

RESEARCH ARTICLE

A Study on Food Consumption Pattern of The Tibetan College Students in Dalai Lama Institute for Higher Education Bengaluru, Karnataka

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Abstract

Healthy eating habit is important for college students for overall academic success. Lack of nutrients causes declining health which directly affects academic scores. The objective of the study is to understand the food frequency, dietary diversity, and nutritional status of Dalai Lama Institute for Higher Education students (DLIHE). A total of 114 students participated in this study. Results show that the students are consuming food rich in carbohydrates and fewer fruits and vegetables. Undernutrition was found to be high among the students. The implication of the study can help management head to create a healthy eating habits and improve overall nutrition among the students.

KEYWORDS:

Food consumption pattern, Nutritional status, College students, Tibetan Refugees, India

1 | INTRODUCTION

The problem of undernutrition and overnutrition was studied widely especially among children and adult populations but less among college students. During the period of transition, it is important to educate youth regarding a healthy diet and proper nutrition. The success rate in the academic field depends upon the quality of dietary intake. A study indicated a link between inadequate nutrition and academic achievement measured by GPA score. There is a positive influence of healthy eating on academic performance (Reuter Forster, 2021). College students tend to eat a fewer amount of fruits and vegetables and prefer food high in calories (Deshpande et al., 2009). The severity of obesity has grown rapidly among children and adolescence (Farhat et al., 2010). This may be due to increased consumption of fast food which was found to be the maximum among undergraduate students accounting for 85% (Mahajan Gothankar, 2020). Unhealthy eating habit leads to various illnesses such as obesity, diabetes, and metabolic syndrome (Abraham et al., 2018). Micro and macronutrients can be obtained from fruits, vegetables, milk, cereal, meat. Lack of these nutrients can lead to complex diseases in the long run (Otemuyiwa Adewusi, 2012). Syrian refugees in Turkey are faced with the challenges of food insecurity contributing to over and undernutrition (Pehlivanurk-Kizilkan et al., 2020). The body mass index (BMI) of college student in China is strongly associated with physical fitness (Chen et al., 2020). College students adopting an active lifestyle promotes health (Sogari et al., 2018). The sleeping pattern was found to be a significant factor affecting BMI. Sleeping disturbances cause overweight among college students (Vargas et al., 2014). From the study, it is clear that it is important to examine the dietary practices of students especially refugees. This study is an attempt to understand the food consumption frequency, dietary diversity, and nutritional status of Dalai Lama Institute for Higher Education students. The implications of the study can benefit Tibetan refugee students in Dalai Lama institute for higher education for improving their dietary practices where the majority of Tibetan youth study.

2 | METHODOLOGY

The study applied a cross-sectional, descriptive study design which was carried out in the Dalai Lama institute for higher education, Bengaluru, located in Karnataka state. All the students are accommodated in the Institute hostels. Students can avail food and use facilities provided by the institute, there are also canteens for those who prefer to eat outside the hostels. The undergraduate students of the Dalai Lama Institute for Higher Education, Bengaluru was included in the study's population. A structured questionnaire focusing on various food groups such as vegetables, fruits, meat, nuts, aerated drinks was used to understand the frequency of consumption and number of food groups to understand dietary diversity. A questionnaire was distributed to two hundred (200) students and only one hundred four-teen (114) responded. To understand the nutritional status of the students, Anthropometric measurements were used to measure their height and weight, also to analyze the Body Mass Index (BMI).

The study also examined food groups to understand the dietary diversity score and made use of food groups defined by Omage Omuemu, 2018. A slight modification in the food group was made to match the type of food consumed by students. Food groups included are wheat, roots and tubers, vegetables, fruits, meats, eggs, fish, nuts, milk, and soft drinks. The dietary diversity score was classified as low for <3, medium for 4-5, and high for >6. This was calculated based on the number of food groups consumed by the respondents. Data analysis was performed using SPSS using simple descriptive analysis such as percentages and frequency counts.

Ethical clearance for this study was obtained from the ethics and research committee of the institute. Permission was obtained from management and informed consent was sought from respondents.

3 | RESULTS

3.1 | Demographic Characteristics

Table 1 below shows the demographic characteristics of the respondents such as age, gender and year of college.

TABLE 1 Socio-demographic characteristics of the respondents

Variables	Frequency (n=114)	Percent
Age group (years)		
18-21	67	58.77
22-24	40	35.09
25-27	7	6.14
Gender		
Male	67	58.77
Female	47	41.23
Degree year		
First-year	44	38.60
Second-year	45	39.47
Third-year	25	21.93

The majority of the age group falls between 18-24 years of age. Male respondents were higher compared to females due to a greater number of male students in the institute. The majority of the students from the first and second years participated in the study.

3.2 | Food consumption frequency of Dalai Lama Institute of Higher Education students

Food consumption frequency as shown in Figure 1 depicts a clear picture of dietary intake by students. Green leafy vegetables, fruits, roots, and tubers are mostly consumed once a week. Fish consumption is low due to eating habits and unavailability factors. Nuts are rarely consumed which may lead to a deficiency of good fats. However, aerated drinks such as Coke, Pepsi, Mountain dew are consumed by students on a daily and weekly basis.

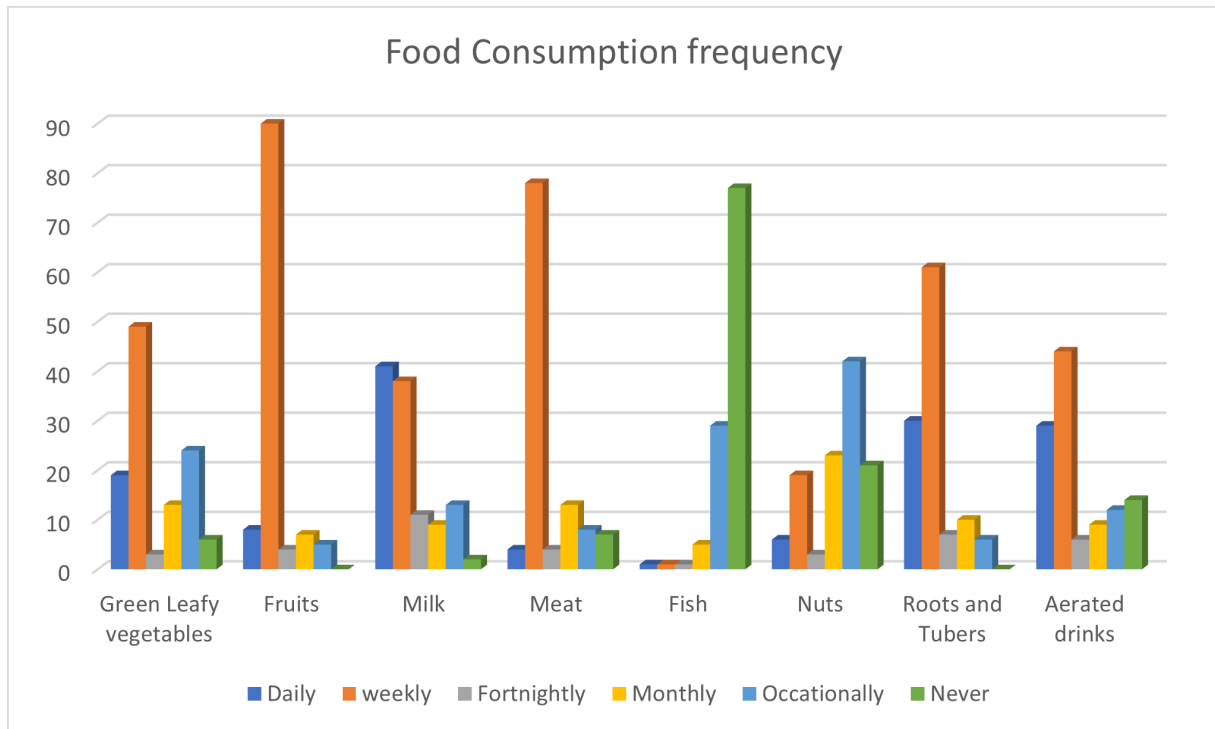


FIGURE 1 Food consumption frequency of DLIHE students

3.3 | Dietary diversity

Dietary diversity is directly linked with healthy and long life (Miyamoto et al., 2019). Thus, the overall dietary diversity score was calculated and is shown in Figure 2. Also, it tries to understand the gender difference concerning dietary diversity.

The dietary diversity of the respondents indicates that 28.95% belong to medium dietary diversity and 9.65% have low dietary diversity. To see the difference between the gender, ANOVA was conducted as shown in Table 2.

TABLE 2 Dietary Diversity between Male and Female

	Gender	N	Mean	SD	SE
Dietary diversity	Male	67	2.70	0.523	0.0639
	Female	47	2.26	0.765	0.1116

One-way ANOVA (Welch's) is significant P-value = < .001

Post-Hoc Test Significant = 0.446 ***(Male)

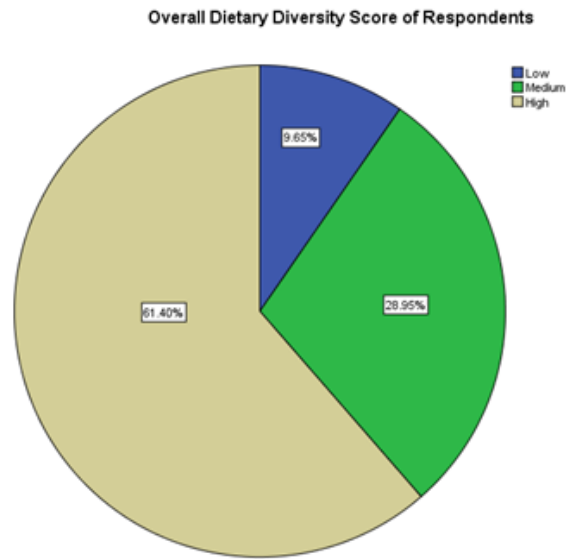


FIGURE 2 Dietary diversity of DLIHE students

From the Table 2 , it is clear that males tend to eat the food of diverse groups compared to females. Lack of food diversity tends to adversely affect overall health due to micro-nutrient deficiency which may arise diseases among students.

3.4 | Nutritional Status of Dalai Lama Institute of Higher Education

The BMI classification of the respondents is shown in Figure 3 . As shown in the figure, the BMI of DLIHE students are in the normal category but there is a prevalence of both underweight and overweight. It was felt important to examine the lifestyle which is directly linked to malnutrition.

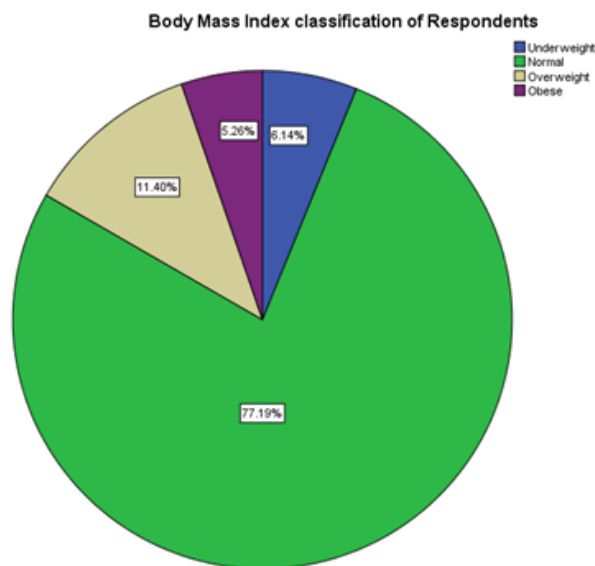


FIGURE 3 BMI classification of the respondents

3.5 | Lifestyle of students

The lifestyle of students influences obesity and physical activities are encouraged for bringing down the weight (Sikorski et al., 2014). Sleeping pattern is also one of the important factors for weight gain and is shown in Table 3 . The majority of the students sleep about 7-8 hours, followed by 4-6 hours. Only a few of them sleep for less than an hour, 1-3 hours, and 10-12 hours.

TABLE 3 Sleeping pattern of DLIHE students

Hours	Frequency	Percent
<1	2	1.75
1-3	3	2.63
4-6	14	12.28
7-8	90	78.95
10-12	5	4.39
Total	114	100.0

Shown in Figure 4 are the leisure activities of DLIHE students. During free time, students tend to involve in watching movies, walking, writing, and so on. However, 40% of the respondents do nothing during leisure.

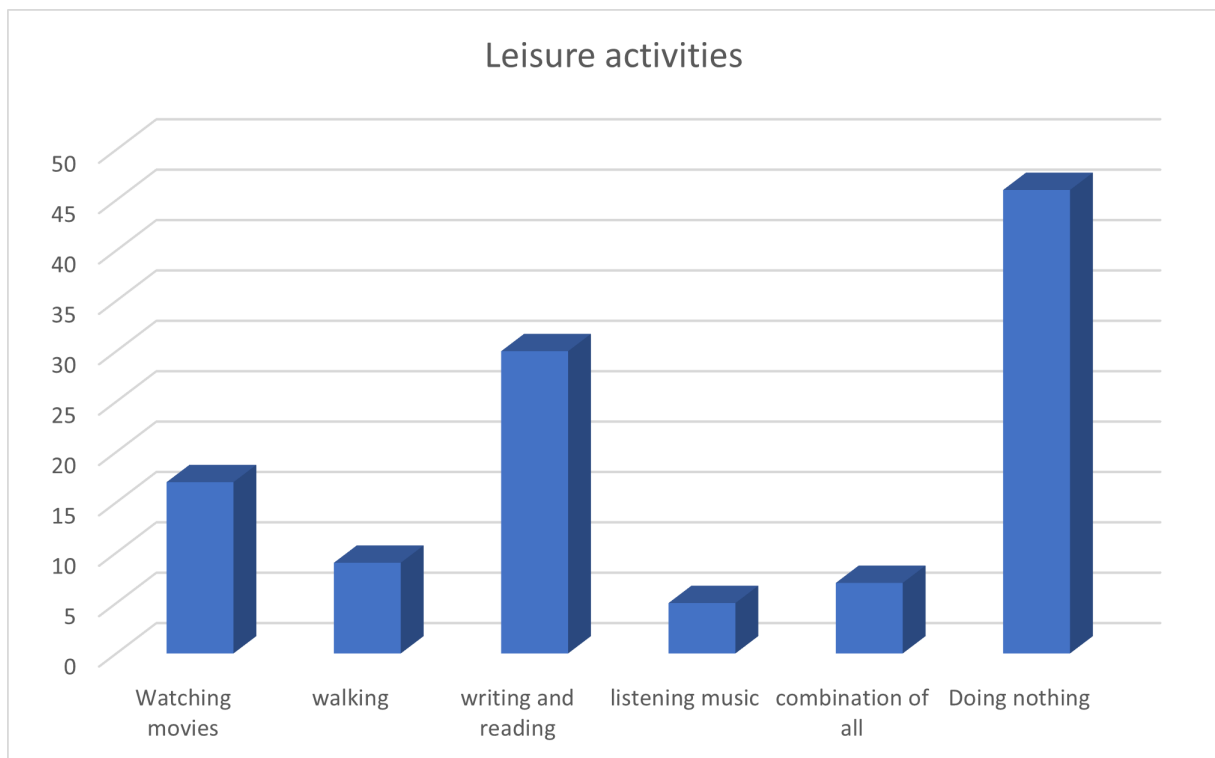


FIGURE 4 Leisure activities of DLIHE students

4 | CONCLUSION AND RECOMMENDATIONS

The food consumption pattern of DLIHE students shows a high consumption of food rich in carbs and a lack of micronutrients which is essential for a healthy lifestyle. All the students reside inside the campus and food provider plays a vital role in providing a diet rich in nutrition. Soft drinks consumption is high among the students and it may cause serious health problems in the long run. The extreme case of under and overnutrition in the DLIHE students can be prevented by providing nutrition education for food providers and introducing a healthy eating awareness program for students. Health-related issues such as poor vision, stomach ache, etc are common among the students. Thus, it can be concluded that there is an urgent need for a health awareness program, especially on healthy eating habits.

Dalai lama institute for higher education students reported diseases like poor vision, mouth ulcer, hair loss, acne, dry skin, stomach pain, and heavy period among female respondents. This could be due to nutrient deficiency and an unhealthy lifestyle. This can be prevented by implementing a health awareness campaign on healthy eating habits and the importance of changing lifestyle patterns provided by the institution. Future research can conduct a qualitative study to gain in-depth knowledge regarding food habits and what causes malnutrition among the students.

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