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## A Descriptive Study To Assess The Level Of Knowledge Regarding Impact Of Fast-Food Consumption Among Students At Selected College, Coimbatore.

Dr. Girija kumari S<sup>1</sup>, Mrs.Amirthaveni k<sup>2</sup>, Ms. Sindhumathi R<sup>3</sup>, Ms. Sherly A<sup>4</sup>, Mrs.sireen k<sup>5</sup>,

<sup>1</sup>Principal, College of Nursing, SRIPMS, Coimbatore

<sup>2</sup>Assistant professor, College of Nursing SRIPMS, Coimbatore

<sup>3</sup>Assitant lecturer, College of Nursing SRIPMS, Coimbatore

<sup>4,5</sup>Bsc Nursing, College of Nursing, Coimbatore

Corresponding Author Details

Ms. Sindhumathi R

Assistant lecturer, College of Nursing SRIPMS, Coimbatore

College Address- # 365, Sarojini Naidu Road, New Sidhapudur, Coimbatore-641044

\*Affiliated to The Tamil Nadu Dr.M.G.R. Medical University

### Abstract

Fast-food consumption has increased significantly among college students due to convenience, accessibility, affordability, and changing lifestyle patterns. Excessive consumption of fast food is associated with several adverse health effects, including obesity, hypertension, cardiovascular diseases, and other lifestyle-related disorders. The present study was undertaken to assess the knowledge regarding the health impact of fast-food consumption among college students. A quantitative descriptive research design was adopted for the study. Data were collected from 100 participants using a structured and validated questionnaire consisting of demographic variables and knowledge-related items. The collected data were analyzed using descriptive statistics. The findings revealed that 23% of participants had poor knowledge, 37% had average knowledge, 16% had good knowledge, 14% had very good knowledge, and 10% had excellent knowledge regarding the health impact of fast-food consumption. The study concluded that although a considerable number of students possessed basic knowledge regarding the harmful effects of fast-food consumption, there remains a need for continuous health education programmes and awareness initiatives to promote healthy dietary practices and prevent lifestyle-related health problems among college students.

**Keywords:** College students, Dietary habits, Fast-food consumption, Health risks, Knowledge.

## INTRODUCTION

Fast food originated during the late 19th and early 20th centuries with the aim of providing quick and affordable meals to busy workers. White Castle, founded in Wichita, Kansas, in the 1920s, is considered one of the first fast-food restaurants, serving small and affordable burgers. Fast food mainly consists of pre-cooked meals that reduce waiting time and allow rapid service. It is a type of mass-produced food designed for commercial sale, with a strong emphasis on speed and convenience.

Today, fast-food restaurants are widely available in urban areas and contribute to the “food desert” phenomenon, where low-income communities have limited access to healthy and nutritious foods. Fast food consumption is strongly associated with an increased risk of obesity and other health problems, especially in the United States. The 2004 documentary *Super-Size Me* by Morgan Spurlock highlighted the harmful effects of excessive fast-food consumption on the human body. During the experiment, the filmmaker experienced significant weight gain and deterioration in health, which created awareness among the public regarding unhealthy eating habits. As a result, many fast-food chains began reducing trans fats in their foods and introduced healthier menu options such as salads, low-fat milk, and fresh fruits. Excessive consumption of fast food can increase the risk of obesity, heart disease, type 2 diabetes, and digestive disorders.

## NEED FOR THE STUDY

India ranks 10th in per capita spending on fast food, accounting for 2.1% of total annual expenditure (FERENCE’S & DEEPTHI, 2012). Although most students are aware that fast food is harmful to health, they continue to consume it due to academic stress, convenience, cravings, and limited food choices in hostels. A study by SAUDA PARVIN (2023) reported that nursing students frequently consume fast food because of repetitive hostel menus and preference for non-vegetarian foods. Several studies have shown that excessive fast-food consumption is associated with obesity, increased body mass index, high basal metabolic rate, weakened immune response, and cardiovascular diseases. Considering these facts, the researcher aimed to assess the knowledge regarding fast food consumption among nursing students.

Recent lifestyle changes and increased dependence on convenience foods have significantly influenced the dietary habits of young adults, particularly college students. According to the World Health Organization, unhealthy dietary practices and excessive intake of energy-dense foods are major contributors to non-communicable diseases worldwide. Fast food is generally high in saturated fats, sugar, sodium, and calories while lacking essential nutrients required for maintaining good health. Bowman and Vinyard (2004) reported that individuals consuming fast food had higher calorie intake, poorer diet quality, and greater risk of obesity compared to non-consumers. Despite the availability of information regarding healthy nutrition, many students continue unhealthy eating practices without adequate knowledge of long-term health consequences. Therefore, the present study was undertaken to assess the knowledge regarding the health impact of fast-food consumption among nursing students and to identify the need for appropriate health education programmes and awareness initiatives to promote healthy dietary practices.

## STATEMENT OF THE PROBLEM

A Descriptive Study to Assess the Level of Knowledge Regarding Impact of Fast-food Consumption among Students at Selected college, Coimbatore.

## OBJECTIVES OF STUDY

- To assess the level of knowledge regarding impact of fast-food consumption among students.
- To find out the association between the level of knowledge regarding impact of fast-food consumption with selected variables.

## METHODOLOGY

### Research Approach

A Quantitative approach was adopted for the present study. This approach was used to assess the level of knowledge regarding fast food consumption among arts and science students.

### Research Design

A non-experimental descriptive research design was used in this study. The design helped to describe and assess the knowledge level of students without any intervention.

### Research Setting

The study was conducted at Selected private hostel. The setting was selected based on the availability of arts and science students for data collection.

### Target Population

The target population of the study consisted of arts and science students. Students residing in the selected hostel were included in the study population.

### Criteria

#### Inclusive criteria

Arts and science students residing at Private hostel  
Students who were willing to participate in the study

#### Exclusive criteria

Pharmacy students residing at Private hostel  
Physiotherapy students residing at Private hostel  
Nursing students residing at Private hostel  
Staff nurse students residing at Private hostel  
Day scholars who were not residing in the hostel.

### Sampling Technique

Non-probability convenience sampling technique was used for selecting the samples. Participants who were available and willing to participate during the data collection period were included.

### Sample Size

The sample size for the present study was 100 arts and science students. The samples were selected from the chosen study setting based on the inclusion criteria.

### Variable

The main variable of the study was the level of knowledge regarding fast food consumption.

### Tool

The data collection tool used for the present study was a structured self-administered questionnaire designed to assess the knowledge regarding the impact of fast-food consumption among arts and science students. The tool consisted of two sections: Section A-Demographic Variables; This section included demographic data such as age, educational status, year of study, dietary habits, and other relevant variables of the participants. Section B-Self-Structured Questionnaire; This section consisted of 25 self-structured questions related to knowledge regarding the impact of fast-food consumption on health among arts and science students.

Each correct/positive response (“Yes”) was awarded a score of 1, and each negative response (“No”) was awarded a score of 0.

This scoring system was used to categorize the knowledge level of the participants regarding the impact of fast-food consumption.

### Procedure

A non-experimental descriptive research design was adopted for the present study. Using a convenience sampling technique, 100 arts and science students were selected based on the inclusion and exclusion criteria. Prior permission was obtained from the college principal and hostel warden of Sri Ramakrishna New Ladies Hostel before conducting the study. The investigator explained the purpose and objectives of the study to the participants, and informed consent was obtained from students who were willing to participate. Data collection was carried out in a comfortable environment within the hostel premises. A structured self-administered questionnaire was used to assess the knowledge regarding the impact of fast-food consumption among arts and science students. The questionnaire consisted of demographic variables and self-structured knowledge-related questions regarding fast food consumption and its health effects. Adequate instructions were provided to the participants before administering the questionnaire, and sufficient time was given to complete the tool. The investigator remained present during the data collection process to clarify doubts and ensure completeness of responses. After completion, all questionnaires were collected, verified, and prepared for data analysis.

### Data analysis

The collected data were coded, organized, tabulated, and analysed using descriptive and inferential statistics. Demographic variables were analysed using frequency and percentage distribution. The level of knowledge regarding the impact of fast-food consumption among arts and science students was assessed using scores and percentage analysis. The association between the level of knowledge and selected demographic variables was analysed using the chi-square test. The findings were presented in the form of tables and figures for clear interpretation.

## RESULTS

Table 1: Frequency and distribution of demographic variables

S.no	Demographic variable	Frequency	Percentage (%)
1	Age in years		
	17 yrs	54	54%
	18 yrs	42	42%
	19 yrs	3	3%
	20 yrs	1	1%
2	Religion –		
	Hindu	90	90%
	Christian	7	7%

	Muslim	3	3%
3	Residence –		
	Urban	64	64%
	Rural	36	36%
4	Type of Diet –		
	Vegetarian	15	15%
	Non vegetarian	85	85%

Table 1 shows the distribution of demographic variables among arts and science students. The findings revealed that the majority of the participants were aged 17 years (54%), belonged to the Hindu religion (90%), resided in urban areas (64%), and followed a non-vegetarian dietary pattern (85%). The results indicate that the study population predominantly consisted of late adolescent students from urban backgrounds with dietary practices that may influence fast-food consumption behaviour.

Table 2: Assessment of knowledge on impact of fast-food consumption

n=100

S.no	Level of knowledge	Frequency	Percentage
1	Poor [0–5]	23	23%
2	Average [5-10]	37	37%
3	Good [11-15]	16	16%
4	Very good [16-20]	14	14%
5	Excellent [21–25]	10	10%

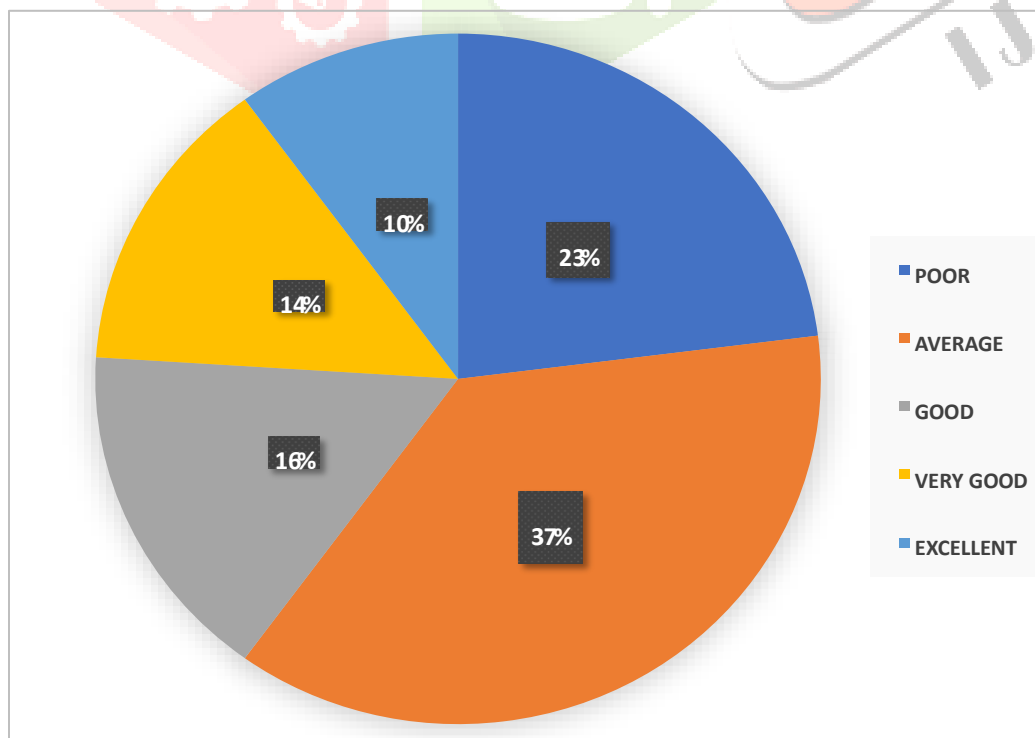


Figure 1: Frequency distribution of level of knowledge regarding fast-food consumption among students.

Table 2 and Figure 1 depict the level of knowledge regarding the impact of fast-food consumption among arts and science students. The findings revealed that the majority of the students had average knowledge (37%), followed by poor knowledge (23%), good knowledge (16%), very good knowledge (14%), and excellent knowledge (10%). The results indicate that most of the participants possessed only average awareness regarding the health impact of fast-food consumption, emphasizing the need for health education and awareness programs among students.

Table 3: Association between level of knowledge on fast-food consumption with demographic variables.

n=100

S.no	Demographic Variables	Frequency	Level of Knowledge		X <sup>2</sup> Value	Degree Of Freedom (r-1) (c-1)	X <sup>2</sup> Table Value
			Below Mean 11	Above Mean 11			
1	Age in years				2.95	1	3.841
	16-17 years	56	30	26			
	18-20 years	44	31	13			
2	Religion				9.88*	1	3.841
	Hindu	90	60	30			
	others	10	1	9			
3	Residence				2.95	1	3.841
	Urban	64	35	29			
	Rural	36	26	10			
4	Type of Diet				2.34	1	3.841
	Vegetarian	16	13	3			
	Non vegetarian	84	48	36			

Table 3 presents the association between the level of knowledge regarding the impact of fast-food consumption and selected demographic variables among arts and science students. The study findings revealed that there was a statistically significant association between religion and the level of knowledge ( $\chi^2 = 9.88$ ) at the selected level of significance, as the calculated chi-square value was higher than the table value (3.841).

However, no statistically significant association was observed between the level of knowledge and demographic variables such as age in years ( $\chi^2 = 2.95$ ), residence ( $\chi^2 = 2.95$ ), and type of diet ( $\chi^2 = 2.34$ ), since the calculated chi-square values were lower than the table value. These findings suggest that religion had a significant influence on the knowledge level of the participants regarding the impact of fast-food consumption, whereas other demographic variables did not show any significant association.

## DISCUSSION

The present study was conducted to assess the knowledge regarding the impact of fast-food consumption among arts and science students. The demographic findings revealed that the majority of the participants were aged 17 years (54%), belonged to the Hindu religion (90%), resided in urban areas (64%), and followed a non-vegetarian dietary pattern (85%). These findings indicate that the study population predominantly consisted of late adolescent students from urban backgrounds, where changing lifestyle patterns, convenience, and easy accessibility to fast-food outlets may influence dietary habits and food preferences.

The findings of the present study revealed that the majority of the students had average knowledge (37%) regarding the impact of fast-food consumption, while 23% of the students had poor knowledge. Only 10% of the participants demonstrated excellent knowledge regarding the harmful effects of fast-food

consumption on health. The findings suggest that although students possess some awareness regarding fast food, adequate knowledge regarding its long-term health consequences remains insufficient.

The findings of the present study are consistent with the study conducted by Ference and Deepthi, which reported that students were aware that fast food adversely affects health, yet continued consuming it due to convenience, stress, and taste preference. Similarly, Ashakiran and Deepthi observed that adolescents frequently consumed fast food despite having awareness regarding unhealthy dietary practices.

The present findings are also supported by the study conducted by Jaworowska et al., who reported that frequent fast-food consumption among young adults was associated with unhealthy dietary patterns and increased risk of obesity and cardiovascular diseases. Likewise, Bowman and Vinyard found that regular consumption of fast food significantly increased calorie intake and reduced overall nutritional quality among adolescents and young adults.

A study conducted by Rosenheck also revealed that increased fast-food consumption was strongly associated with obesity, poor dietary behavior, and adverse health outcomes among adolescents. Furthermore, Paeratakul et al. reported that frequent intake of fast food contributed to higher fat consumption and lower intake of fruits, vegetables, and essential nutrients among college students.

The present study identified a statistically significant association between religion and level of knowledge regarding the impact of fast-food consumption ( $\chi^2 = 9.88$ ). However, no statistically significant association was observed between knowledge level and demographic variables such as age, residence, and type of diet. These findings indicate that demographic variables may have limited influence on students' awareness regarding the harmful effects of fast-food consumption.

Overall, the findings of the study emphasize the importance of strengthening health education programmes and nutritional awareness initiatives among students. Educational interventions such as awareness campaigns, counselling sessions, and distribution of informational pamphlets may help improve students' knowledge regarding healthy dietary practices and reduce the harmful effects associated with excessive fast-food consumption.

## MAJOR FINDINGS OF THE STUDY

1. The study revealed that the majority of the students possessed a moderate level of knowledge regarding the health impact of fast-food consumption, whereas only a limited number of participants demonstrated adequate knowledge.
2. Demographic analysis indicated that most of the participants were aged 17 years, belonged to the Hindu religion, resided in urban areas, and predominantly followed a non-vegetarian dietary pattern.
3. The findings highlighted that fast-food consumption was common among students, mainly due to convenience, palatability, peer influence, busy academic schedules, and easy accessibility of fast-food outlets.
4. Although a considerable proportion of students were aware of the adverse health effects associated with frequent fast-food intake, such as obesity, gastrointestinal disorders, cardiovascular diseases, and nutritional deficiencies, the practice of regular fast-food consumption remained prevalent.
5. The findings emphasized the need for structured health education and nutritional awareness programmes aimed at promoting healthy dietary practices and reducing unhealthy eating behaviours among college students.
6. Overall, the study underscores the importance of early educational interventions and lifestyle modification strategies to enhance awareness and minimize the long-term health consequences associated with excessive fast-food consumption among students.

## STRENGTH OF THE STUDY

1. The present study addressed a significant and emerging public health concern related to fast-food consumption among adolescents and young adults.
2. The study provided valuable insight into the knowledge level of arts and science students regarding the health impact of fast-food consumption.
3. Inclusion of students from different academic backgrounds enhanced the diversity of the study population and improved the relevance of the findings.

4. The use of a structured questionnaire ensured uniformity and consistency in data collection.
5. The descriptive research design was appropriate for assessing knowledge and identifying existing awareness gaps among students.
6. The findings of the study may serve as baseline data for future research and for planning health education and nutritional awareness programmes among college students.
7. The study emphasized the importance of preventive health education in promoting healthy dietary habits among adolescents and young adults.

### LIMITATIONS OF THE STUDY

1. The study was limited to a single hostel setting; therefore, the findings may not be generalized to the wider student population.
2. The sample size was relatively small, which may limit the external validity of the study findings.
3. A convenience sampling technique was adopted, which may introduce sampling bias and affect representativeness of the population.
4. The study focused only on the assessment of knowledge and did not evaluate attitudes, practices, or actual dietary behavior related to fast-food consumption.
5. The study relied on self-reported responses from participants, which may be associated with response bias and social desirability bias.
6. Since the study utilized a descriptive cross-sectional design, causal relationships between variables could not be established.
7. Time constraints and limited resources may have influenced the scope of data collection and analysis.

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