

Fast-Food Consumption Behaviour of Undergraduate: With Special Reference to The State Universities in Sri Lanka.

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<p>Corresponding Author Iqbal Saujan</p> <p>Department of Islamic Studies, South Eastern University of Sri Lanka, Oluvil.</p> <p>Article History</p> <p>Received: 29/09/2024</p> <p>Accepted: 09/10/2024</p> <p>Published: 12/10/2024</p>	<p>Abstract: Fast-food consumption behaviours are increasing among children and youth. In particular, unhealthy eating habits are more prevalent among university students in Sri Lanka. Such habits are often associated with adverse impacts on nutrition and health. Therefore, the present study was conducted to identify the fast-food intake habits of undergraduates at state universities in Sri Lanka and determine the relationship between fast-food habits and Body Mass Index (BMI). Data regarding the level of fast-food consumption, time duration for consuming fast food on a daily, weekly and monthly basis, height, weight and other factors associated with choosing fast food were obtained through a self-administered questionnaire distributed among undergraduates (N = 250). Descriptive and inferential statistical techniques were applied in this study. According to the findings, 32.3% of the sample's BMI indicated overweight (26 – 30 kgM2). Participants' overall fast-food consumption habits were 15.29% for males and 65.21% for females, respectively. 30.3% of the participants consumed fast-food 2 to 3 times a week. Compared with other factors, the university environment contributed 54.3% to selecting such food, representing an increased influence. A positive significant relationship ($p < 0.05$) was observed between fast-food consumption and an increase in BMI. In summary, the behaviour of students' fast-food consumption has significantly increased. The findings of this study can be utilised to design interventions to reduce fast-food consumption among students. Additionally, researchers can develop strategies to encourage healthier eating habits among students. Finally, this study can inform policies to create an environment that promotes healthy eating habits.</p> <p>Keywords: Fast-food, Consumption behaviour, Unhealthy Eating, Undergraduates, Sri Lankan Universities.</p>
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Introduction

Food is essential for the survival of human beings. It provides the required nutrition to the human body (Didarloo et al., 2021). Human beings obtain their food from plants or animals. Food contains essential nutrients such as carbohydrates, fats, proteins, vitamins, fibres and minerals required by the human body (Abayomi Tunde et al., 2023). Human diet choices have occupied an essential place in the identification of cultural heritage in the history of human development. That is why, based on the food choices of human beings, people are classified into vegetarians, non-vegetarians, vegetarians and non-vegetarians. Also, a man's diet Choice is intertwined with his religious beliefs (Ramli et al., 2021). Moreover, The food pattern of a community is determined by family income, commodity prices, personal preferences and religious beliefs, cultural traditions, as well as geographical, environmental, social and economic factors (Anitharaj, 2018).

Fast foods generally refer to foods that are prepared quickly in short intervals (Dowarah & Bhowmick, 2020; Sumaedi & Yarmen, 2015). Fast-food stalls, street stalls and mobile eateries have come up to manufacture and sell these fast food items (Anitharaj, 2018).

The words "fast food" and "junk food" are used interchangeably (Arslan et al., 2023; Saha et al., 2022). However, not all fast food is harmful to the human body. When they are prepared with nutritious compounds that are not harmful to the body, they become harmless to the body (Arslan et al., 2023; Dimani, 2013). Ludwig et al. (2001) state that fast foods are generally low in essential elements such as iron, calcium, riboflavin, and vitamins A and C, comparable to poor nutritional value. Nutritional modification refers to increased oxidation of fats, carbohydrates and sodium and reduced consumption of unrefined grains and vegetables (Lipika et al., 2020). Fast-food consumption by youngsters and weight gain have become a global problem today (Anitharaj, 2018; Rajon et al., 2020). More than 400 million people in the world suffer from obesity (Moustafa et al., 2022). Many people in the world suffer from obesity due to their irregular eating habits and high intake of fast food (Rajon et al., 2020). Fast-food consumption is particularly prevalent among the younger generation between 18 and 25 (Afolabi et al., 2013; Anitharaj, 2018; Arslan et al., 2023).

Readiness, taste, affordability, and marketing strategies are the factors most influencing fast food intake among children and adolescents (Dimani, 2013). University students are more likely to consume fast food due to their social environment and improper eating habits (Arslan et al., 2023). Skipping meals is also one of the unhealthy eating habits among these people. University students are mainly found to skip breakfast (Arslan et al., 2023). According to the American Heart Association reported in 2017, people who eat fast food for breakfast are more likely to have lower heart disease, sensory blood pressure and higher cholesterol (Mohiuddin, 2019). Fast food is spreading all over the world. The countries of the world are interested in investing heavily in such fast-food production. Between 1988 and 1997, US investment in such food production in Asian countries increased from 743 million to 2.1 billion. Similarly, US investment in Latin America increased from \$222 million to \$3.3 billion. This is more than the investment put into agriculture by the United States. The United States, France, Canada, London, South Korea, Japan, Australia, Germany, Switzerland and Sweden are the countries that consume fast food (Nico, 2023). The United States is the world's largest fast-food consumer. Americans, such as French fries, Pizza, ice cream, Chicken wings, Coffee, Sandwiches, and Soda, are also used by Americans to entertain guests.

Globalisation and urbanisation have significantly changed the food consumption patterns in East Asian countries (Anitharaj, 2018; Lipika et al., 2020). Adulthood is a period of growth in human life, and there is a period of free eating and consumption of nutrients (Dowarah & Bhowmick, 2020). Most households in developed and developing countries rely heavily on fast food (Afolabi et al., 2013; Lipika et al., 2020; Otterbach et al., 2021), and Sri Lanka is no exception. According to Sri Lanka's Ministry of Health Report (2021), the number of people suffering from fast-food consumption and obesity is rising (Sri Lanka's Ministry of Health, 2021).

As far as Sri Lanka is concerned, the staple food of the Sri Lankan people is rice, as is the case in other Asian countries. Rice continues to be the food of choice (Logamahadavi, 2018). Vegetables, leaves, fish and meat are used along with rice. Considering the ancient food habits of the people of Sri Lanka, during the First and Second World Wars, due to the scarcity of rice in the foreign market, the then British Government introduced wheat. Although this did not change the primacy of rice, it did have a lasting impact on the food habits of the Sri Lankan people in later years. It was only after that that wheat dishes called paan, pittu, idiyappam, and dosa became important. Based on this, the multinational fast-food companies of the Western countries are changing the food habits of people all over the world, especially our people, by introducing fast food and turning our people into slaves (Lipika et al., 2020; Rajon et al., 2020). By this, the food with unique taste produced in each region is destroyed, and the same food is imposed on the people. The fast foods the Sri Lankan people consume most are Burger King, KFC, Pizza, Subway, BreadTalk, Hot Wings, Colonel's Fries, Snacker, Twister, and Submarine (Maree et al., 2020; Moustafa et al., 2022; Saha et al., 2022). These fast foods are more tasty but do not have the necessary nutrients for health (Didarloo et al., 2021; Sajjad et al., 2023). However, people who are addicted to taste tend to prefer raw foods. This practice is prevalent in Sri Lanka, especially among the youth and people with a hectic lifestyle. University

students, often away from home, have resorted to fast food to conveniently, easily and quickly meet their needs.

Problem Statement

The health status of university students in contemporary society is a matter of concern. University students demonstrate a tendency to favour readily available fast food over nutritious alternatives. This trend has been particularly exacerbated following the economic crisis in Sri Lanka, compelling many individuals to rely on fast-food establishments. This phenomenon is notably prevalent among university students. Since university canteens offer affordable, fast food, students perceive these establishments as a solution to their economic constraints. However, excessive consumption of fast food is associated with numerous health issues and obesity. Medical professionals caution that frequent fast food consumption may increase the risk of various physiological disorders. The fast-food habits of students can potentially lead to cognitive impairments, including poor memory, lack of concentration, and diminished planning abilities, as well as physical symptoms such as headache, depression, fatigue, weight gain, emotional dysregulation, abdominal pain, joint pain, gastritis, glossitis, neurodegeneration, diabetes, intolerance, colorectal cancer, and an elevated risk of cancer after the age of 50 (Abayomi Tunde et al., 2023; Li et al., 2020). This not only raises concerns about their immediate health but also their long-term well-being. Given this context, it is imperative to investigate the factors contributing to the inclination of university students towards fast-food consumption.

Research Objective

1. To find out the involvement of consumption in fast food among university students.
2. Identify factors influencing the engagement in fast-food consumption.

Literature Review

Previous studies in this area were reviewed. The objective of this review is to identify the research gap, and the following are the literary reviews of the studies that have been obtained during the search.

Jayasingha J.K & Silva L.P (2014). "Fast Food Consumption And Health Status of A University In Sri Lanka" The Sri Jayawardhanapura in the Colombo District was selected as the boundary of this study. The research objective is to emphasise the necessity for health education programmes that promote healthy eating habits and lifestyles for university students. University students consume fast foods high in fat, protein, and carbohydrates. Approximately 54% of individuals consume fast food several times a day. This is attributed to price and taste. 8% of the female participants surveyed were overweight, and 16% of the male participants were overweight.

Thaybaran Aaruppillai & Paulina Mary Godwin Philip (2015) "An Analysis of Consumers' Buying Behaviour and Its Determinants of Fast Food in Sri Lanka" The objective of the study was to identify the impact of demographic and economic characteristics of consumers on fast food consumption and consumer purchasing behaviour in Moratuwa Municipal Council Area in Sri Lanka. This study was carried out. Data was collected

through structured questionnaires and consumer surveys of 100 samples from 50 restaurants. The study's findings identified consumers' age, educational level, employment, civic status, and the distance from their home to the nearest fast-food outlet as the significant determinants of fast-food consumption. Researchers mentioned that 48% of the students consume fast food once or twice a month, 40% once a week, and 2% consume fast food daily.

Sriyathala M.A & Kumarasingha P.J (2021) "Customer Satisfaction And Revisit Intention Towards Fast Food Restaurant In Sri Lanka" The objective is to investigate the impact of food taste, food quality, service quality, perceived efficiency, and restaurant environment on customer satisfaction and reciprocity. Data was collected through a questionnaire survey administered to students of Sri Jayewardenepura University who are fast-food restaurant patrons in the selected metropolitan area in the Colombo district. The results indicate a significant preference for fast food among university students, who increasingly opt for fast food due to the perceived price and taste. Furthermore, restaurant managers utilise valuable insight to attract, retain, and satisfy customers.

Dassanayake & Priyanath (2022) "Impact of Fast Food Consumption on Overweight among Youth in Sri Lanka" The study focused on 100 young individuals residing in Kiriella Village in the Ratnapura district. This research aims to determine the effect of fast-food consumption on the prevalence of overweight among young people. The study concluded that fast food consumption positively correlated with the incidence of overweight among young individuals.

Yumna A.S.R (2021) "Fast food habits affecting students' learning ability" This research raises awareness at the school level by identifying health-related discomforts and daily eating habits that students frequently experience and demonstrating the impact of fast food on their learning ability in society. According to the study's findings, there is a lack of focus on learning. Lack of

motivation, frequent drowsiness during lesson periods, disinterest in learning activities, diminished thinking ability, poor comprehension skills, and decline in achievement levels are some observed effects among students. These issues cause physical discomfort and learning problems, primarily due to a deficiency of nutritious foods.

Madanika & Sakitha (2019) "Study on factors affecting consumers fast food behaviour: special reference to Pizza Hut in the Jaffna, peninsula Sri Lanka" The study examines the factors influencing consumer behaviour regarding fast food. This research was conducted in the Jaffna peninsula. The objectives of this study are to identify the factors that influence consumer behaviour in fast food restaurants in Jaffna, assess the level of food awareness among the population, examine how food is served according to local preferences in Jaffna, and investigate how the purchase of fast-food products in Jaffna influences consumer behaviour and the contributing factors.

Method and Materials

In this quantitative sociological study, all the data required for research were gathered based on the primary source of information. Approximately 250 students studying in Sri Lankan state universities were involved in the study on a voluntary basis. The researchers employed the random sampling technique to choose the samples. The Self-Administered Questionnaire (SAQ) was applied as the primary tool for collecting empirical data in this study. The necessary questions for the construction of this questionnaire were reviewed from the existing literature. Questionnaires were administered for the pilot survey to 14 students who were not part of the study sample, and the information returned was utilised to improve the closed-ended questionnaires prior to their administration to the study sample. Also, the items were reviewed by a researcher from food science research.

The manner in which the questionnaire was distributed among the participants is as follows.

No	University	Distributed Questionnaire	Received Questionnaire
1.	University of Colombo	25	19
2.	South Eastern University of Sri Lanka	50	48
3.	Eastern University, Sri Lanka	25	22
4.	University of Jaffna	24	15
5.	University of Kelaniya	25	23
6.	University of Moratuwa	12	08
7.	Rajarata University of Sri Lanka	10	10
8.	University of Sri Jayewardenepura	10	09
9.	University of Peradeniya	30	26
10.	University of Ruhuna	12	08
11.	Sabaragamuwa University of Sri Lanka	12	07
12.	Uva Wellassa University of Sri Lanka	15	04
Total		250	199

A total of 250 questionnaires were sent out, of which 199 were collected back, with a possibility of being used in the study. The average relationship between distributed and retrieved questionnaires is 79.6%. It includes a number of variables that can be useful in conducting the study. The statistical software package SPSS (Version-24) was also used to analyse the data obtained from the questionnaires. Furthermore, the respondents' height (Cm) and weight (Kg) were also obtained to determine the body mass index. The body mass index of the samples was determined using a BMI calculator obtainable from the website www.calculator.net.

The analysis results were presented descriptively with the help of graphs, tables, letters, and sentences.

Results and Discussion

The questionnaires distributed among the samples were analysed, and the results obtained are presented in tables and drafts. Accordingly, in this section, 'Results and Discussion', the results are discussed under the main headings such as body mass index of the samples, interest in visiting fast food restaurants, duration of intake of fast food, concept of research models on the nutrition of fast food consumers, reasons for obtaining food from fast food and fast food consumed by the samples.

1. Demographic details of the respondents

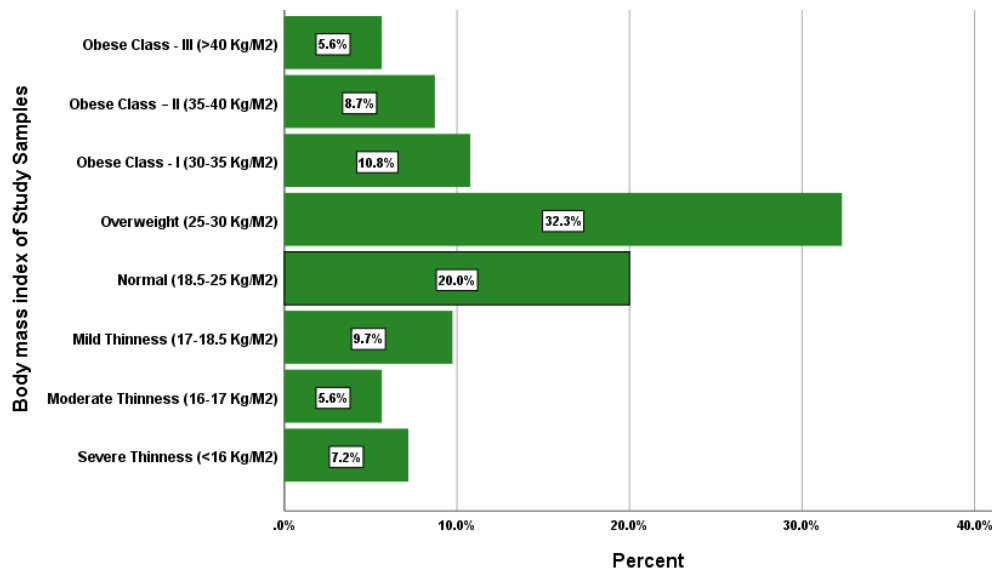
Personal data of the sample, such as age, gender and university, were obtained and analysed. The results obtained are detailed in the following table.

Details of the Study Sample	Frequency	Percentage
Age		
▪ 21-30	190	95.4%
▪ 31-40	9	4.5%
Total	199	100%
Gender		
▪ Male	86	43%
▪ Female	113	57%
Total	199	100%
University		
▪ University of Colombo	19	10%
▪ South Eastern University of Sri Lanka	48	24%
▪ Eastern University, Sri Lanka	22	11%
▪ University of Jaffna	15	8%
▪ University of Kelaniya;	23	12%
▪ University of Moratuwa	08	4%
▪ Rajarata University of Sri Lanka	10	5%
▪ University of Sri Jayewardenepura	09	4%
▪ University of Peradeniya	26	13%
▪ University of Ruhuna	08	4%
▪ Sabaragamuwa University of Sri Lanka	07	3%
▪ Uva Wellassa University of Sri Lanka	4	2%
Total	199	100%

95.4% of the participants were in the age group of 21-30 years, and 4.5% were in the age group of 31-40 years. This represents a comparatively low proportion. This distribution is attributable to the age-based entry policies of universities, which result in a predominance of students between the ages of 21 and 30. Analysis of the sample based on gender revealed that 43% of the students were males and 57% were females. Examination of the universities of the research samples who participated in this study indicated that all the participants were pursuing education in public universities in Sri Lanka. The highest number of students who participated was from South Eastern University (24%), followed by the University of Peradeniya (13%) and Eastern University (11%).

2. Bodymass Index of Respondents

Body mass index is a tool that measures body mass health based on a person's height and weight. This is a globally accepted standard. The participants' Weight (Kg) and Height (Cm) were obtained to determine the body mass index of the study samples. It was calculated with the help of the BMI Calculator on the web page. The body mass of the sample has been divided into eight categories recommended by the World Health Organization for a person who has reached puberty and presented in the following slab graph.

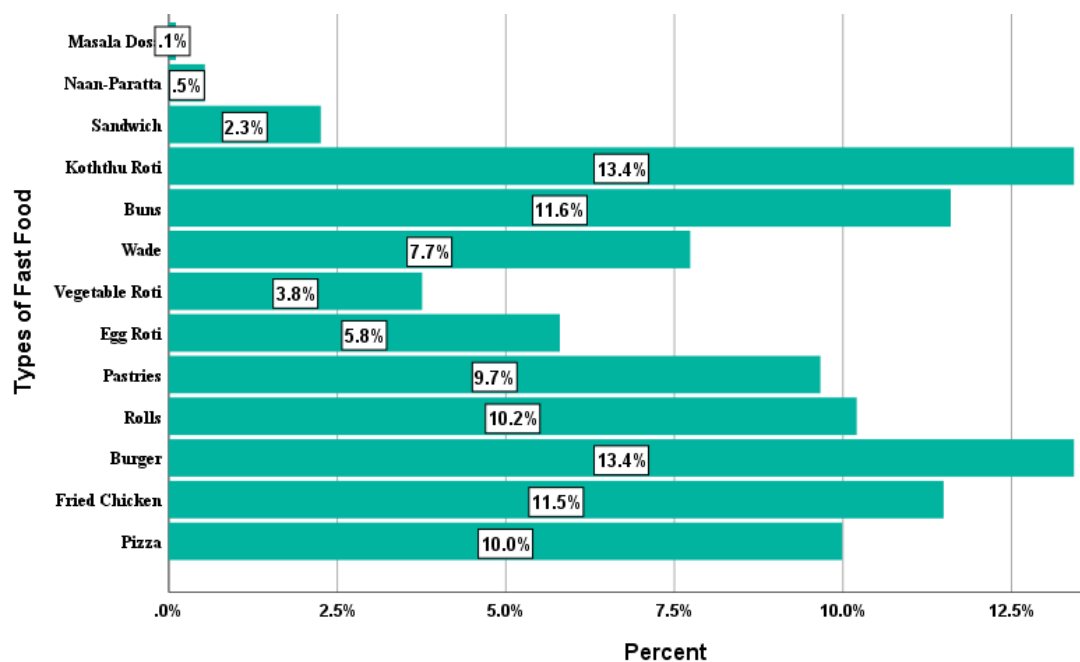


Graph 1: Body mass index of sample

According to the above bar chart, 32.3% of the study participants were at risk of high body mass (25 – 30kgb2). The next stage is 20% of the average mass (18.5-25kgm2). Following these two categories, The second highest body mass, class I (18.5-25kb2), had 10.8% of the samples. It is followed by Obese Class II (8.7%) and Obese Class III (5.6%). It is worth noting that more than half of the total sample is of high Body Mass Index. Accordingly, according to the recommendation of the World Health Organization, it can be concluded that a large number of students who continue their education in Sri Lankan public universities are obese. Paeratakul et al. (2003) The main reason for this waist increase is high-fat fast foods. Moreover, excessive fast food consumption has significantly increased weight gain among younger people (Lipika et al., 2020).

2. Study samples Preferred Types of Fast Food.

In Western societies, commonly recognised fast food items include burgers, sandwiches, French fries, pizza, fried chicken, puri, singara and chips (Lipika et al., 2020). The environment in which university students reside significantly influences their dietary choices. Research has demonstrated that individuals who consume nutritious foods, particularly when residing in a domestic environment, are more prone to consuming fast food in the university setting due to time constraints and the inability to prepare their meals. The types of fast food that students consume more frequently when residing in a university environment have been investigated and the results are presented in the following graph - 02.



Bar Chart 2: Study Samples Preferred Types of Fast Food

The most frequently consumed fast food items among the study participants were bun bread (13.4%) and bakery items (13.4%). These were followed by bun (11.6%) and fried chicken (11.5%). It is noteworthy that the fast food selection of the sample predominantly comprises Western foods such as fried chicken, barbakar, bun, and sandwich, as well as Sri Lankan fast foods including paratha, Koththu paratha, egg paratha, vada and roll. Generally, research models have demonstrated that the characteristics of restaurants in proximity to the university environment have influenced food choices. The findings of previous studies indicate that there is also a Western cultural influence.

3. Desire to Visit Fast Food Restaurants

The time taken by the sample to visit fast food outlets is analysed in this section. This can be seen in the following table.

		<i>Frequency</i>	<i>Per cent</i>	<i>Mean</i>	<i>Std. Deviation</i>
Valid	Weekday	31	15.9	2.04	.609
	Weekend	119	61.0		
	Weekday and Weekend	39	20.0		
	Total	189	96.9		
Missing	System	6	3.1		
Total		195	100.0		

Table 3: Duration of visits to fast food outlets

Analysis of the study samples revealed that a majority (61%) of participants frequented fast food establishments on weekends. Subsequently, 20% of respondents reported discontinuing their visits to fast food restaurants during both weekends and weekdays. This trend aligns with Anitharaj's (2018) observation that contemporary youth exhibit diminished interest in food preparation, consequently leading to an increased propensity for dining out. Further examination of the test models yielded the following results regarding motivations for fast food consumption. These findings are presented in the subsequent table.

4. Duration of fast food intake

The following table was obtained by analysing the duration of fast food intake of the sample samples.

Frequency of Fast-Food Consumption					
		<i>Frequency</i>	<i>Per cent</i>	<i>Mean</i>	<i>Std. Deviation</i>
Valid	More rarely	49	25.1	2.62	1.396
	2 to 3 times in a week	59	30.3		
	3 to 4 times in a week	38	19.5		
	5 to 6 times in a week	15	7.7		
	Daily	34	17.4		
	Total	195	100.0		

Table – 1: Duration of intake of fast food

According to the table above, the majority of participants (30.3%) in the study sample consumed fast food two to three times per week. This was followed by three to four times (19.5%) and five to six times (7.7%). Additionally, 17.4% of the sample were found to consume fast food daily. Conversely, 25.1% of individuals consumed fast food infrequently. Arslan et al., 2023 The study found that 39.7 per cent of university students consumed fast food once in 15 days. This increased consumption of fast food may lead to physiological changes and contribute to various health conditions, including digestive disorders, constipation, peptic ulcers, cardiovascular disease, hypertension, and diabetes.

5. Perception of Study Sample on Nutritional Status of Fast Food Consumers

This section examines the participants' perceptions regarding the changes in the nutritional status of humans due to the high consumption of fast food. Accordingly, the perception of the samples is enlightened in Table 02.

Type of Fast-food Consumers	Valid								Mean	Median	Std. Deviation
	Underweight		Body weight normal		Overweight		Obesity				
	F	%	F	%	F	%	F	%			
1. Those who take fast-food 2 to 3 times a day	27	13.6	43	21.6	50	25.1	79	39.7	2.91	3.00	1.074
2. Those who consum fast-food once a day	36	18.1	83	41.7	44	22.1	36	18.1	2.40	2.00	.984
3. Those who take fast-food 4 to 5 times a week	24	12.1	73	36.7	69	34.7	33	16.6	2.56	3.00	.908
4. Those who take fast-food 2 to 3 times a week	16	8.0	116	58.3	46	23.1	21	10.6	2.36	2.00	.778
5. Those who take once a week	35	17.6	123	61.8	33	16.6	8	4.0	2.07	2.00	.707
6. Those who take fast food once in 2weeks	56	28.1	102	51.3	23	11.6	18	9.0	2.02	2.00	.873
7. Those who take fast food once a month	66	33.2	99	49.7	18	9.0	16	8.0	1.92	2.00	.861

Table 2: Perception of nutrition in fast food users

According to the table above, the majority of study samples (Mean – 2.91, Mode – 3, Standard Deviation – 1.074) indicate that individuals who consume fast food two to three times a day are at risk of an unhealthy body mass (Overweight). Participants concurred that individuals who consume fast food only once daily maintain an average body weight (Mean – 2.40, Mode - 2, Standard Deviation – .984). When examining the perception of the study samples regarding those who consume fast foods four to five times a week, the majority (inter - 2.56, food; - 3, stand - free - 908) indicated average body weight conditions. Furthermore, when analysing the perception of the samples on the body weight of those who consumed fast food only two to three times a week and only once a week, an average body weight was observed (Mean 2.36, Mode - 2, Standard Deviation - .778). It was noted that those who consumed fast food two to three times a week maintained a normal body weight (Mean - 2.07, Mode - 2, Standard Deviation - .707). Additionally, individuals who consumed fast food only once every two weeks and once a month reported a normal state of body weight.

In summary, it has been observed that, according to the perception of the study samples, there is a significant relationship between increased body weight and the frequency of fast food intake, and it is accepted that there is a positive correlation between the frequency of fast food consumption and the increase in Body Mass. In a study conducted by Anitharaj (2008), it was found that young people in India are aware of the nutritional effects of fast food on their diet, but they are not cognizant of it. Maree Scully et al. (2020) mentioned in their study that 38% of secondary school students in Australia have the habit of consuming fast food on a weekly basis (Maree et al., 2020). They also identified factors contributing to weight gain, such as increased consumption of sugary drinks and snacks, reduced exercise habits, watching commercial television, and taking short naps (Maree et al., 2020).

6. Reasons for Increased Fast Food Consumption

In this area, the study samples identified factors influencing fast food intake. Accordingly, the results obtained after analysis are tabulated in the following table.

Table 3: Reasons for Increased Fast Food Consumption

		Frequency	Per cent	Mean	Std. Deviation
Valid	University Environment	108	54.3	2.13	1.421
	Inability to prepare meals by oneself	23	11.6		
	Availability of fast food quickly	19	9.5		
	Taste	33	16.6		
	Fascination with new foods	16	8.0		
	Total	199	100.0		

The most influential factor was the university environment (54.3%). It is followed by the tastiness of the particular foods (16.6%) and the inability to prepare their own food (11.6). The least influential factors are rapid access (9.5%) and attractiveness to fresh foods (8%). Generally, it is customary for universities in Sri Lanka to contract out-of-town restaurants on an annual basis to run cafeterias at subsidised prices at wild prices. However, ensuring the quality and hygienic preparation of the food prepared in these universities is impossible. Recently, more attention has been paid to the health of university students, and some canteens have been created to sell only healthy natural foods, but due to the student's lack of interest in these canteens, these canteens cannot be continued. As a result, the project seems to have failed.

In addition, due to the lack of facilities to prepare their meals, the younger students are forced to stay in restaurants outside or cafeterias in the university environment. Further, students often visit fast food outlets with their friends. This is because the taste of fast food attracts students. Arslan et al. (2023), In addition to these, university students consume fast food due to taste, workload and other social factors.

7. Accompaniment When Visiting Fast Food Restaurants

The following results were obtained when a study was conducted to find out with whom students used to go to fast food restaurants.

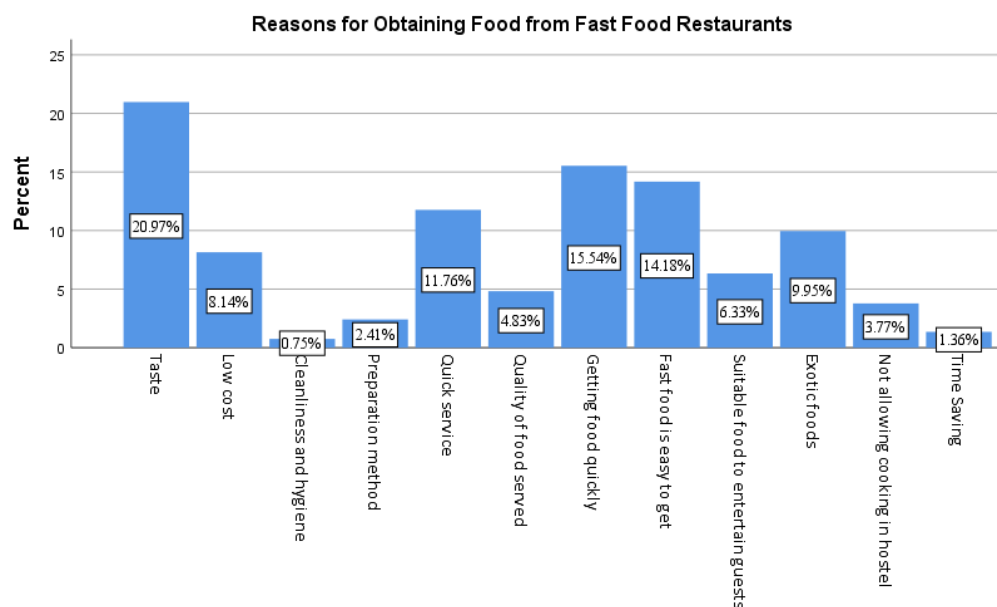
Table 4: Accompaniment When Visiting Fast Food Restaurants

		<i>Frequency</i>	<i>Per cent</i>	<i>Mean</i>	<i>Std. Deviation</i>
Valid	University Colleagues	185	93.0	1.12	.440
	Family Relatives	5	2.5		
	Myself	9	4.5		
	Total	199	100.0		

According to the above table, most of the research samples (93%) mentioned that fellow university students visited restaurants together. It was found that the next level (4.5%) was to go alone and to go with family relatives (2.5%). As noted above, university environment studies describe how fast food habits influenced the participants. A study conducted by Maree Scully et al. (2020) found that those who eat fast food on a weekly basis tend to go with friends, family relations etc.

8. Reasons for Preferring to Obtain Food from Restaurants

The results obtained from the study samples of reasons for more significant cravings for fast food are described in the following Bar Chart.



According to the study, 20.97% of the samples indicated that the taste of fast food stimulated the appetite, and the subsequent category (15.54%) indicated that the rapid availability of these foods was a factor. Furthermore, 14.18% of the participants noted that universities are more likely to have fast food due to its increased prevalence in these environments. The following categories (11.79%) were the expeditious food service and the foods' visual appeal (9.95%). Dimani (2013) states that fast food outlets have been established prioritising speed, efficiency, and consistency. Moreover, in a study conducted by Anitharaj (2018), "Fast food outlets have attracted many youngsters. This is because they serve food very

quickly and can pick it up quickly." The author further noted that fast food outlets have developed strategies to display their food in a manner that attracts more youth. According to the study by Rajon et al. (2020), medical students are more likely to consume fast food, spend more time on technological devices and exhibit less interest in sports.

9. Hypothesis Testing

This section is studied to see if there are any significant associations between fast food intake patterns and weight gain.

Correlations									
		Body mass index of Study Samples	Those who take food 2 to 3 times a day	Those who consume once a day	Those who take fast-food 4 to 5 times a week	Consuming 2 to 3 times a week	Consume only once a week	Those who consume once in 2 weeks	Consume once a month
Body mass index of Study Samples	Pearson Correlation	1	.892**	.910**	.934**	.866*	.893**	.890**	.879**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000
	N	195	195	195	195	195	195	195	195
Those who take food 2 to 3 times a day	Pearson Correlation	.892**	1	.885**	.881**	.764*	.747**	.766**	.773**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000	.000
	N	195	199	199	199	199	199	199	199
Those who consume once a day	Pearson Correlation	.910**	.885**	1	.912**	.871*	.888**	.868**	.849**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.000
	N	195	199	199	199	199	199	199	199
Those who take fast-food 4 to 5 times a week	Pearson Correlation	.934**	.881**	.912**	1	.843*	.836**	.843**	.853**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000	.000
	N	195	199	199	199	199	199	199	199
Consuming 2 to 3 times a week	Pearson Correlation	.866**	.764**	.871**	.843**	1	.816**	.839**	.820**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.000
	N	195	199	199	199	199	199	199	199
Consume only once a week	Pearson Correlation	.893**	.747**	.888**	.836**	.816*	1	.898**	.847**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000
	N	195	199	199	199	199	199	199	199
Those who consume once in 2 weeks	Pearson Correlation	.890**	.766**	.868**	.843**	.839*	.898**	1	.942**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		.000
	N	195	199	199	199	199	199	199	199
Consume once a month	Pearson Correlation	.879**	.773**	.849**	.853**	.820*	.847**	.942**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	
	N	195	199	199	199	199	199	199	199

**. Correlation is significant at the 0.01 level (2-tailed).

The hypothesis table presents significant correlations between the study samples' body mass index (BMI) and various eating habits. The Pearson correlation coefficients indicate strong positive associations between BMI and the frequency of food intake, encompassing both regular meals per day and fast-food consumption per week. Notably, the correlation between BMI and consuming fast food 4-5 times a week exhibits the highest value (0.934), suggesting that individuals who frequently consume fast food tend to have a higher BMI. Conversely, those who consume fast food 2-3 times a week demonstrate a slightly lower correlation with BMI (0.866), albeit still solid and significant. All correlations are statistically significant at the 0.01 level ($p = 0.000$), substantiating that these eating habits are closely associated with BMI increases. Arslan et al., 2023 found a significant correlation between fast food consumption and participants' age, gender, economic status, BMI, daily intake of vegetables, and breakfast habits. However, Maree Scully et al.'s (2020) study found no link between frequent fast food intake and weight gain.

Furthermore, the table elucidates significant correlations between various patterns of food consumption. For instance, individuals who frequently consume fast food are also likely to eat fewer meals per day, as evidenced by the strong correlation (0.912) between consuming fast food 4-5 times a week and having only one meal daily. This observation suggests that unhealthy eating patterns, such as frequent fast-food

intake and irregular meal schedules, are interconnected and tend to coexist. In conclusion, the study establishes a clear association between higher BMI and more frequent fast food consumption, alongside a pattern of related eating behaviours.

10. The correlation between fast food cravings and reasons for food cravings

Here, the analysis was conducted to determine the relationship between the participants' reasons for consuming fast food and the frequency of visits to fast food restaurants.

Correlations			
		Reasons for Obtaining Food from Fast Food Restaurants	Time of Visiting Fast Food Restaurants
Reasons for Obtaining Food from Fast Food Restaurants	Pearson Correlation	1	.729**
	Sig. (2-tailed)		.000
	N	663	189
Time of Visiting Fast Food Restaurants	Pearson Correlation	.729**	1
	Sig. (2-tailed)	.000	
	N	189	189

** . Correlation is significant at the 0.01 level (2-tailed).

The correlation table demonstrates a robust and statistically significant positive association between the motivations for obtaining sustenance from fast-food establishments and the temporal patterns of patronage at these venues, with a Pearson correlation coefficient of 0.729. This finding suggests that the factors influencing individuals' selection of fast food are intricately linked to the specific temporal periods during which they frequent these establishments. The correlation is significant at the 0.01 level ($p = 0.000$), indicating a substantive relationship between these two variables. The analysis is predicated on data collected from 663 participants regarding motivations for fast food selection and 189 participants concerning their visitation patterns.

Conclusion

According to a study conducted on fast food consumption habits among undergraduate and postgraduate students in Sri Lanka, the research findings indicated that a substantial proportion of students exhibited addictive behaviour towards fast food consumption, and a significant number of students experienced weight gain. Moreover, the study revealed that the majority of respondents consumed fast food 2-3 times per week, with the primary contributing factor being residence away from home and the university environment. Additionally, the research identified a significant correlation between weight gain and increased fast food intake. Should the current trend persist, there is a potential risk that the weight gain issue faced globally may escalate to the point of necessitating a health emergency declaration in Sri Lanka, and the researchers postulate an increased likelihood of premature mortality. In light of these findings, it is imperative that the University Grants Commission, university authorities, and the Ministry of Higher Education implement necessary measures to address this issue in the future. The researchers express high expectations that the results of this study will contribute to strengthening efforts in this regard.

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