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THE PREVALENCE OF SKIPPING BREAKFAST AMONG STUDENTS II AT AL-WAHA SCHOOL, ADEN, YEMEN

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ABSTRACT

BACKGROUND:

Breakfast is widely recognized as a critical meal of the day. However, some students, particularly females, often skip breakfast, believing it may contribute to weight gain. In contrast, other studies report differing findings regarding this behavior.

OBJECTIVE:

This study aims to investigate the effects of breakfast omission among adolescents.

METHOD:

A questionnaire-based survey was conducted with a sample of 50 adolescents, assessing their attitudes toward consuming three meals daily, with a particular focus on breakfast. Statistical analyses were applied to examine the implications of breakfast skipping among adolescents.

RESULTS:

The majority of participants were male (62.0%), with an even distribution across grades seven (40.0%), eight (30.0%), and nine (30.0%). A significantly higher proportion of boys (74.19%) reported never skipping breakfast compared to girls (47.37%). Conversely, a larger percentage of girls (36.84%) indicated that they sometimes skip breakfast, in contrast to boys (19.35%).

CONCLUSION:

The findings indicate a notable interest in breakfast consumption; however, many students skip it due to time constraints or lack of hunger in the morning. The survey results suggest that a significant number of students, especially females, do not regularly consume breakfast, potentially leading to adverse health effects, including weight loss and impaired concentration.

KEYWORDS: Skipping Breakfast Students, Aden, Yemen.

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Introduction

In most countries, adolescents make up a large proportion of the population. According to the World Health Organisation, in 2003, adolescents aged 10 to 19 made up 19% of the world's total population, with 84% of them residing in developing countries [1]. Adolescence is an important period because the development of nutritional habits during this time can also have an impact on adulthood. In addition, breakfast is known as the most important daily meal, and consumption of it is considered an important indicator of a healthy lifestyle [2].

Since the time between dinner and breakfast is usually the longest period without absorption of energy and nutrients, skipping breakfast may lead to metabolic changes and have a negative effect on cognitive performance [3]. Eating breakfast has beneficial effects on the quality of the diet and prevents chronic disease; in contrast, skipping this meal increases risk of the metabolic syndrome and cardiovascular diseases [4, 5]. So far, breakfast plays an important role in maintaining the health of adolescents [5]. Several countries have reported breakfast skipping, with children and adolescents more likely to do so [6].

Some studies indicate a relation between skipping breakfast and the occurrence of obesity [7, 8]. Others indicate the effect of basic characteristics (such as parent's education and income) on skipping breakfast [9, 10].

The study on skipping breakfast and physical fitness among schools was conducted in C Hina in 2022 [11]. This study examined breakfast and physical fitness in a group of schools. Among boys, non-breakfast skippers had good scores for the 50-meter run and vital capacity tests when skippers had good scores for the standing long jump test compared with breakfast skippers. The multiple linear regression model showed that not skipping breakfast was positively associated with sprint and 1,000-m run times in boys [12].

A study conducted in Ethiopia in 2023 [13], titled "Adolescent breakfast skipping is associated with poorer academic performance," aimed to assess the

prevalence and correlates of skipping, as well as its association with school performance among randomly selected breakfast school adolescents in Hidhabu Abote Wereda, North Shewa Zone, Central Ethiopia. The study's results showed a statistically significant association between breakfast skipping, overall academic performance and performance scores, household food insecurity, and less maternal education, all of which were independently linked to breakfast skipping. The primary reasons for skipping breakfast were lack of time, lack of appetite in the morning, and concerns about weight gain [15].

The study of breakfast skipping in adolescents is critical because it can have significant impacts on their health, academic performance, and overall well-being. Adolescence is a critical period of growth and development, and breakfast plays a vital role in providing the necessary nutrients and energy for the day ahead. Researching this behaviour helps identify its consequences, such as poor dietary choices and decreased cognitive function. Understanding these implications can inform interventions and policies aimed at promoting healthier habits among adolescents. This study aimed to estimate the prevalence of skipping breakfast among students at AL-Waha School in Aden, 2024, and to evaluate the effect of skipping breakfast on students' academic performance and athletic performance. Additionally, this research aims to compare the rates of breakfast skipping among various age groups, genders, and educational levels of students.

METHODS

Study Design and Study Setting

A cross-sectional survey design was employed to investigate the prevalence of breakfast skipping among students at AL-Waha School. It involves collecting data from a representative sample of the population at a single point in time. This study was conducted at AL-Waha School, located in Dar Saad, Aden, Yemen. This school serves students in grades seven through nine.

Study Population



The study population consisted of students enrolled in grades seven, eight, and nine at AL-Waha School.

Sampling

A convenience sample of 50 students was selected from the eligible population. Convenience sampling involves selecting individuals who are readily available and easy to recruit.

Data Collection Instrument:

A self-administered questionnaire was used to gather information from participants. The questionnaire included both closed-ended and open-ended questions to assess breakfast skipping habits, demographic characteristics, and other relevant variables.

Inclusion Criteria:

To be eligible for inclusion, participants had to meet the following criteria:

- Be enrolled in grades seven, eight, or nine at AL-Waha School
- Be present at the school on the day of data collection (Monday, 4/3/2024)
- Provide informed consent to participate

Exclusion Criteria:

There were no specific exclusion criteria for this study.

Questionnaire Distribution and Administration: Consent and Explanation

Before distributing the questionnaire, participants were informed about the purpose of the study and the voluntary nature of their participation. Written or verbal consent was obtained from all participants.

Questionnaire Distribution

Questionnaires were distributed to the selected sample of 50 students during their regular school hours. The distribution was carried out in a controlled setting, e.g. the classroom.

- **Instructions:** Clear instructions were provided to participants on how to complete the questionnaire. The instructions emphasized the importance of

providing honest and accurate responses.

- **Time Allotment:** A reasonable amount of time was allocated for participants to complete the questionnaire. The duration was determined based on the questionnaire's length and complexity.
- **Clarification and Assistance:** If participants encountered any difficulties or had questions about the questionnaire, they were provided with necessary clarification or assistance.

Data Collection Methods

- **Self-Administration:** Participants were instructed to complete the questionnaire independently. This method ensured privacy and allowed for honest responses without external influence.
- **Observer Monitoring:** While participants completed the questionnaire, observers were present to ensure that the instructions were followed and to address any questions or concerns.
- **Collection and Storage:** Completed questionnaires were collected and stored securely to protect participant confidentiality and prevent data loss.

Follow-Up Procedures

1. **Non-Response Follow-Up:** If any participants failed to return their completed questionnaires, follow-up efforts were made to encourage them to do so by sending reminders and contacting participants directly.
2. **Data Verification:** Collected questionnaires were reviewed for completeness and accuracy. Any inconsistencies or missing data were noted for further investigation or clarification.

Ethical consideration:

The study was reviewed and approved by Community Medicine Department, Faculty of Medicine and Health Sciences, UST number MEC (No/AD032). All the participants of the questionnaire consented verbally to filling the questionnaire and the collected information will be confidential and private.



Data analysis:

We gave the questionnaire for all the students at the school of grade seven, eight and nine, the sampling was non-randomly we chose a sample consist of 50 students. Simple statistical techniques were used to tabulate the results of this study. The primary data or analysis, using a percent of results and frequencies. All the questions were qualitative variables. All the statistical methods were applied within IBM SPSS statistics (version 22).

RESULTS

Characteristics of the participants:

A total of 50 school-age adolescents (31 boys and 19 girls) with a mean age of 13.66 years participated in the study. As shown in Table 1, the majority of the sample were boys (62.0%), and the participants were evenly distributed across grades seven (40.0%), eight (30.0%), and nine (30.0%).

70.97% reporting daily sports participation. Girls, on the other hand, were more evenly distributed across participation levels, with 47.37% participating weekly, 15.79% participating few times a month, and 21.05% participating often less (table 2).

When examining academic performance, there were no significant differences between boys and girls. Both groups demonstrated similar levels of achievement, with a majority of students (58.06% for boys and 57.89% for girls) achieving excellent marks (table 2).

Table 2: Breakfast Skipping Habits and Athletic Participation Among Participants (n=50)

Variables		N (frequency)	
Prevalence of breakfast skipping	Males	Always	23 (74.2%)
		Sometimes	6 (19.4%)
		Rarely	2 (6.5%)
	Females	Always	9 (47.4%)
		Sometimes	7 (36.8%)
		Rarely	3 (15.4%)
Prevalence of Athlete Performance	Males	Every day	22 (71%)
		Once a wee	6 (19.4%)
		Many times a month	1 (3.2%)
	Females	Rarely	2 (6.5%)
		Every day	3 (15.8%)
		Once a wee	9 (47.4%)
Marks	Males	Many times a month	9 (15.8%)
		Rarely	4 (21.1%)
		Excellent	18 (58.1%)
	Females	Very Good	4 (12.9%)
		Good	3 (9.7%)
		Fair	6 (19.4%)
Females	Excellent	11 (57.9%)	
	Very Good	4 (21.1%)	
	Good	1 (5.3%)	
		Fair	3 (15.8%)

DISCUSSION

This study explored the prevalence of breakfast skipping among adolescents of sample 50 of grade 7-9. students (aged 11–16 years). The results of the current study provide evidence for the

Table 1 : Demographic Characteristics of Participants (n=50)

		N (frequency)	
Gender	Males	31(62%)	
	Females	19 (38%)	
Educa-tional Level	Males	7 th class	11 (35.5%)
		8 th class	10 (32.3%)
	Females	9 th class	10 (32.3%)
		7 th class	9 (47.4%)
	Females	8 th class	5 26.3%)
		9 th class	5 26.3%)

Regarding breakfast skipping habits, a significantly higher proportion of boys (74.19%) reported never skipping breakfast compared to girls (47.37%). Conversely, a greater percentage of girls (36.84%) reported sometimes skipping breakfast compared to boys (19.35%). Notably, 5.26% of girls reported always skipping breakfast, while no boys reported this behavior (table 2).

In terms of athletic participation, boys were more likely to engage in regular physical activity, with



disassociation between breakfast consumption and the academic & athletic performance of students.

The majority of boys reported never skipping breakfast, and few of students reported always skipping breakfast. Half of girls reported always have breakfast, and few skip breakfast, taking into account the difference in numbers. These results support the outcomes of a study that was conducted in South Korea to examine the effect of breakfast on the academic performance of both male and female adolescents from the 7th to the 12th classes, and 37% of males and 41% of females reported skipping breakfast.

The researchers study was able to identify a strong link between breakfast skipping and obesity. Obesity is related to reduction in cognition and memory due to its effect on the structure of the brain. Therefore, skipping breakfast was found to be a cause for obesity, which is indeed related to lower academic performance. Also in Iran "1st study" it was the percent of the prevalence of skipping breakfast 95% among students. 35

According to result Skipping breakfast was more prevalent among females than males and the current study found that the most common reasons were lack of appetite in the morning, not feeling hungry, not having time due to a late awakening or consumption of snacks. Our study found that the majority of AL-Waha School Students don't skip breakfast this's because they know the importance of breakfast and how it affects their performance, health & concentration. 36

On the side of sports, most of the boys practice sports every day, while in girls, there're a few who practice sports every day, which is the lowest percentage of boys. In compare with China "2nd study" among boys & girls non breakfast-skippers had good results in sports. A study found that males had a higher proportion than females at breakfast rates, in sports and in high scores in school 37 However, the association between breakfast consumption and academic performance that 22 was revealed by the current study does not coincide with the outcomes of other study, who examined the relationship between

frequency of breakfast consumption and the academic performance of adolescents.

The study results show no correlation between academic performance and students who have breakfast and the reason that some students have high scores even though they don't have breakfast and some have low scores even though they've had breakfast. This suggests that there is no correlation between academic performance and breakfast. Therefore, the null hypothesis is accepted.

CONCLUSION

The prevalence of breakfast skipping among adolescents appears considerably less prevalent than previous studies suggest. Findings from the current study suggest alternative supports are required to ensure all adolescents regularly eat breakfast. To be effective, strategies to promote breakfast consumption need to be informed by an understanding of the drivers of breakfast skipping across population sub-groups.

RECOMMENDATIONS

However, the results showed that students are breakfast skipping at a rate lower than what we consider neglecting for the breakfast eating. We therefore recommend the following: 1. Encourage them to take something easy to eat when hunger does strike just before school or between classes. 2. If you are time poor, you can still have breakfast. 3. Avoid nibble on snacks during the mid-morning of afternoon

Disclaimer

The article has not been previously presented or published, and is not part of a thesis project.

Conflict of Interest

There are no financial, personal, or professional conflicts of interest to declare.

Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript



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