4.105	2.242	1.96	S
	Female	148	20.75	3.555			
Locality	Rural	134	26.16	4.669	2.031	1.96	S
	Urban	166	27.27	4.736			
Medium of instruction	English	137	15.73	3.766	2.174	1.96	S
	Tamil	162	14.83	3.343			
Father's Educational Qualification	School level	152	15.34	3.527	0.404	1.96	NS
	College level	148	16.17	3.617			
Mother's Educational Qualification	School level	162	26.12	4.422	2.132	1.96	S
	College level	137	27.28	4.588			

**Figure.1. Showing the Mean difference in the Awareness on ill effects of Junk food among Higher Secondary Students in Tirunelveli District**



It is inferred from the table that, there is no significant difference between school level and college level educated fathers' of Higher Secondary Students in their awareness about the ill effects of Junk food. Whereas there is a significant difference between male and female, rural and urban, English and Tamil medium and School and College level educated mothers' of Higher secondary students in their awareness about the ill effect of junk food.

**FINDINGS AND DISCUSSIONS**

There is significant difference between the male and female Higher Secondary Students in their awareness about the ill effects of Junk food.

In the present study the mean of Junk food awareness scale value of male student (21.74) is greater than that of female students (20.75). This may be due to the fact that, male students have more exposure to various types of mass media. Reading food labels during grocery shopping and engaging in more sports activity reduce the consumption of junk food. Participating in public education campaigns emphasize the dangers of too much of junk food intake. They participate in physical activities at school and after school to stay fit and healthy. Male students have good diet plans and great beliefs in the importance of healthy diets. They know the importance of balanced diet and the role of carbohydrates, protein and fat to maintain healthy body. This may be the reasons for male students having more awareness than Female students. This result contradicts with the study conducted by Wrastle.J. et al.(2004). In their study they showed that gender differences in food choices appear to be partly attributable to women's greater weight control involvement and strong beliefs in healthy eating.

There is significant difference between the rural and urban Higher Secondary Students in their awareness about the ill effects of Junk food.

In the present study the mean of Junk food awareness scale value of urban students (27.27) is greater than that of rural student (26.16). This may be due to the fact that urban students are aware about the health hazards caused due to junk food consumption. Their attitude towards the junk food has been changed due to the exposure of modern gadgets. Specific health

educational programs organised by the government and non-governmental organisations are easily available to them than rural children. Dietary guidelines from their schools help them to increase the intake of fruits and vegetables in their regular diet. They may get more choice to read books and magazine regarding harmful effects of junk food. Children living in urban areas consume food less in fat and calories, and also involve in exercise. This may be the reasons for urban students having more awareness than rural students. This result support the study conducted by Befort(2012). In his study Children living in rural areas are said to consume diets high in fat, full of rich creams, homemade foods including lots of meat and dessert and less exercise lead to childhood obesity in rural areas.

There is significant difference between the English and Tamil Medium Higher Secondary Students in their awareness about the ill effects of Junk food.

In the present study the mean of Junk food awareness scale value of English medium student (15.73) is greater than that of Tamil medium students (14.83). This may be due to the fact that most of the food labels are in English language and the students from English medium can easily understand the nutritional values and the chemical composition mentioned in the food label. Most of the Books, papers, websites, pamphlets and research article about the food components, food diet plan, food adulteration, colouring agents and preservatives are available in English language. Teachers in English medium motivates the students to participate in various awareness programme and competition such as essay writing, poem, seminar, group discussion and poster making regarding the awareness on the harmful effects of junk food. Various websites and blogs are in English it's easily available for the English medium students than Tamil medium students. This may be the reasons for English medium students having more awareness than Tamil medium students.

There is significant difference between the School level and college level educated mothers of Higher Secondary Students in their awareness about the ill effects of Junk food.

In the present study the mean of Junk food awareness scale value of College level educated Mothers of Higher secondary students(27.28) is greater than that of school level educated Mothers of Higher secondary students (26.12). This may be due to the fact that college level educated mothers plan the appropriate diet for their children. They are aware of the ingredients, chemicals and colouring agents used in the junk foods. Despite they focus on positive modelling, health promoting family eating patterns and family food rules. Involving their child in the process of grocery shopping, reading food labels with them and shopping only healthy foods. They provide good home environment and their parenting can influence a child's health by shaping their diet plans and physical behaviours, such as providing access to fruits and vegetables and encouraging their children to play outside. This may be the reasons for the college level educated mother of higher secondary school students having more awareness than the school level educated mother of higher secondary school students. This result support the study conducted by Vereecken.C.A, Keukelier and Maes.L.(2014). In their study they showed

that the influence of mother's educational level on food parenting practices and food habits of young children.

### Conclusion

Junk food eating habits become major problem in school children. Excess consumption of junk food can affect the physical as well as mental performance of children. Addiction of junk-food in early age may cause serious illness in later age. Adolescent needs specific health educational programs, dietary guidelines and effective public awareness. Eating habits also changed in them due to the influence of advertisements. Image of the attractive models eating junk foods and their positive review make them to buy junk foods. Each school should provide guidelines to raise the awareness of junk food. Parental monitoring in the media usage is important to control their junk food eating habits. They should watch TV with their children and help them to understand that the advertisers are trying to sell their products with high-fat and high-calorie foods. Public Awareness programme regarding the harmful effects of junk food should be arranged for rural children. The main purpose of this study to spread the awareness on the ill effects of junk food among higher secondary school children. This survey will create awareness on ill effects of Junk food among higher secondary school children and provide a pathway for health education to broaden for a change towards good eating habits and adaptation of healthy living.

### REFERENCE

1. **Arora, K. (2014).** Junk Food Survey Report. *International journal of Emerging Trends in Science and Technology*, 1(3), 280-287.
2. **Arya, G. & Mishra, S. (2013).** Effects of junk food and beverages on adolescent's health – a review article. *IOSR Journal of Nursing and Health Science*, 1(6), 26-32.
3. **Ashakiran & Deepthi, R. (2012).** Fast foods and their impact on Health. *Journal of Krishna Institute of Medical Sciences University*, 1(2), 7-15.
4. **Befort, C. (2012).** Rural residents are more likely to be obese than their urban counterparts. *Journal of rural health*, 8(4), 392-397 Retrieved from <http://www.ruralhealthweb.org/go/left/publications-and-news/the-journal-of-rural>
5. **Das, J. C. (2015).** Fast food consumption in Children: A review. *iMedPub Journal*, 1(1:1), 1-4.
6. **Kashyap, A., Joglekar, & Verma, S. (2014).** Effect of junk food on physical performance of school children. *Ind. J. Sci. Res. and Tech*, 2(4), 21-25.
7. **Sharma, V. (2013).** Adolescents Knowledge Regarding Harmful Effects of Junk food. *IOSR Journal of Nursing and Health Science*, 1(6), 1-4.
8. **Thamarai, R., Sivakumar, K., & Ponniraivan, K. (2015).** Awareness of health consequences of junk foods among medical students. *International Journal of Recent Scientific Research*, 6(3), 3203-3207. Retrieved from <http://www.recentscientific.com>

9. **Vakili,R., Kiani1,M.A., Saeidi,M., Hoseini,B.L, &Anbarani,M.A.(2015).** Junk Food Consumption and Effects on Growth Status among Children Aged 6-24 Months in Mashhad, Northeastern Iran. *Int J Pediatr.*3(20),817-822.SN
10. **Vereecken,C.A.,Keukelier.,&Maes, L. (2004).**Influence of mother’s educational level on food parenting practices and food habits of young children. *Elsevier appetite*, 43(1), 93-103.
11. **Vikraman,N.,&Nitha.(2017).**Impact of Junk foods and it’s Banning among Adolescent Girls. *International Journal of Trend in Scientific research and Development*, 2(1), 69-71.
12. **Wardle,J., Haase.A.M., Nillapun,M., Jonwutiwes,K.,& Bellisle,F.(2004).**Gender differences in food choice: the contribution of health beliefs and dieting. *Ann Behav Med.* 27(2), 107-116.
13. **Wormley,A.(2013).**Healthy eating habits of school aged children in rural areas. *The spectrum:Ascholars day journal*,3(12),1-15.

**AWARENESS ON ILL EFFECTS OF JUNK FOOD AMONG HIGHER SECONDARY STUDENTS IN TIRUNELVELI DISTRICT**

S.No	Statement	Agree	Disagree
1.	Junk foods lack essential nutrients.		
2.	Junk food contain huge amount of bad fats.		
3.	Sodium Salt used in junk food increases blood pressure.		
4.	Junk food eating habit leads to hormonal changes in teenagers.		
5.	Deep fried Junk food items cause problem like gastro esophageal reflux disease.		
6.	Fried junk food cause irritable bowel syndrome.		
7.	Junk food cause liver dysfunction.		
8.	Junk food causes Type II diabetes.		
9.	Oils in junk food deposit in the stomach and cause acidity.		
10.	Fats from the junk food accumulated over the time in our body and make us obese.		
11.	Refined sugar in the junk food slows down the ability to learn new skills.		
12.	High amount of bad fats affects the kidney function.		
13.	Fried foods increase the risk of developing prostate cancer.		

14.	High sugar and fat content in the fast food increase the chance of developing colorectal cancer.		
15.	Junk food raises the risk of diabetes.		
16.	Sorbitol used in soft drinks cause bowel syndrome.		
17.	Junk food causes food poisoning in children.		
18.	Colouring used in junk food cause asthma.		
19.	Flavors used in junk food cause rashes and hyper activity.		
20.	Preservatives used in Soft drinks cause allergic reaction.		
21.	Malic acid in the soft drinks causes diarrhoea.		
21.	Caffeine flavor in soft drinks cause insomnia.		
22.	Artificial sweetener used in cookie increase blood sugar level.		
23.	Saturated fats in the main crust of pizza may block arteries and cause heart attack.		
24.	The high calorie content of the pizza may contribute to our weight gain and make us obese.		
25.	Pizza consumption may raise blood cholesterol level and may lead to heart disease.		
26.	Salt content in pizza raise blood pressure level.		
27.	Butter content of the cookies may raise cholesterol level.		
28.	Raw dough of cookies is more susceptible to bacterial infection and cause food poisoning.		
29.	The high calorie of cookies content increase body weight and make us obese.		
30.	Refined flour used in cookies will elevate blood glucose level.		
31.	Salted cookies raise blood glucose level.		
32.	Propylene glycol used in noodles to reduce dryness may weak immune system.		
33.	Over eating of pizzas make us prone to heart disease.		



34.	Refined sugar in junk food increase insulin.		
35.	Junk food intake cause poor appetite		
36.	Sodium content in chips increases blood pressure.		
37.	High fructose corn syrup used in cool drinks cause diabetes.		
38.	Citric acid present in soft drinks cause severe dental erosion in children.		
39.	Caramel colour in cola causes cancer.		
40.	Phosphoric acid in soft drinks affect calcium metabolism.		
41.	Excess eating of junk food lead to Alzheimer disease (Brain disorder).		
42.	Vegetable used in junk food are genetically modified products (GMO).		
43.	Salt used in junk food lead to Plaque build up in atherosclerosis (hardening of arteries in brain).		
44.	Spices added in Junk food leads to gastritis.		
45.	Junk food consumption leads to Attention deficit hyperactive disorder (ADHD) in children.		
46.	Junk food habits lead to poor concentration.		
47.	Excess consumption of Junk food affects brain cells.		
48.	Junk food leads to excess secretion of Hydrochloric acid in stomach.		
49.	Junk food eating habits leads to dyslexia.		
50.	Over sustainable period of eating Junk Food can drop blood circulation.		