

Awareness of Junk Food Effects and Exploring Eating Habits with a View to Develop a Dietary Manual among Adolescents in Selected Schools of Guwahati, Assam: A Descriptive Study

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Abstract: ***Background:** Junk food or fast food refers to as 'food that is quick to prepare and serve'. According to food standard agency junk food is a term describing food that is perceived to be unhealthy or having poor nutritional value. It is loaded with saturated fat and high calorie, and is low in fibre and nutrients. These include processed, canned and packed food items as well as 'high - calorie' meals served at restaurants and cafeterias such as burgers, pizzas, fried chicken, potato fries, sausages, salty snacks, carbonated drinks and beverages, desserts and chocolates. **Aims and objectives:** To assess the awareness regarding harmful effects of junk food and its eating habits among adolescents in selected schools of Guwahati. **Materials and methods:** Non experimental cross - sectional research design and interview method was used in the study. Convenience sampling technique was used to select the samples. **Results:** The study revealed that out of 200 sample, majority 99 (49.5%) had moderately adequate awareness, 96 (48%) had adequate awareness and 5 (2.5%) had inadequate awareness regarding junk foods and its harmful effects among the adolescents. There was significant association between the level of awareness regarding junk foods and its harmful effects with age, class of study, occupational status of father and source of information regarding harmful effects of junk foods, whereas there was no significant association with other selected demographic variables such as gender, residence, educational qualification of father, educational qualification of mother, type of family, occupational status of mother and awareness about the nutrient fact of junk foods. **Conclusion:** The study found that the adolescents had moderate level of awareness regarding the harmful effects of junk foods therefore there should be more awareness programs related to harmful effects of junk foods among the adolescents regarding unhealthy foods through nutrition education in the schools and community and assess the impact of the same.*

Keywords: awareness, adolescents, eating habits, dietary manual

1. Introduction

Junk food or fast food refers to as 'food that is quick to prepare and serve'. According to food standard agency junk food is a term describing food that is perceived to be unhealthy or having poor nutritional value. It is loaded with saturated fat and high calorie, and is low in fibre and nutrients. These include processed, canned and packed food items as well as 'high - calorie' meals served at restaurants and cafeterias such as burgers, pizzas, fried chicken, potato fries, sausages, salty snacks, carbonated drinks and beverages, desserts and chocolates. In today's world scenario, junk food has become a prominent feature of diet for adolescents. The rapidly changing food consumption pattern and diet transition emerging in the society is due to economic growth and new life style choices. Now - a - days many adolescents like to eat junk food due to which they might face many health problems in early stages of life.

The prevalence of fast food consumption among school children is high which may leave the bad effect on the children's growth and development, resulting in decreased learning ability, poor concentration in the study, and impaired school performance. The children do not like homemade healthy foods. Most of them 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 concern and urgent awareness action should be taken to tackle this public health problem.

Objectives

- To assess the awareness regarding junk foods and its harmful effects among the adolescents.
- To find the association between the awareness regarding junk foods and its harmful effects with selected demographic variables (Age, Gender, Education of the parents, Family income, Type of family, eating habits, knowledge about junk foods, peer influence, availability of junk food)
- To prepare a dietary manual for the adolescents.

2. Methods and Materials

A descriptive study design was used to accomplish the objectives. The study was conducted on 200 adolescent students from class VI to class IX in selected schools of Guwahati, Assam by using convenience sampling technique. Participants were selected based on inclusion and exclusion criteria. Structured awareness questionnaire and eating

habits questionnaire were used to assess the level of awareness and eating habits of the adolescents.

Tool

The data was collected was using structured awareness questionnaire and eating habits questionnaire. The content validity of the tool was established by 7 experts from the field of child health nursing, community health nursing, nutrition and dietics.

Description of the tool

The tool used for the study consisted of two sections, it includes

Section - I

Demographic data: Age, gender, religion, class, residence, educational qualification of father, educational qualification of mother, type of family, occupational status of father, occupational status of mother, nutrient facts of junk foods, source of information regarding harmful effects of junk foods.

Section - II

- 1) AWARENESS QUESTIONNAIRE: Structured questionnaire to assess the awareness: it consists of 14 questions related to awareness on harmful effects of junk foods.
- 2) EATING HABITS QUESTIONNAIRE: Structured questionnaire to assess the eating habits of junk foods: it consists of 14 questions related to eating habits of junk foods.

3. Data Collection

For conducting the main study, data collection period was scheduled from 14th November to 5th December 2022. After getting ethical clearance from the INS trust ethics committee (GNRC complex), Dispur, Guwahati, Assam a formal written application was obtained for the respective principal of the selected schools for conducting the research study and the study was conducted after obtaining permission from the principal of the selected schools. A brief introduction and purpose of the study were explained to the sample prior to data collection and those who are willing to participate informed consent was taken. The privacy and confidentiality were assured with regards to their response. The investigator then administered the self - structured questionnaire and each respondent took approximately 20 - 30 minutes to complete the questionnaire.

The names of the schools were -

- 1) Army Public School, Basistha
- 2) Smrity Academy, Beltola Chariali
- 3) Gajendranath Talukdar Chinmaya Vidyalaya, Six Mile

4. Results

Table I: Frequency and percentage distribution of students according to demographic variables, n=200

Demographic variables	Frequency (f)	Percentage (%)
Age in years		
10 – 11	37	18.5

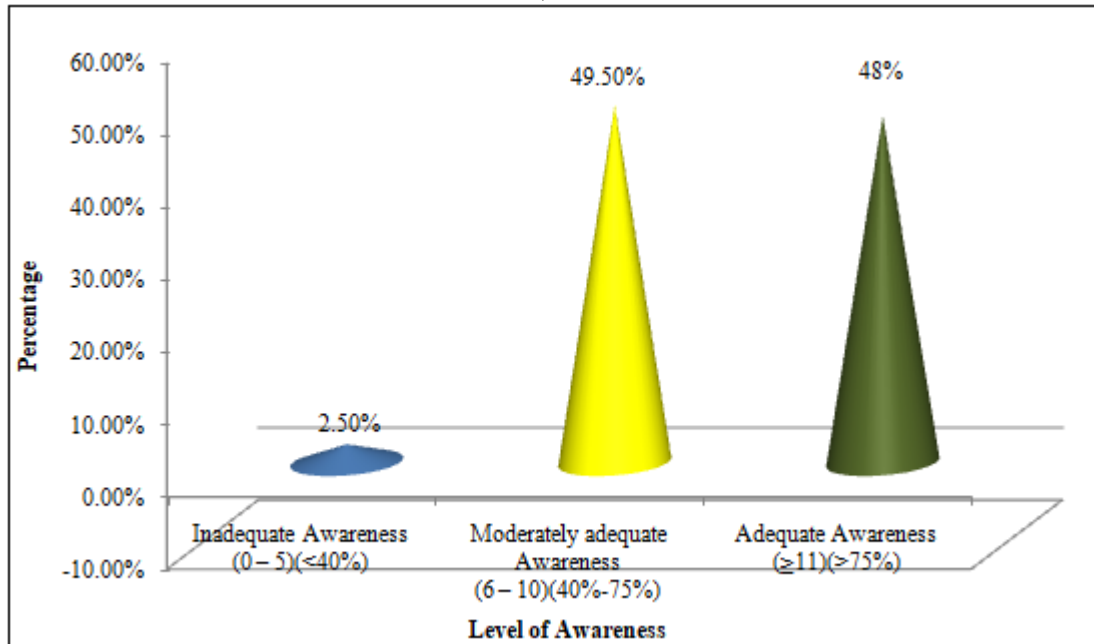
12 – 13	67	33.5
14 – 15	74	37
16	22	11
Gender		
Male	107	53.5
Female	93	46.5
Religion		
Hindu	161	80.5
Islam	25	12.5
Christian	10	5
Others	4	2
Class of study		
VI	39	19.5
VII	44	22
VIII	38	19
IX	43	21.5
X	36	18
Residence		
Urban area	190	95
Rural area	10	5
Educational qualification of father		
No formal education	15	7.5
Primary education	26	13
HSLC	30	15
HSSLC	26	13
Graduate and above	103	51.5
Educational qualification of mother		
No formal education	20	10
Primary education	22	11
HSLC	42	21
HSSLC	37	18.5
Graduate and above	79	39.5
Type of family		
Nuclear	130	65
Joint	56	28
Extended	14	7
Occupational status of father		
Unemployed	16	8
Self – employed	52	26
Private service	55	27.5
Government service	77	38.5
Occupational status of mother		
Home - maker	146	73
Self – employed	22	11
Private service	19	9.5
Government service	13	6.5
Awareness on nutrient fact of junk foods (Protein, Fat, Calories, Carbohydrates)		
Always	43	21.5
Most of the time	76	38
Rarely	53	26.5
Not at all	28	14
Source of information regarding harmful effects of junk foods		
Massmedia (Television, newspaper, magazine etc)	74	37
Friends / relatives	22	11
Health personnel	48	24
Family members	56	28

Study revealed that out of two hundred adolescents, majority i. e. seventy four (37%) were in the age group of 14 - 15 years, majority i. e one zero seven (53.5%) adolescents were male, In terms of religion majority i. e161 (80.5%) adolescents were Hindu, majority i. e52 (26%) adolescents

were studying in class IX majority i. e190 (95%) adolescents were from urban area majority i. e103 (51.5%) of their father were Graduate and above, majority i. e79 (39.5%) of their mother were Graduate and above, majority i. e 130 (65%) of the students were from nuclear families,, majority i. e 77 (38.5%) of their fathers were in government service,

majority i. e146 (73%) of their mothers were home - maker, majority i. e 76 (38.0%) were aware of the nutrient facts on most of the time and majority i. e 74 (37%) got the information regarding harmful effects of junk foods from mass media like television, newspaper, magazines etc.

Table II: Frequency and percentage distribution of students according to the level of awareness of harmful effects of junk foods, N=200



The data represented in Table II depicts that out of 200 students, majority of the students i.e. 49.50% had moderately adequate awareness, 48% had adequate awareness and the rest 2.50% had inadequate awareness

towards harmful effects of junk foods. the mean score of awareness was 10.25 ± 2.05 with minimum score of 4.0 and maximum score of 14.0. The median value was 10.0.

Table III: Frequency and percentage distribution of students according to the eating habits, n=200

Frequency of Consuming Junk Foods	Frequency (F)	Percentage (%)
Daily	39	19.5
Sometimes	56	28
Rarely	91	45.5
Not at all	14	7
Reason of Consuming Junk Foods	Frequency (F)	Percentage (%)
Liked the taste	158	79
Variety of menu	23	11.5
Limited time	14	7
Peer influence	5	2.5
Time of Consuming Junk Foods	Frequency (F)	Percentage (%)
Morning	6	3
Afternoon	19	9.5
Evening	141	70.5
At any time of the day	34	17
Place of Consuming Junk Foods	Frequency (F)	Percentage (%)
Home	56	28
School canteens	12	6
Restaurants	70	35
Money Spent at Fast Food Restaurants	Frequency (F)	Percentage (%)
Less than 100	83	41.5
Rs.100 – 200	41	20.5
Rs, 200 – 300	26	13
Number of Meals Per Day	Frequency (F)	Percentage (%)
Once	14	7
Twice	32	16
Thrice	109	54.5
Types of Raw Vegetables Consumptions Per Day	Frequency (F)	Percentage (%)

Once	35	17.5
Twice	62	31
Thrice	77	38.5
Frequency of Milk Consumptions Per Day	Frequency (F)	Percentage (%)
Once	79	39.5
Twice	65	32.5
Thrice	25	12.5
None	31	15.5
Number of Egg Consumptions Per Day	Frequency (F)	Percentage (%)
Once	101	50.5
Twice	45	22.5
Thrice	22	11
Frequency of Fish Consumption Per Week	Frequency (F)	Percentage (%)
Once	66	33
Twice	47	23
Thrice	42	21
Frequency of Meat Consumptions Per Week	Frequency (F)	Percentage (%)
Once	78	39
Twice	40	20
Thrice	57	28.5
Frequency of Water Consumption Per Day	Frequency (F)	Percentage (%)
3 – 4 glasses	42	21
5 – 6 glasses	49	24.5
7 – 8 glasses	64	32
Frequency of performing physical activity per week	Frequency (F)	Percentage (%)
Daily	102	51
2 - 3 times / week	52	26
4 – 5 times / week	24	12
Preference of type of junk food	Frequency (F)	Percentage (%)
Sugary Foods - Chocolates, Sweets, Candies	45	22.5
Frozen Foods - Ice creams, Fries, Sausages	16	8
Ready to eat Foods - Pasta, Instant noodles	31	15.5
Street Foods - Momo, Samosa, Panipuri	108	54

The results revealed that out of two hundred adolescents, majority i. e 91 (45.5%) consume junk foods rarely, majority i. e 158 (79%) consume junk foods for the taste, majority i. e 141 (70.5%) consumes junk foods in the evening, in terms of place of consuming junk foods majority i. e 70 (35%) consume junk foods at the restaurants,, in terms of money majority i. e 83 (41.5%) spends less than Rs100 at fast food restaurants,, majority i. e 109 (54.5%) have 3 meals per day majority i. e 77 (38.5%) consumes 3 types of raw vegetables

per day majority i. e 79 (39.5%) consumes 1 glass of milk per day majority i. e 101 (50.5%) consume 1 egg per day, majority i. e 66 (33%) consumes fish once in a week, in terms of consumption of meat majority i. e 78 (39%) consumes meat once in a week, majority i. e 64 (32%) consumes 7 - 8 glasses of water per day, majority i. e 102 (51%) performs physical activity daily and majority i. e 108 (54%) prefers street foods.

Table IV: Association between level of awareness regarding harmful effects of junk foods among the adolescents with their selected demographic variables

Sl. no	Demographic variable	Fisher Exact test p - value	Remark
1	Age in years	p=0.012*	S
2	Gender	p=0.790	NS
3	Religion	p=0.071	NS
4	Class of study	p=0.000***	S
5	Residence	p=0.805	NS
6	Educational qualification of father	p=0.139	NS
7	Educational qualification of mother	p=0.435	NS
8	Type of family	p=0.714	NS
9	Occupational status of father	p= 0.000***	S
10	Occupational status of mother	p=0.419	NS
11	Awareness of the nutrient facts in each of the junk food that is consumed (Protein, Fat, Calories, Carbohydrates)	p=0.612	NS
12	Source of information regarding harmful effects of junk foods	p=0.016*	S

***p<0.001, *p<0.05, S – Significant, p>0.05, N. S – Not Significant

The analysis depicted that there was significant association between awareness regarding junk foods and its harmful effects with age, class of study, occupational status of father and source of information regarding harmful effects of junk

foods at p<0.05 level, whereas there was no significant association with other selected demographic variables such as gender, residence, educational qualification of father, educational qualification of mother, type of family,

occupational status of mother and awareness about the nutrient fact of junk foods.

5. Conclusion

Through this study, the investigator concluded that the adolescents had a moderate level of awareness regarding the harmful effects of junk foods so dietary manuals were distributed among them so that they can have adequate awareness regarding the harmful effects of junk foods and also have a good eating habit. After this study, it is recommended to conduct a comparative study to assess the awareness of harmful effects of junk foods among adolescents in the schools of rural and urban areas.

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