RESEARCH ARTICLE

A Descriptive Study to Assess the Knowledge on Ill Effects of Junk Food among undergraduate students at selected College, Bangalore

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ABSTRACT:

Background : Eating junk food on a regular basis can lead to an increased risk of obesity and chronic diseases like cardiovascular disease, type 2 diabetes, non-alcoholic fatty liver disease and some cancers. a study conducted among students showed that the increasing use of preservatives and flavouring agents has the potential to cause health problem among the people. however, there are no published studies from India exploring the awareness, safety perception, and practices about food preservatives (fps) and flavouring agents (fas).so this study was conducted with the objectives of assessing the awareness, safety perceptions and practices about food preservatives (fps), flavouring agents (fas) used in most junk foods. also, it was found that 23% of the student meals come from fast foods and about 50% of the students reported that they ate at least 3 fast food meals in a week. the problem, therefore is that eating junk food in excess could lead to serious health issues in future. **Aim**: However, it is found that college students consume junk food but do not fully understand the implications on health. this study is aimed at addressing the lack of knowledge that the undergraduate students have concerning junk food and its ill effects. **Objective:** The objective of this study was to assess the knowledge on ill effects of junk food among undergraduate students. **Method:** Descriptive survey approach was used to collect data from 60 subjects, selected by purposive sampling technique. **Result:** The data was collected by administering a modified self-administered questionnaire from a sample of 60 undergraduate students. the study reveals that the majority of subjects 31 (51.7%) belong to the age group of >18 years, in which majority 70% were female, 48% were hindu and majority 67% of subjects were at secondary level of education. over 50% of the respondents mothers were housewives. the total number of questions were 25, out of which mean score percentage was 56.4% which indicates the students have moderate knowledge regarding junk food and its ill effects. **Conclusion:** Undergraduate students require healthy diets to maintain good health. it is therefore a necessity to determine their knowledge so that if inadequate, a practical guidance may be given to them so as to prevent disease and illness.

KEYWORDS: Junk food, ill effects, disease, undergraduate students.

INTRODUCTION:

In today's society, the average person has at least encountered junk food once in their lifetime. It is served in our homes, sold on the street and advertised on media streams. The promise that it gives of good taste and convenience, as well as trend is what draws most consumers to it. However tasty they may be, there are health risks associated with the excess consumption of these foods; health risks such as cardiovascular diseases,

muscle skeletal conditions and even mental conditions.

Junk food simply means an empty caloric food. An empty caloric food is a high caloric rich food which lacks in micro- nutrients such as vitamins, minerals or amino acids, and fibre but has high energy (calories)[1].

These foods don't contain the nutrients that your body needs to stay healthy. Hence, these foods that has proper nutritional value is considered unhealthy and may be called as junk food. Junk food is an informal term applied to some foods which are perceived to have little or no nutritional value, but which also have ingredients considered unhealthy when eaten regularly, or to those considered unhealthy to consume at all.[2]

The term junk food was coined as a slang in the public interest in 1972 by Michael Jacobson, Director of the Centre for Science, Washington. What makes these foods to be called as junk is that it contains high levels of refined sugar, white flour, trans fat and polyunsaturated fat, salt, and numerous food additives such as monosodium glutamate and tartrazine; at the same time, it is lacking in proteins, vitamins, essential minerals, fibre, among other healthy attributes. These foods have little enzyme producing vitamins and minerals but contain high levels of calories in their place. A food that is high in fat, sodium, and/or sugar and provides high calories yet useless in value is generally known as junk food. On the contrary, junk food is easy to carry, purchase and consume.[3]

The rising consumption of unhealthy foods has been facilitated by trade liberalization and foreign investment in the food and beverage industries, which have resulted in the proliferation of large transnational food companies, according to a study.[3]

Generally, a junk food is given a very attractive appearance by adding food additives and colors to enhance flavor, texture and for increasing long shelf life[4]. A cross- national ecological analysis revealed an association between soft drink consumption and higher rates of overweight and obesity.[5]

Finally, the investigator felt the need to mention that many adolescents in some parts of the world are dying of starvation every day and they don't have this great choice to make. Any food, whether Junk or otherwise, would be life for them. However, the health risks it pauses to them is of great concern.

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NEED FOR THE STUDY :

"Good health and good sense are two of life's greatest blessing -   Publilius Syrus

There is an urgent need to educate the urban community on the aspects of healthy food habits and desired lifestyles to prevent overweight/obesity and its associated ill effects.

Junk food are typically ready to eat convenience foods containing high levels of saturated fats, salt or sugar and little or no fruit, vegetables or dietary fiber and are considered to have little or no health benefits. Common junk food includes salted snack foods like chips (crisps), candy, gum, most sweet desserts, fried fast food and carbonated beverages (sodas) as well as alcoholic beverages.

Traditionally it has been parents who have taken leadership in deciding what their kids are going to eat. But Donald's and other fast food companies spend billions of dollars a year on ad campaigns that target children and young adults, with the goal of taking that leadership away from the parents and shifting it on to the kids themselves. In this way, the ads not only promote the consumption of Junk food, with all the baneful health consequences we are witnessing today.[7]

OBJECTIVE OF THE STUDY :

1) To assess the knowledge on ill effects of junk food among undergraduate students.

HYPOTHESIS :

H_1. Students will not have sufficient knowledge about the ill effects of junk food on health.

REVIEW OF LITERATURE :

Literature review is a body of text that aims to review the critical points of current knowledge including substantive findings as well as theoretical and methodological contributions to a particular topic.
Based on the objectives of the present study, the review of literature is classified under the following headings:
1. Review of literature related to knowledge of students on junk food
2. Review of literature related to problems associated with use of junk food
3. Review of literature related to knowledge on the ill effects of junk food on health
4. Review on control of junk foods consumption

1) Review of literature related to Knowledge of students on junk food:

Junk food is an informal term applied to some foods that are perceived to have little or no nutritional value ("containing empty calories"), or products with nutritional value but which also have ingredients considered unhealthy when regularly eaten, or those considered unhealthy to consume at all [8]

A cross sectional study was done to provide locally specific evidence around the exposure, awareness and effect of Junk food advertising and promotion to children and adolescents in Fiji. The study selected a total of 88 primary school students and 103 secondary school students from high schools in Suva, Fiji.[10]

2) Review of literature related to problems associated with the use of junk food:

A study was conducted in 2012 to find the Contextual factors association with adolescent girls' dietary behaviours. High school girls completed a 7-day diary, recording all trips made. Girls made an average of 11.4 trips per week other than to home or school.

Snacks high in solid oils, fats and added sugars (SOFAS) were frequently consumed. Girls reported eating an average of 3.5 servings per week of snacks high in SOFAS at someone else's house compared to 3.0 servings per week at retail food outlets. Findings demonstrate that low nutrient foods are ubiquitous and efforts should be made to reduce their availability in multiple settings.[11]

The result of studies conducted among adolescents from Punjab Maharashtra, Gujarat, Bangalore, Hyderabad and South India revealed that the prevalence of overweight and obesity was high ranging from 11 percent to 29 percent.[12] The prevalence of overweight and obesity in Delhi was revealed to be 13 and 9.3 percent respectively.[13]

3) Review of literature related to the knowledge on ill effects of junk food:

A Study conducted in 2015 was aimed to assess the existing knowledge of adolescents regarding the health hazards of junk foods in a selected college and to find out association between selected demographic variables and health hazards of junk foods. 115 engineering students were tested by using non probability convenience sampling technique with structured questionnaire. Majority of study subjects 69.56% samples had Average knowledge while 24.35% samples having Good knowledge, and6.08 % samples having Poor knowledge regarding the health hazards of junk foods. There is a significant association between expense of junk food and knowledge regarding health hazards of junk food.[14]

4)Review of literature related to the control of junk food:

A cross sectional study was conducted in 2011 to examine whether state and district level nutritional policies addressing junk foods in school vending machines and school stores were associated with less

junk food in stores and school vending machines, Results revealed that 93% of school stores are prevalent at high school level with junk foods .study suggest that state policies is required to prohibit the junk foods in schools.[15]

An experimental study was conducted in 2011 to assess the nutritional knowledge of adolescents in Hyderabad, India. In this study 164 samples are selected from different schools belonging to eight standards and intervention group is thought about the nutrition importance with audio visual aids. Result of this study revealed that adolescents started to consume vegetables and fruits rather than the junk foods, study suggest that importance of nutrition should be emphasized in future programs.[17]

METHODOLOGY :
RESEARCH APPROACH :
Descriptive survey approach was considered as appropriate to describe the knowledge of the undergraduate students on the ill effects of junk food.
RESEARCH DESIGN :
Descriptive research design was used this study
VARIABLES :
Dépendent variables : The knowledge of undergraduate students on the ill effects of junk food. **Independent variables** : Age gender, religion, parents' occupation and education are the variables.
SETTING OF THE STUDY :
The present study was conducted at AIGS, Acharya Institutes and Vagdevi College, Bangalore.
POPULATION :
The target population of the present study comprised of undergraduate students studying at selected college including AIGS, Acharya institutes and Vagdevi College in Bangalore.
Sample and sample size :
Sample size of the present study consisted of 60 undergraduate students studying at selected college including AIGS, Acharya Institutes and Vagdevi College, Bangalore.
Sampling Technique :
Purposive sampling technique was adopted to draw the samples for the study.
Inclusion criteria:
1. Students who are willing to participate in the study.
2. Students who are available during data collection.
3. Students who are studying at undergraduate level
Exclusion criteria:
1. Students who are not willing to participate in the study
2. Students who are not available during data collection.
3. Students who are not studying at undergraduate level

TOOLS USED FOR THE STUDY:
Based on the objective of the study, modified structured self-administered questionnaire was developed in order to assess the knowledge towards ill effects of junk food among undergraduate students.
Description of tools:
A modified structured self-administered questionnaire was designed in two sections where the first section comprised of the demographic variables and the second one comprised the research questions.
Section A:
Demographic variables of the respondents. It consists of age, sex, religion, educational status, and marital status.
Section B:
Modified structured self-administered questionnaire to assess the knowledge on ill effects of junk food. It consists of 22 questions each carrying four options. Each correct answer carrying one mark. No mark was given for a wrong answer.

PROCEDURE FOR DATA COLLECTION :
A. Formal permission was obtained from the principal of selected college.
B. Sample was selected based on inclusion criteria.
C. Investigator made a self- introduction and explained the purpose of the study.
D. The instruction for answering questions were given to the participants by the investigator.

RESULTS :
SECTION A: Demographic Variables of Respondents.
Table 1: Distribution of samples according to their demographic variables of respondents.

S. no	Demographic variable and category	N= 60	
		Frequency	**Percentage**
1.	**Age in years**		
	a) Above 25 years	2	3.3%
	b) 20- 25 years	13	21.7%
	c) 18- 20 years	14	23.3%
	d) Below 18 years	31	51.7%
2.	**Gender**		
	a) Male	18	30%
	b) Female	42	70%
3.	**Religion**		
	a) Hindu	29	48.3%
	b) Muslim	9	15%
	c) Christian	9	15%
	d) Other	13	21.7%
4.	**Educational Status**		
	a) Primary level	**0**	**0%**
	b) Secondary level	40	67%
	c) Tertiary level	12	20%
	d) Graduate level	8	13%
5.	**Marital status**		
	a) Married	0	0%
	b) Single	60	100%
	c) Engaged	0	0
	d) I prefer not to say	0	0
6.	**Mother's educational status**		
	a) Primary level	27	45%
	b) Secondary level	17	28.3%
	c) Tertiary level	8	13.3%
	d) Graduate level	8	13.3%

Table 2 - Assessment of the level of knowledge of students

S. No	Percentage	Range	Level of knowledge	Frequency	Percentage
1	≥75%	19-25	Adequate	12	20%
2	51%-74%	14-18	Moderate	35	58.3%
3	≤50%	0-13	Inadequate	13	21.7%
			TOTAL	60	100

Table -2 Shows the assessment of the level of knowledge of the students. About 20% had adequate knowledge, 58% had moderate knowledge and 22% had inadequate knowledge.

MAJOR FINDINGS OF THE STUDY :
The analysed data in the study revealed that :
- Majority 51.7% of subjects belonged to the age group of < 18 years
- The majority 71% of subjects were female
- Majority 67% have received secondary school education
- The students had moderate knowledge regarding junk food and its ill effects
- The overall mean percentage of knowledge score was 56.4%.

DISCUSSION:
The discussion section is devoted to a thoughtful and insightful analysis of the findings leading to a discussion of their clinical and theoretical utility. The focus of this study was to assess the knowledge regarding the ill effects of junk food among students in Bangalore.

The analyzed data from the demographic information of the students reveals that the majority of subjects 31 (51.7%) belong to the age group of >18 years, in which majority 70% were female, 48% were Hindu and majority 67% of subjects were at secondary level of education. The total number of questions were 25, out of which mean score percentage was 56.4% which indicates the students have moderate knowledge regarding junk food and its ill effects.

CONCLUSION:
The analyzed data in the study reveals that majority 51.7% of subjects belong to the age group of <18 years, with majority 70% being female, 48% were Hindu and majority 67% of subjects have received secondary level of education. Although fast food tastes good and eating it once in a while is fine, eating fast food too frequently may result in health problems such as obesity or diabetes. The problems caused by fast food are mainly in the high sugar, salt and fat content in it. There are several causes of eating junk food, but the effects are detrimental. Although people enjoy junk food due to its deliciousness and saving time and effort, they should consider the long-term consequences of the diet. It is cheaper and convenient in the short-term, but highly inconvenient and expensive in the long-term. Eating junk food presents serious health risks which threaten the quality of life. Therefore, individuals should endorse healthy eating habits by controlling their consumption of junk food.

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