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Original Research Article

Dietary Habit and Lifestyle of Secondary School-Going Students in Dhaka City of Bangladesh

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Abstract: ***Introduction:*** Understanding the dietary habits and lifestyle choices of secondary school-going students is crucial for developing targeted health interventions. This study aims to analyze these aspects among secondary school-going students in Dhaka, Bangladesh, focusing on dietary preferences, physical activity, screen time, and sleep patterns. ***Methods:*** This observational cross-sectional study involved 600 secondary school students in Dhaka. Data were collected through structured questionnaires by assessing age, gender, BMI, dietary habits, meal frequency, water intake, fruit and vegetable consumption, fast-food and sweets intake, breakfast habits, physical activity, screen time, sleep patterns, self-perceived health status, and chronic health conditions. Bivariate correlations were analyzed to understand the relationships between these variables. ***Result:*** The majority of participants were 15 years old (37.83%), with more females (61.33%) than males. Most students were in grade 10 (77.67%), and the predominant BMI category was normal (54.67%). Dietary preferences showed a preference for a mixed diet (56.17%). Regular fruit and vegetable consumption was reported by 34.00% and 59.83% of students, respectively. High rates of fast food (23.00% regularly) and sweets (33.00% regularly) consumption were observed. Breakfast was often skipped by 15.50% of participants. Physical activity levels indicated that 45.33% engaged in physical training, but 19.67% were not involved in any sports. The average screen time was 2.42 hours, and the mean sleep time was 7.02 hours. Most students rated their health as good (61.17%), and 95.17% had no known chronic health conditions. ***Conclusion:*** The study highlights a mix of healthy and unhealthy dietary and lifestyle patterns among secondary school students in Dhaka. While there is a reasonable intake of fruits and vegetables, the prevalence of fast food and sweets consumption, combined with suboptimal breakfast habits and physical activity levels, calls for comprehensive health promotion strategies. Targeted interventions focusing on balanced diets, regular physical activity, and education about the impacts of screen time and sleep are essential for fostering healthier lifestyles among adolescents.

Keywords: Dietary Habits, Lifestyle Choices, Secondary School Students, Physical Activity, Screen Time, Sleep Patterns.

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INTRODUCTION

The dietary habits and lifestyle choices of adolescents, particularly in urban areas of developing countries, have become a subject of increasing concern in public health and nutrition research. Adolescence, a dynamic period of growth and development, forms a critical foundation for long-term health, cognition, and educational achievements [1]. The global trends in dietary habits and lifestyle among adolescents, reveal a complex interplay of cultural, economic, and social factors, with significant health implications [2,3]. In developing countries, including Bangladesh, these trends are further influenced by rapid urbanization, economic growth, and cultural shifts [4,5]. The importance of studying dietary habits and lifestyle choices during adolescence cannot be overstated. This period is marked by significant physiological changes and the establishment of dietary patterns that can have lasting effects on health [1]. In developing countries, the dietary intake of adolescents is often limited in diversity, primarily comprising plant-based food sources, with inadequate intake of fruits and vegetables [1]. Concurrently, there is an emerging trend of high-energy snack and beverage consumption, particularly in urban areas, indicating a nutrition transition [1,6]. This transition, coupled with physical inactivity, is contributing to the dual burden of malnutrition – undernutrition and over-nutrition – in these populations [1,7]. The global context of these dietary and lifestyle trends highlights the increasing prevalence of non-communicable diseases (NCDs) such as obesity, diabetes, and cardiovascular diseases, even among younger populations [2,8]. Studies have shown that dietary practices and physical activity patterns significantly influence body weight management and the risk of developing NCDs [8,9]. In countries like Bangladesh, where traditional diets are rapidly being replaced by more energy-dense, nutrient-poor foods, the health implications are profound [4,5]. The relevance of these trends in a global health context is further emphasized by the need for culturally competent, family-centered interventions [10]. The dynamics between various levels of health determinants, including individual knowledge, family influence, and broader social and environmental factors, are critical in shaping adolescents' dietary habits and lifestyle choices [3,10]. For instance, the impact of media on eating habits and physical activity levels is a growing area of concern, particularly with the increasing exposure of adolescents to television and digital media [6,7]. In the context of Bangladesh, particularly in urban settings like Dhaka, the scenario of dietary habits and lifestyle choices among secondary school-going students is yet to be comprehensively understood. While there is some evidence of the nutrition transition and its health implications, detailed studies focusing on this demographic are scarce [4,5]. Cultural, economic, and social factors play a pivotal role in shaping these habits. For example, the influence of family dietary patterns, economic constraints, and cultural norms on food choices and physical activity levels are areas that warrant further exploration [10]. Moreover, there is a notable gap in the existing literature, especially concerning the detailed dietary patterns, lifestyle choices, and their health implications among secondary school students in urban settings of developing countries like Bangladesh [4,5]. This gap underscores the need for more focused research in this area, which can inform public health policies and intervention strategies tailored to the unique needs of these populations. This study aims to fill the existing gaps in literature by providing a comprehensive analysis of the dietary habits and lifestyle choices of secondary school students in Dhaka City, Bangladesh, and their implications for health and well-being.

METHODS

This observational cross-sectional study was conducted with data collected from multiple secondary school-going students in Dhaka, Bangladesh. The study spanned from June 2023 to January 2024. During the initial phase, a total of 600 students were selected to form the study cohort. Schools in Dhaka City were chosen for participation using a stratified sampling method. This approach ensured a representative sample reflecting the diverse socio-economic backgrounds of the city. A range of educational environments, including both government-funded and private institutions, were selected. This diversity aimed to provide a comprehensive overview of dietary habits and lifestyle choices among different segments of the adolescent population in urban Dhaka. The study's inclusion criteria were strictly followed, encompassing male and female students currently enrolled in grades 8 to 10. This age group was specifically targeted as it represents a crucial developmental stage in adolescence. Students outside this age range were excluded to maintain the study's focus and relevance to the intended demographic. In collaboration with experts in adolescent health and nutrition, a data collection form was developed. This form included standard questions to understand the family and school background of the participants, covering areas such as dietary intake, physical activity, family dynamics, and educational environment. The form underwent a pre-test in a pilot study with a smaller subset of students from one of the selected schools, ensuring its clarity and effectiveness in data collection. Data collection was carried out by a team of trained research assistants. These assistants were thoroughly briefed on the study's objectives and the ethical considerations of working with adolescent participants. They were responsible for administering the data collection forms to the students, ensuring that the process was conducted respectfully, confidentially, and non-intrusively.

RESULTS

Table 1: Distribution of participants by baseline characteristics (N=600)

Variables	Frequency	Percentage
Age		
13	38	6.33%
14	148	24.67%
15	227	37.83%
16	170	28.33%
17	17	2.83%
Gender		
Male	232	38.67%
Female	368	61.33%
Grade		
7	2	0.33%
8	55	9.17%
9	77	12.83%
10	466	77.67%
BMI		
Underweight	173	28.83%
Normal	328	54.67%
Overweight	91	15.17%
Obese	8	1.33%

The age distribution showed a higher concentration of older students, with 37.83% being 15 years old, 28.33% aged 16, and 24.67% aged 14. Younger and older age groups were less represented, with 13-year-olds at 6.33% and 17-year-olds at 2.83%. Gender-wise, the majority of participants were female (61.33%), compared to 38.67% male students. In terms of grade levels, a significant majority (77.67%) were in grade 10, followed by grades 9 (12.83%) and 8 (9.17%), with grade 7 being minimally represented (0.33%). Regarding BMI, over half of the students (54.67%) had a normal BMI. However, a notable 28.83% were underweight, 15.17% were overweight, and a small fraction (1.33%) were obese. These results highlight a diverse BMI range among the students, with a considerable number in the underweight category.

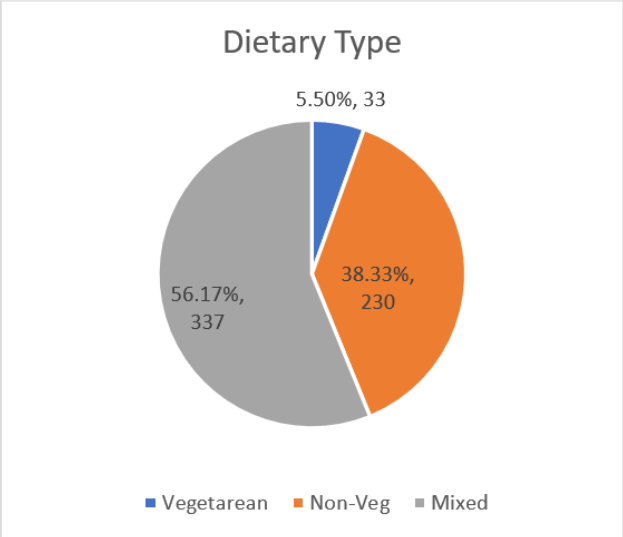

Figure 1: Distribution of participants by preferred diet type (N=600)

The majority of the students, accounting for 56.17%, followed a mixed diet, incorporating both vegetarian and non-vegetarian foods. Non-vegetarian diets were preferred by 38.33% of the participants. A smaller segment, 5.50%, adhered to a vegetarian diet.

Table 2: Distribution of regular meal and water intake habit among participants (N=600)

Variables	Frequency	Percentage
Daily Meals		
2 meals	25	4.17%
3 meals	359	59.83%
4 meals	167	27.83%
5 meals	36	6.00%
6 meals	13	2.17%
Mean±SD	3.42±0.76	
Daily water intake		
<=1.5	274	45.67%
1.51-2 liters	156	26.00%
2.1-2.5 liters	43	7.17%
2.51-3 liters	75	12.50%
>3 liters	52	8.67%
Mean±SD	2.00±0.97	

For daily meals, the majority (59.83%) reported consuming 3 meals per day. The next significant group, comprising 27.83%, had 4 meals daily. Fewer participants consumed 2 meals (4.17%), 5 meals (6.00%), and 6 meals (2.17%) per day. The mean number of meals per day was 3.42 with a standard deviation of 0.76. In terms of daily water intake, 45.67% of the students consumed less than or equal to 1.5 liters of water per day. Those drinking between 1.51 to 2 liters represented 26.00% of the participants. A smaller proportion consumed 2.1-2.5 liters (7.17%), 2.51-3 liters (12.50%), and more than 3 liters (8.67%). The mean daily water intake was 2.00 liters with a standard deviation of 0.97.

Table 3: Distribution of participants by dietary habits and practices (N=600)

Dietary Habits	Frequency	Percentage
Fruits Intake		
Regular	204	34.00%
Weekly	290	48.33%
Rarely	97	16.17%
Never	9	1.50%
Vegetables Intake		
Regular	359	59.83%
Weekly	173	28.83%
Rarely	52	8.67%
Never	16	2.67%
Fast-food Intake		
Regular	138	23.00%
Weekly	246	41.00%
Rarely	177	29.50%
Never	39	6.50%
Sweet and Sugary Food Intake		
Regular	198	33.00%
Weekly	240	40.00%
Rarely	158	26.33%
Never	4	0.67%
Habit of Skipping Breakfast		
Often	93	15.50%
Sometimes	269	44.83%
Rarely	54	9.00%
Never	184	30.67%

Regarding fruit intake, 34.00% of the students consumed fruits regularly, while the majority (48.33%) had fruits weekly. A smaller percentage rarely ate fruits (16.17%), and a minimal number (1.50%) never consumed fruits. For vegetable intake, a significant majority of 59.83% reported regular consumption. Weekly vegetable intake was reported by 28.83% of the participants, with 8.67% rarely consuming vegetables

and 2.67% never including them in their diet. Fast-food consumption patterns varied, with 23.00% of the students eating fast food regularly and the largest group (41.00%) consuming it weekly. Those who rarely ate fast food made up 29.50%, and 6.50% never consumed fast food. In terms of sweet and sugary food intake, 33.00% of the participants consumed these regularly, and 40.00% did so weekly. A notable 26.33% rarely indulged in sweet and sugary foods, while only 0.67% never consumed them. The habit of skipping breakfast showed that 15.50% of the students often skipped breakfast, 44.83% did so sometimes, 9.00% rarely skipped it, and 30.67% never skipped breakfast.

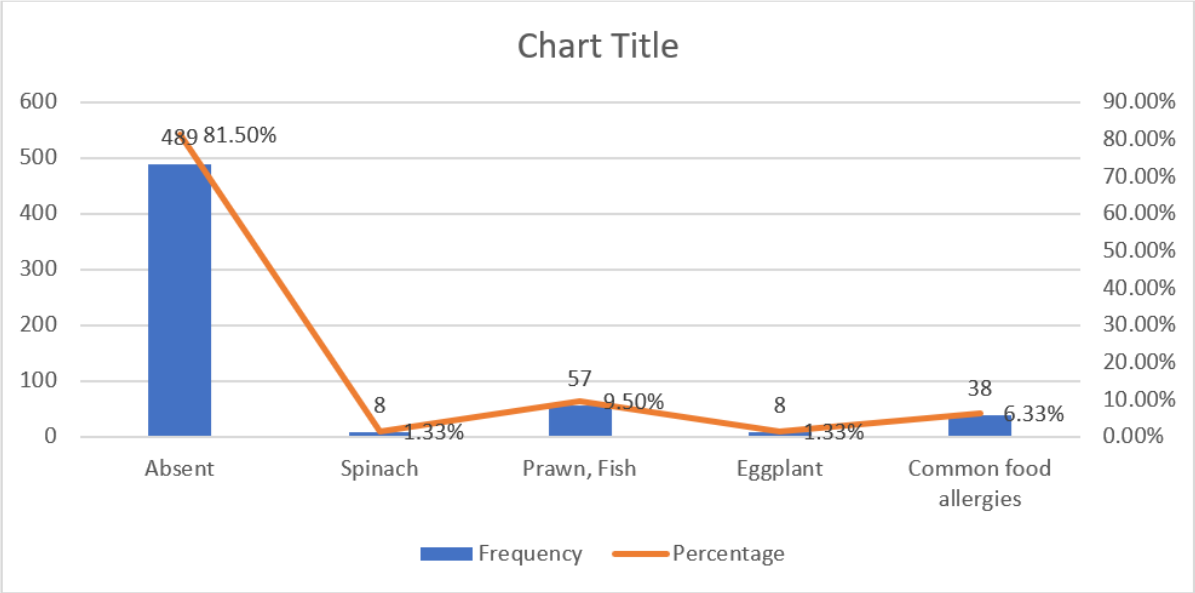

Figure 2: Distribution of known food allergies among participants (N=600)

A significant majority, 81.50%, reported no known food allergies. However, allergies to specific foods were present in a minority of the participants. Prawn and fish allergies were the most common, reported by 9.50% of the students. Common food allergies, including red meat, lentil, spinach, eggplant, etc., were reported by 6.33% of the participants. Individual allergies to spinach and eggplant were each reported by 1.33% of the students.

Table 4: Distribution of participants by participation in physical sports and activities (N=600)

Variables	Frequency	Percentage
No	118	19.67%
Physical Training Exercise	272	45.33%
Football	62	10.33%
Cricket	52	8.67%
Playground Exercise	69	11.50%
Badminton	9	1.50%
Running	10	1.67%
Cycling	3	0.50%
Martial art	3	0.50%
Handball	2	0.33%
Mean±SD frequency of physical activity per week	2.44±2.20	

A notable 19.67% of the participants reported not engaging in any physical sports or activities. The most common form of physical activity was physical training exercise, with 45.33% of students participating. Football and cricket were also popular, with 10.33% and 8.67% participation respectively. Playground exercise was engaged in by 11.50% of the students. Other sports had lower participation rates: badminton (1.50%), running (1.67%), cycling (0.50%), martial arts (0.50%), and handball (0.33%). The mean frequency of physical activity per week among the participants was 2.44 times, with a standard deviation of 2.20.

Table 5: Distribution of participants by daily lifestyle (N=600)

Variables	Frequency	Percentage
Average Screen Time (hours per day)		
≤1 hours	141	23.50%
1.1-2 hours	243	40.50%
2.1-4 hours	168	28.00%
4.1-6 hours	43	7.17%
>6 hours	5	0.83%
Mean±SD	2.42±1.62	
Average Sleep time (hours per day)		
≤4 hours	12	2.00%
4.1-6 hours	140	23.33%
6.1-8 hours	419	69.83%
>8 hours	29	4.83%
Mean±SD	7.02±1.15	
Participation in Extracurricular activities		
Yes	125	20.83%
No	475	79.17%
Self-perception of health status		
Excellent	67	11.17%
Good	367	61.17%
Fair	156	26.00%
Poor	10	1.67%
Known Chronic Health Condition		
No	571	95.17%
Asthma	6	1.00%
Skin Disease	7	1.17%
Eye Problem	12	2.00%
Piles	4	0.67%

In terms of average screen time per day, 40.50% spent 1.1-2 hours, while 28.00% spent 2.1-4 hours. A smaller proportion, 23.50%, had screen time of ≤1 hour, and 7.17% spent 4.1-6 hours. Only 0.83% exceeded 6 hours of screen time daily. The mean screen time was 2.42 hours with a standard deviation of 1.62. Regarding average sleep time per day, the majority (69.83%) reported 6.1-8 hours of sleep. A significant number, 23.33%, slept for 4.1-6 hours, while 2.00% slept for ≤4 hours, and 4.83% slept for more than 8 hours. The mean sleep time was 7.02 hours with a standard deviation of 1.15. Participation in extracurricular activities was relatively low, with only 20.83% of students involved, while 79.17% did not participate in such activities. When asked about their self-perception of health status, 61.17% rated it as good, 26.00% as fair, 11.17% as excellent, and 1.67% as poor. In terms of known chronic health conditions, 95.17% of the participants reported having no chronic conditions. A small percentage had asthma (1.00%), skin diseases (1.17%), eye problems (2.00%), and piles (0.67%).

Table 6: Bivariate correlation among dietary and lifestyle factors (N=600)

Correlations										
		Gender	**BMI**	**Daily Meals Taken**	**Vegetables intake**	**Fast food intake**	**Sweets and sugary food intake**	**Habit of skipping breakfast**	**Average daily screen time**	**average sleep hours**
Gender	Pearson Correlation	1	.112**	0.017	0.012	-.173**	-.119**	-.151**	0.009	0.012
	Sig. (2-tailed)		**0.006**	0.673	0.770	**<0.001**	**0.003**	**<0.001**	0.827	0.774
BMI	Pearson Correlation	.112**	1	0.051	0.055	-.251**	0.054	-.294**	-.131**	.183**
	Sig. (2-tailed)	**0.006**		0.212	0.179	**<0.001**	0.183	**<0.001**	**0.001**	**<0.001**
Daily Meals Taken	Pearson Correlation	0.017	0.051	1	0.072	0.032	-.138**	.108**	0.062	.180**
	Sig. (2-tailed)	0.673	0.212		0.079	0.432	**0.001**	**0.008**	0.129	**<0.001**
Vegetables intake	Pearson Correlation	0.012	0.055	0.072	1	-.186**	0.001	-.192**	-0.041	0.039
	Sig. (2-tailed)	0.770	0.179	0.079		**<0.001**	0.982	**<0.001**	0.312	0.334

Correlations										
		Gender	**BMI**	**Daily Meals Taken**	**Vegetables intake**	**Fast food intake**	**Sweets and sugary food intake**	**Habit of skipping breakfast**	**Average daily screen time**	**average sleep hours**
Fast food intake	Pearson Correlation	-.173**	-.251**	0.032	-.186**	1	.177**	.345**	0.037	-.257**
	Sig. (2-tailed)	**<0.001**	**<0.001**	0.432	**<0.001**		**<0.001**	**<0.001**	0.361	**<0.001**
Sweets and sugary food intake	Pearson Correlation	-.119**	0.054	-.138**	0.001	.177**	1	0.040	-0.006	-0.010
	Sig. (2-tailed)	**0.003**	0.183	**0.001**	0.982	**<0.001**		0.325	0.883	0.808
Habit of skipping breakfast	Pearson Correlation	-.151**	-.294**	.108**	-.192**	.345**	0.040	1	-0.041	-.087*
	Sig. (2-tailed)	**<0.001**	**<0.001**	**<0.001**	**<0.001**	**<0.001**	0.325		0.319	**0.033**
Average daily screen time	Pearson Correlation	0.009	-.131**	0.062	-0.041	0.037	-0.006	-0.041	1	0.055
	Sig. (2-tailed)	0.827	**0.001**	0.129	0.312	0.361	0.883	0.319		0.178
average sleep hours	Pearson Correlation	0.012	.183**	.180**	0.039	-.257**	-0.010	-.087*	0.055	1
	Sig. (2-tailed)	0.774	**<0.001**	**<0.001**	0.334	**<0.001**	0.808	0.033	0.178	

Gender showed a significant negative correlation with fast food intake ($r = -.173$, $p < 0.001$), sweets and sugary food intake ($r = -.119$, $p = 0.003$), and the habit of skipping breakfast ($r = -.151$, $p < 0.001$), but a positive correlation with BMI ($r = .112$, $p = 0.006$). BMI itself was negatively correlated with fast food intake ($r = -.251$, $p < 0.001$) and the habit of skipping breakfast ($r = -.294$, $p < 0.001$), while positively correlated with average sleep hours ($r = .183$, $p < 0.001$). The number of daily meals taken was positively correlated with the habit of skipping breakfast ($r = .108$, $p = 0.008$) and average sleep hours ($r = .180$, $p < 0.001$), but negatively with sweets and sugary food intake ($r = -.138$, $p = 0.001$). Vegetable intake showed a negative correlation with fast food intake ($r = -.186$, $p < 0.001$) and the habit of skipping breakfast ($r = -.192$, $p < 0.001$). Fast food intake was positively correlated with the habit of skipping breakfast ($r = .345$, $p < 0.001$) and sweets and sugary food intake ($r = .177$, $p < 0.001$), but negatively with average sleep hours ($r = -.257$, $p < 0.001$). Sweets and sugary food intake had a weak positive correlation with fast food intake ($r = .177$, $p < 0.001$). The habit of skipping breakfast negatively correlated with average sleep hours ($r = -.087$, $p = 0.033$). Screen time showed a weak negative correlation with BMI ($r = -.131$, $p = 0.001$). Sleep hours were positively correlated with BMI ($r = .183$, $p < 0.001$) and daily meals taken ($r = .180$, $p < 0.001$), but negatively with fast food intake ($r = -.257$, $p < 0.001$).

DISCUSSION

Our study's age distribution, predominantly featuring 15-year-olds (37.83%), aligns with the typical secondary school age range, reflecting a crucial transitional phase in adolescence. This distribution resonates with Drenowatz Clemens and Greier Klaus's findings, emphasizing the importance of dietary intake during puberty [11]. The gender skew, with more female participants (61.33%), might reflect a higher engagement in health-related studies among female adolescents, a trend also observed by other studies [12]. The predominance of grade 10 students (77.67%) suggests a focus on older adolescents in the current study, who likely have more established dietary and lifestyle patterns. BMI categorization revealed a majority with normal BMI (54.67%), but a concerning proportion of underweight adolescents (28.83%), higher than Sutradhar *et al.,* 's findings [13]. This discrepancy highlights varying nutritional challenges in different settings. Dietary preferences showed a majority favoring a mixed diet (56.17%), consistent with global trends noted by other authors [14,15]. Regular meal consumption, with most consuming 3 meals daily (59.83%), aligns with Mullie *et al.,*'s emphasis on its importance for maintaining healthy weight [16]. Water intake, slightly below recommendations, underscores the need for public health interventions, as discussed by St-Onge *et al.,* [17]. Fruit and vegetable intake patterns in our study are encouraging, with regular consumption rates of 34.00% and 59.83%, respectively. These findings, supported by the works of other authors, suggest a relatively healthy dietary habit among adolescents [16,18]. However, the high intake of fast food (23.00% regularly) and sweets (33.00% regularly) is concerning, echoing Dausch *et al.,*'s concerns about high-fat/low-nutrient-dense snacks [19]. Breakfast habits, with 15.50% often skipping, highlight an area for improvement, as regular breakfast consumption is crucial for adolescents, as noted by Koskela *et al.,* [20]. Physical activity levels showed that 45.33% engaged in physical training, but 19.67% were not involved in any sports, indicating a need for increased promotion of physical activity, as described by Estela Martín Gómez and R. M. Campos [21]. Screen time and sleep patterns, with an average of 2.42 hours and 7.02 hours respectively, suggest moderate screen exposure and adequate sleep, crucial for adolescent health. These patterns, discussed in other studies, highlight the interplay between lifestyle habits and health [17,22].

Limited participation in extracurricular activities (20.83%) and the majority rating their health as good (61.17%) reflect on the adolescents' lifestyle and perception of well-being, as explored by studies of Weatherson *et al.*, and Aranha and Teixeira [23,24]. In the bivariate analysis of our study, significant correlations were observed, shedding light on the complex interplay between gender, BMI, dietary habits, and lifestyle factors among adolescents. Notably, gender exhibited a significant negative correlation with unhealthy dietary habits, including fast food intake ($r = -.173$, $p < 0.001$) and sweets and sugary food intake ($r = -.119$, $p = 0.003$), as well as with the habit of skipping breakfast ($r = -.151$, $p < 0.001$). Interestingly, there was a positive correlation between gender and BMI ($r = .112$, $p = 0.006$), suggesting gender-specific differences in body composition and dietary patterns. BMI itself showed a negative correlation with fast food intake ($r = -.251$, $p < 0.001$) and the habit of skipping breakfast ($r = -.294$, $p < 0.001$), indicating that higher BMI might be associated with healthier eating habits, at least in terms of avoiding fast food and not skipping breakfast. Conversely, a positive correlation was found between BMI and average sleep hours ($r = .183$, $p < 0.001$), aligning with the notion that adequate sleep contributes to healthier weight management. The frequency of daily meals taken was positively correlated with the habit of skipping breakfast ($r = .108$, $p = 0.008$) and average sleep hours ($r = .180$, $p < 0.001$), but negatively with sweets and sugary food intake ($r = -.138$, $p = 0.001$). This pattern suggests that regular meal consumption may be linked to better sleep quality and less reliance on sugary foods. Vegetable intake showed a negative correlation with fast food intake ($r = -.186$, $p < 0.001$) and the habit of skipping breakfast ($r = -.192$, $p < 0.001$), reinforcing the importance of a balanced diet in maintaining healthy eating habits. Fast food intake was positively correlated with the habit of skipping breakfast ($r = .345$, $p < 0.001$) and sweets and sugary food intake ($r = .177$, $p < 0.001$), but negatively with average sleep hours ($r = -.257$, $p < 0.001$), highlighting a pattern of less healthy eating behaviors associated with higher fast food consumption. Sweets and sugary food intake had a weak positive correlation with fast food intake ($r = .177$, $p < 0.001$). The habit of skipping breakfast negatively correlated with average sleep hours ($r = -.087$, $p = 0.033$), suggesting that poor breakfast habits might be linked to shorter sleep duration. Screen time showed a weak negative correlation with BMI ($r = -.131$, $p = 0.001$), while sleep hours were positively correlated with BMI ($r = .183$, $p < 0.001$) and daily meals taken ($r = .180$, $p < 0.001$), but negatively with fast food intake ($r = -.257$, $p < 0.001$). These findings highlight significant relationships between dietary habits, physical health, and lifestyle factors, emphasizing the need for holistic approaches in promoting healthy behaviors among adolescents [25,26].

Limitations of The Study

The study was conducted in a single hospital with a small sample size. So, the results may not represent the whole community.

CONCLUSION

Our study provides a comprehensive overview of the dietary habits, physical activity, and lifestyle choices of secondary school-going students in Dhaka, Bangladesh. The age and gender distribution of our participants, predominantly 15-year-old females, aligns with typical secondary school demographics and reflects crucial developmental stages. The findings reveal a mixed dietary preference with a significant intake of fruits and vegetables, yet a concerning prevalence of fast food and sweets consumption. Regular meal patterns and moderate water intake were observed, though improvements in breakfast habits are necessary. Physical activity levels indicate a need for enhanced engagement in sports and extracurricular activities, as a significant portion of students were not involved in any physical activities. Screen time and sleep patterns suggest moderate digital exposure and adequate sleep duration, essential for adolescent health and well-being. The self-perceived health status was predominantly rated as good, and most participants had no known chronic health conditions, indicating a generally positive health perception among the students. Crucially, our bivariate analysis unveiled significant correlations that highlight the complex interplay between gender, BMI, dietary habits, and lifestyle factors. The negative correlation between gender and unhealthy dietary habits, and between BMI and fast food intake, underscores the influence of gender on dietary choices and the impact of dietary habits on physical health. The positive correlation between daily meals and sleep hours, and the negative correlation between vegetable intake and fast food consumption, emphasize the importance of balanced dietary habits for overall health.

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Conflict of Interest: None declared

Ethical Approval: The study was approved by the Institutional Ethics Committee

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