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DIETARY HABITS AMONG STUDENTS OF A MEDICAL COLLEGE

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ABSTRACT

Background: The present era is facing major health challenges that includes obesity, cardiovascular disease and diabetes mellitus. Adopting proper dietary habits is widely regarded as the most effective approach to lower the risk of cardiovascular disease.**Aim:** To assess the dietary practices of medical students. **Materials and Method:** This Cross sectional study was conducted in the Department of Public Health and life sciences, University of South Asia, Dhaka from January 2021 to June 2021. Two Hundred medical students studying in Parkview Medical College age ranging from 18-23 years were considered as study group. **Results:** The result observed that out of 200; 57 students (28.5%) did not take fruits as snacks, 63 students (31.5%) preferred fast food 3-4 times per week and 96 students (48%) preferred fast food sometimes. Among the 200 study population, 96 students (48%) drink tea/ coffee once a day, 83 students (41%) twice a day and 178 study subjects (89%) preferred a mixed vegetable and non-vegetable diet. Out of the 200 students, 173 students (86.5%) consume the main meal 2 times/day. In case of each meal (breakfast, lunch and dinner) out of the 200 subjects, 51.5% of the students take breakfast within 9 am; 39.5% take lunch at 3 pm while 53% consume dinner at 10 pm. **Conclusion:** The study found that, most of the students, in general, had nearly balanced dietary practices except in frequency of meals, incorporation of vegetables and fruits in diet and consumption of fatty and junk foods but the timing and number of meal is not satisfactory.Despite understanding the importance of proper dietary practices for health, the medical students failed to effectively translate their theoretical knowledge into practical behavior.

Keywords: Medical students, Diet, Lifestyle, Nutrition, Transition, Awareness.

INTRODUCTION

Bangladesh is facing nutritional transition. The health outcome of the nutrition transition has an increased prevalence of malnutrition (under nutrition to obesity) across the world[1].

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It is widely recognized that diet and nutrition have a significant influence in maintaining health and preventing diseases[2]. Development of non-communicable diseases such as hypertension, heart diseases, diabetes mellitus, hypertension, heart diseases and various nutritional problems such as deficiencies of micronutrients, stunting are the impacts of malnutrition[3].

As reported by the World Health Organization, 60% of an individual's health and life quality depends on his/her food behavior and lifestyle[4]. Unfortunately, this irregularity of food habit and lifestyle is particularly predominant among the young adults, especially college or university students. College life is the phase of life when the choice of diet and lifestyle takes place. Unwholesome diet and poor life style has harmful effects on health[5, 6].

Maintaining a healthy lifestyle and good dietary habits is particularly crucial for medical students, as they will become future physicians responsible for guiding others in health[7].The period between the end of high school and the end of college is a carping time to practice and educate young adults about the importance of developing and maintaining healthy behaviors[8].Several medical colleges have acknowledged that prevention of physician health problems should begin in the medical college and medical students need to be provided with information and tools to maintain overall health in addition to their clinical studies[9,10]. Considering above viewpoints, the objective of this study was to investigate the dietary patterns of medical college students.

MATERIALS AND METHOD

Department of Public Health and Life Sciences, University of South Asia, Dhaka conducted this cross-sectional research from January 2021 to June 2021. Two hundred medical students of Parkview Medical College, Sylhet, Bangladesh age ranging from 18-23 years were considered as study group after obtaining ethical clearance from University of South Asia's the Institutional Review Board. The objective of the study was explained and written consent was taken from each subject. The criteria for inclusion of the participants included students of medical college; age range from 18 to 23 years. The research excluded those having any chronic disease and those who refused to participate in the study. A questionnaire (structured) was used to gather the demographic and dietary habits information. SPSS (Statistical Package for Social Sciences) Version 22 was used for analyzing the results. Results were presented as mean and standard deviation (mean ± SD) and frequency distribution.

RESULTS

Among the 200 students that participated with age ranging from 18 to 23 years, there were one hundred male and one hundred female students.

Table 1: Dietary habit of the study subjects (N=200)

Types of snacks	Male (n=100)	Female (n=100)	Total (n=200)
No snacks fruit	45 (45.0)	12 (12.0)	57 (28.5)
Fruit juice	0 (0.0)	5 (5.0)	5 (2.5)
Yogurt biscuits	5 (5.0)	5 (5.0)	10 (5.0)
Cakes fried potatoes sweets	22 (22.0)	0 (0.0)	22 (11.0)
Cake combinations	17 (17.0)	44 (44.0)	61 (30.5)
Other	11 (11.0)	34 (34.0)	45 (22.5)
Preference fast food			
Daily	5 (5.0)	6 (6.0)	11 (5.5)
Weekly 3-4 times	40 (40.0)	23 (23.0)	63 (31.5)
Sometimes	43 (43.0)	53 (53.0)	96 (48.0)
Rare	12 (12.0)	18 (18.0)	30 (15.0)
Consumption of energy drinks			
Weekly 3-4 times	21 (21.0)	17 (17.0)	38 (19.0)
Sometimes	43 (43.0)	37 (37.0)	80 (40.0)
Rare	36 (36.0)	46 (46.0)	82 (41.0)
Daily intake of coffee/tea			
1 times	50 (50.0)	46 (46.0)	96 (48.0)
2 times	45 (45.0)	38 (38.0)	83 (41.5)
More than 3 times	5 (5.0)	16 (16.0)	21 (10.5)
Diet preference			
Vegetables	0 (0.0)	6 (6.0)	6 (3.0)
Non-vegetables	16 (16.0)	0 (0.0)	16 (8.0)
Mixed	84 (84.0)	94 (94.0)	178 (89.0)

N=Total number of participants; n=Number of participants in each group. Results are expressed as frequency distribution

Out of 200, 57 students (28.5%) didnot take fruits as snacks, 63 students (31.5%) preferred fast food weekly 3-4times and 96 students (48%) preferred fast food sometimes. Among 200 study population 96 students (48%) drink tea/ coffee once a day, 83 students (41%) twice a day, 80 students (40%) sometimes consume energy drink and 178 study subjects (89%) preferred a mixed vegetable and non-vegetable diet.

Table 2: Timing of meals of the study subjects (N=200)

Number of main meals	Male (n=100)	Female (n=100)	Total (n=200)
2 times	84 (84.0)	89 (89.0)	173 (86.5)
3 times	16 (16.0)	5 (5.0)	21 (10.5)
More than 3 times	0 (0.0)	6 (6.0)	6 (3.0)
Breakfast time			
Within 8 am	39 (39.0)	27 (27.0)	66 (33.0)
At 9 am	46 (46.0)	57 (57.0)	103 (51.5)
At 10 am	11 (11.0)	6 (6.0)	17 (8.5)
After 10 am	4 (4.0)	10 (10.0)	14 (7.0)
Lunch time			
At 1 pm	17 (17.0)	5 (5.0)	22 (11.0)
At 2 pm	39 (39.0)	37 (37.0)	76 (38.0)
At 3 pm	27 (27.0)	52 (52.0)	79 (39.5)
After 3 pm	17 (17.0)	6 (6.0)	23 (11.5)
Dinner time			
At 9 pm	25 (25.0)	5 (5.0)	30 (15.0)
At 10 pm	34 (34.0)	72 (72.0)	106 (53.0)
After 10 pm	41 (41.0)	23 (23.0)	64 (32.0)

N=Total number of participants; n=Number of participants in each group.Results are expressed as frequency distribution.

Out of 200 students, 173 students (86.5%) take main meal 2 times/day, 66 students (33%) take breakfast within 8 am, 103 students (51.5%) take breakfast within 9 am, 17 students (8.5%) take breakfast within 10 am, 14 students (7%) take breakfast after 10 am, 22 students (11%) take lunch at 1pm, 76 students (38%) take lunch at 2 pm, 79 students (39.5%) take lunch at 3 pm, 30 students (15%) take dinner at 9 pm, 106 students (53%) take dinner at 10pm and 64 students (32%) take dinner after 10 pm.

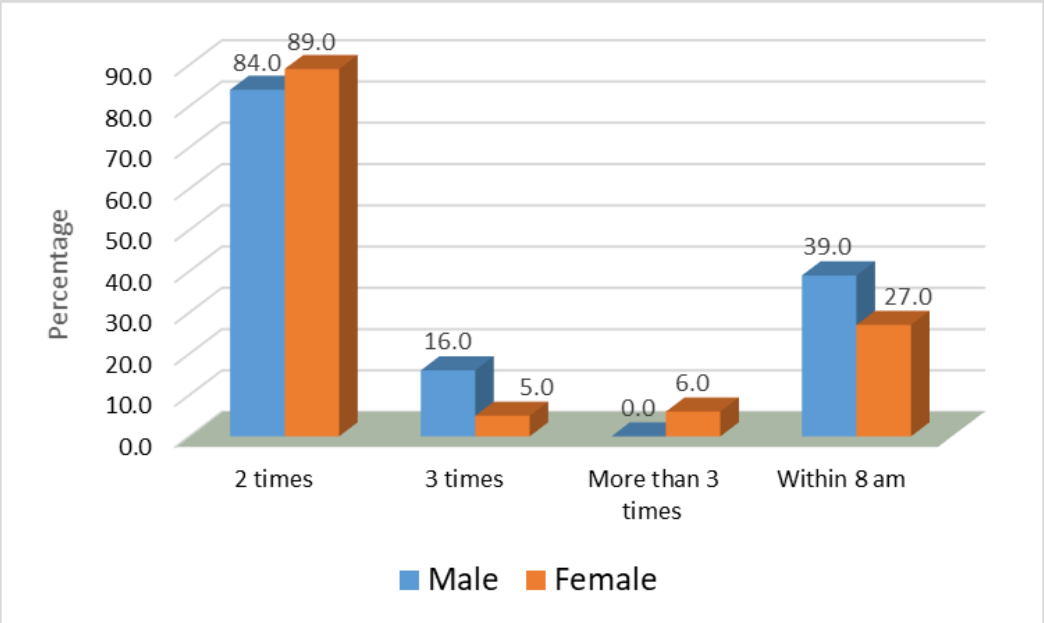

Figure 1: Number of main meals taken by the study subjects.

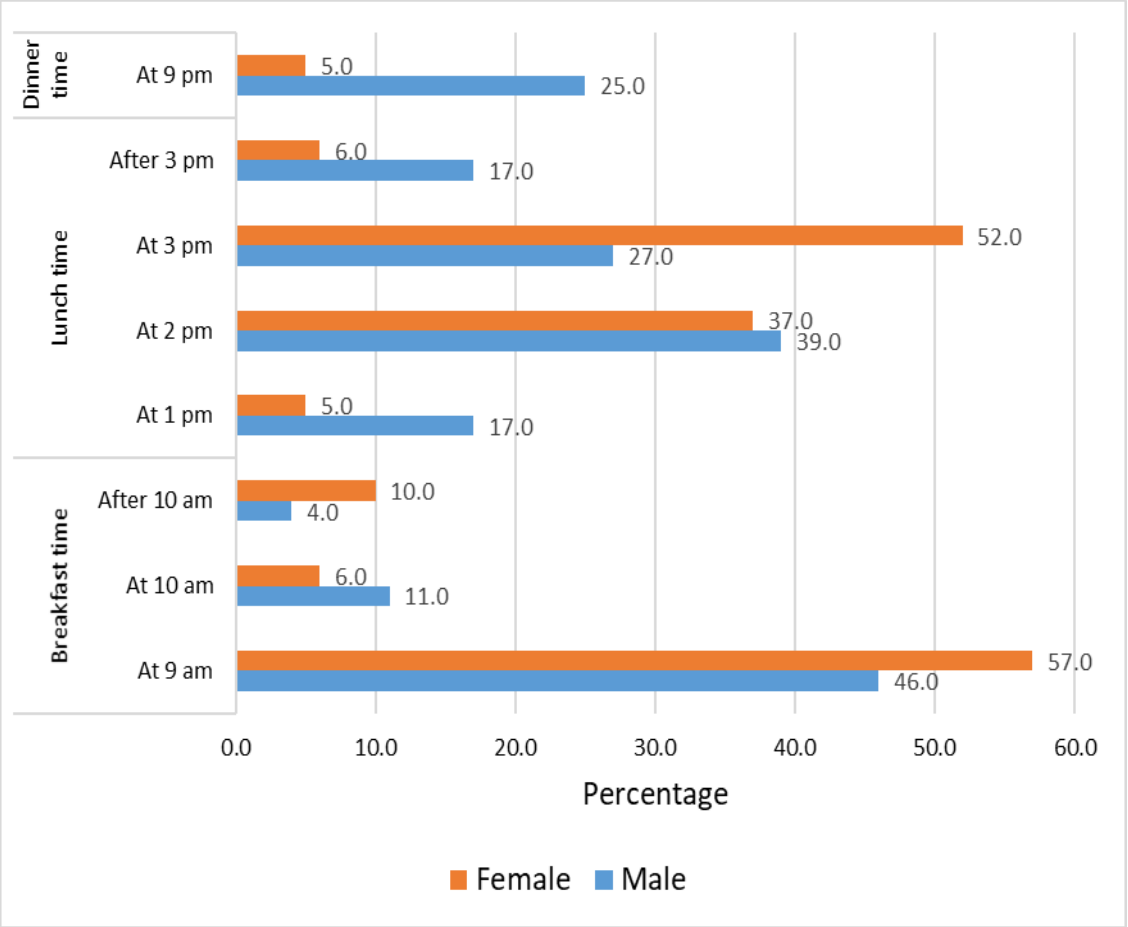

Figure 2: Timing of meals of the study subjects

DISCUSSION

In this research medical students' choices of life style and diet was explored.In case of dietary habit, the result observed that out of 200; 57 students (28.5%) didnot take fruits as snacks, 63 students (31.5%) preferred fast food weekly 3-4 times and 96 students (48%) preferred fast food sometimes.

Several studies across Asia and Europe report a prevalence of suboptimal consumption of vegetables and fruits by medical students, often attributed to academic pressures and social influences. For example, a study by Sakamaki et al. found that only 30% of Chinese university students met recommended fruit and vegetable guidelines, mirroring the 28.5% of students not consuming fruit as snacks in this research[11]. Similarly, Deshpande et al., using the Health Belief Model, highlighted a high frequency of fast food consumption, with more than 40% of students preferring convenience over nutritional value. Our result displayed that 31.5% of students prefer fast food 3–4 times per week aligning with the reports from Pakistan and Saudi Arabia, where fast food consumption is increasingly common among undergraduates[12].

Among 200 recruits, 178 (89%) preferred mix veg and non-veg diet. The predominance of mixed diets combining vegetables and non-vegetables (89% of participants) is also consistent with regional dietary practices in South Asia. A Bangladeshi survey by Khan et al. noted a similar trend among urban youth, emphasizing growing flexibility but limited adherence to strict dietary guidelines[13].

Discrepancies in beverage consumption can also be noted. While other South Asian studies report high rates of energy drink

and tea/coffee intake among students, our cohort showed relatively moderate coffee/tea (once daily by 48%, twice by 41%) and low regular energy drink usage (19% weekly), perhaps reflecting increased awareness regarding the health effects of stimulants among medical students compared to general peers. In contrast, Edrees et al. found much higher rates of both tea/coffee and energy drink intake in UAE medical students, which was attributed to stressful curricula and prevailing social trends[14]. These deviations may be explained by differences in academic structure, cultural preferences, and targeted health education campaigns.

Out of 200 students, 173 students (86.5%) take main meal 2times/day with majority taking breakfast within 9 am,lunch at 3 pm and dinner at 10 pm. Similar type of result wasfound in a study which was done to observe the factors impact patterns of eating healthy among students of college [15].Carcoana et al. observed in their study that personal and structural academic barrier led to the dietary choices made by the medical students.They suggested that more research is needed to understand the various obstacles faced by medical institutions to offer healthy and affordable food to their students[16].

Despite health awareness, students failed to consistently implement recommended meal frequency and balanced diet, consistent with research in multiple settings. There remains a disparity between practice and knowledge which calls for institutional intervention, as recommended in recent systematic reviews[17,18] .

CONCLUSION

The study found that, most of the students, in general, had wholesome eating patterns except in frequency of meals, inclusion of vegetables and fruits in diet and consumption of fatty and junk foods but the timing and number of meal is not satisfactory.Nutritional education should be given among medical students to encourage them for maintain healthier eating habits and lifestyles. Thus, the study strengthens the need to encourage the students about healthy lifestyles, whole some diet and regular physical activity so that the dangers of the risks of developing chronic diseases can be prevented.

CONFLICT OF INTEREST

There is no conflict of interest

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