

# The Effect Of Breakfast Habits On Learning Concentration Among First Semester Students Of The Faculty Of Psychology and Health UIN Sunan Ampel

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Abstract: Breakfast is an essential activity that supports energy availability and cognitive functions, particularly students' learning concentration. However, breakfast is often neglected due to time constraints and a lack of awareness regarding the importance of morning nutrition. This study aims to examine the effect of breakfast habits on the learning concentration of first semester students at the Faculty of Psychology and Health, UIN Sunan Ampel Surabaya. The method used was quantitative research with a cross-sectional design involving 74 respondents, determined through simple random sampling. The research instrument was an online questionnaire that had been tested for validity and reliability. Data were analyzed using the Independent Sample T-Test to determine differences in concentration based on breakfast habits. The results showed a significant difference between students who regularly had breakfast and those who did not, with a p-value of 0.020. The average concentration score of students who had breakfast was 34.97, higher than those who did not, with a score of 32.70. This study concludes that breakfast has a significant effect on students' learning concentration and should be promoted as part of a healthy lifestyle to support academic success

## 1 INTRODUCTION

Breakfast is one of the essential components of a daily diet that functions to provide energy and nutrients needed by the body after an overnight fast. The energy obtained from breakfast plays a crucial role in both physical and cognitive activities, particularly in maintaining concentration during learning. A lack of morning intake can lead to decreased blood glucose levels, resulting in fatigue, reduced attention, and impaired memory. Recent studies have shown that a well-balanced breakfast can improve focus and concentration, thereby

contributing to the enhancement of students' academic performance (Massie & Silaban, 2025).

Nevertheless, breakfast has not yet become a priority for most students. Limited time, unhealthy lifestyles, and a lack of awareness about the importance of breakfast are often the main contributing factors. A study conducted in Makassar found that many students still had poor breakfast habits, and this condition was proven to correlate with decreased levels of concentration in academic activities (Raihanah et al., 2024). This finding indicates that a simple behavior such as having

breakfast can significantly affect students' readiness to engage in the learning process.

Various studies have also emphasized the positive relationship between breakfast habits and improved learning concentration. Students who regularly have breakfast are better able to pay attention to material, retain information, and participate actively in class compared to those who frequently skip breakfast (Ahmad, 2024). A nutritious breakfast composition, particularly those containing complex carbohydrates, protein, and vitamins, helps maintain stable brain energy, thus allowing concentration to last longer. Therefore, breakfast serves not only as a health investment but also as an important factor in supporting academic achievement.

Considering the importance of breakfast, research on the effect of breakfast habits on students' concentration is highly relevant to conduct. The focus of this study is on first-semester students of the Faculty of Psychology and Health at the State Islamic University Sunan Ampel Surabaya, who are in the transition period from school to university. This stage is characterized by increasing academic demands and adaptation to a more independent learning style. Therefore, the results of this study are expected to strengthen empirical evidence on the benefits of breakfast for concentration while also providing a basis for nutritional interventions that can be implemented in the campus environment (Awaliyah et al., 2025)

## 2 METHOD

This study was a quantitative research with a cross-sectional design conducted in October–

November 2024 at the Faculty of Psychology and Health, UIN Sunan Ampel Surabaya. The study population consisted of all first-semester students totaling 323 individuals, with a sample of 74 respondents determined using the Lemeshow formula and the simple random sampling technique. Primary data were collected through an online questionnaire using Google Forms, which included questions regarding breakfast habits and students' learning concentration levels. The instrument had undergone validity and reliability testing prior to use. The analytical tool employed was SPSS version 25. Data were analyzed univariately to describe the distribution of respondents and bivariately using the Independent Sample T-Test to determine differences in concentration between students who had breakfast and those who did not, with a significance level of  $p < 0.05$ . **RESULT**

Table 1. Distribution of Respondents by Gender

Gender	Frequency (n)	Percentage (%)
Male	20	27,0
Female	54	73,0
<b>Total</b>	<b>74</b>	<b>100</b>

Based on Table 1, it can be seen that the respondents were dominated by female students, totaling 54 individuals (73.0%), while male students accounted for only 20 individuals (27.0%). This proportion reflects the reality that in several study programs within the Faculty of Psychology and Health, the number of female students is indeed higher than that of male students. This finding is also relevant to national trends indicating that the fields of health and psychology are more popular among female students. Such a difference may influence the

results of the study, particularly because biological and psychosocial factors between males and females may affect breakfast habits as well as concentration levels. However, in this research, gender was not treated as a main variable, but rather as a characteristic to describe the distribution of respondents.

Table 2. Distribution of Respondents by Age

Age (Years)	Frequency (n)	Percentage (%)
17–18	21	28,4
19–20	42	56,8
21–22	11	14,8
<b>Total</b>	<b>74</b>	<b>100</b>

Table 2 shows that the majority of respondents were in the 19–20 years age group, with 42 individuals (56.8%). The 17–18 years group accounted for 21 individuals (28.4%), while the smallest group was 21–22 years, totaling 11 individuals (14.8%). This age distribution corresponds to the condition of first-semester students who generally have just graduated from senior high school. Such a relatively young age is crucial, as late adolescence and early adulthood are stages when dietary habits, including breakfast, are still influenced by lifestyle, family practices, and adaptation to campus environments. Moreover, this age period represents a phase where cognitive functions, including concentration, are at an optimal

level. Therefore, this study provides a representative picture of how breakfast habits can influence concentration in an early productive age group.

Table 3. Distribution of Respondents by Breakfast Habits

Breakfast Habits	Frequency (n)	Percentage (%)
Regular	37	50,0
Irregular	37	50,0
<b>Total</b>	<b>74</b>	<b>100</b>

Based on Table 3, the respondents were equally divided between those who had regular breakfast (50.0%) and those who did not (50.0%). This indicates that half of the first-semester students have not yet established breakfast as a consistent daily habit. Such a condition is concerning, as breakfast is an important factor in preparing both the body and brain for daily activities. Skipping breakfast may result in decreased blood glucose levels, which can lead to reduced concentration, fatigue, and mood disturbances. On the other hand, students who regularly have breakfast tend to maintain more stable energy, be better prepared for lectures, and show better focus. This finding is consistent with several previous studies indicating that breakfast compliance among students remains relatively low, even though they are aware of its benefits.

Table 4. Distribution of Average Student Concentration Scores

Breakfast Habits	Mean Concentration	Standard Deviation	Min	Max
Regular	34,97	2,51	29	39
Irregular	32,70	2,73	28	38

Table 4 demonstrates a clear difference in the average concentration scores of students based on breakfast habits. Students who regularly had

breakfast achieved an average concentration score of 34.97 with a standard deviation of 2.51, with minimum and maximum scores of 29 and 39,

respectively. Meanwhile, students who did not regularly have breakfast obtained a lower average score of 32.70 with a standard deviation of 2.73, and minimum and maximum scores of 28 and 38. The difference of almost 2.3 points is quite significant, suggesting that breakfast habits contribute to students' concentration levels. Physiologically, this can be explained by the fact that breakfast provides energy to the brain in the form of glucose, the main source of energy for cognitive activity. Without adequate morning intake, students are more likely to experience decreased attention and memory during lectures. Tabel

Table 5. Results of the Independent Sample T-Test of Student Concentration by Breakfast Habits

Variabel	Mean Difference	T-hitung	p-value
Breakfast and No Breakfast	2,27	2,376	0,020

Based on Table 5, the results of the bivariate analysis using the Independent Sample T-Test show a significant difference in concentration between students who had breakfast regularly and those who did not. The obtained p-value was 0.020, which is less than 0.05, thus confirming the hypothesis that breakfast habits influence students' concentration. The mean difference of 2.27 further emphasizes that students who regularly had breakfast possessed higher levels of concentration than those who skipped it. This finding strengthens empirical evidence that breakfast is not merely a morning eating habit but also an important factor in supporting students' academic readiness. Therefore, the results support the existing literature stating that breakfast can improve cognitive performance, particularly concentration and memory.

## 4 DISCUSSION

The results of this study indicate a significant difference in concentration levels between students who regularly had breakfast and those who did not. Students with regular breakfast habits achieved higher average concentration scores compared to those who skipped breakfast. This finding is consistent with the theory that breakfast functions as the body's primary energy source after an overnight fast, which is essential for optimal brain function. Adequate glucose intake in the morning enables the brain to maintain focus, memory, and cognitive performance throughout academic activities. Conversely, skipping breakfast may lower blood glucose levels, causing fatigue, reduced attention, and decreased academic performance. This result is in line with the findings of (Harahap, 2025) who reported that elementary school students who regularly ate breakfast demonstrated higher learning concentration compared to those who skipped it. Therefore, breakfast can be confirmed as a key factor in preparing students to engage effectively in their academic tasks (Harahap, 2025).

The distribution of respondents in this study showed an equal proportion of students who had regular breakfast and those who did not, highlighting that breakfast is still not a consistent habit among first-semester students. This condition reflects lifestyle patterns influenced by time limitations, academic schedules, and a lack of awareness regarding the importance of morning nutrition. Many students reported skipping breakfast due to insufficient preparation time before morning classes. Supporting this, (Raihanah et al., 2024) found that irregular breakfast habits combined with poor sleep

quality significantly reduced students' ability to concentrate. Thus, irregular breakfast not only directly influences concentration but may also exacerbate the negative impact of other lifestyle factors such as inadequate rest. This finding emphasizes the importance of health education programs to increase awareness and improve breakfast practices among students (Raihanah et al., 2024).

The mean difference of 2.27 in concentration scores between the two groups is statistically and practically meaningful. It demonstrates a tangible impact of breakfast on cognitive readiness in academic settings. This finding supports the study by (Arista et al., 2025) which reported a positive association between breakfast habits and academic achievement among junior high school students in Mataram. A nutritious breakfast contributes not only to physical health but also to mental readiness, thereby facilitating higher levels of classroom engagement. Moreover, students who start their day with balanced nutrition tend to display greater motivation and attentiveness in learning environments. Therefore, the results of this study add to the empirical evidence that breakfast is a lifestyle factor with direct implications for students' learning concentration and academic outcomes (Arista et al., 2025).

Beyond its physiological benefits, breakfast also contributes to students' psychological stability. Students who have breakfast regularly tend to feel calmer, less anxious, and more prepared for daily academic challenges. This psychological readiness may result from stable blood glucose levels that reduce irritability and stress caused by hypoglycemia. (Damayanti et al., 2025) found that breakfast

education significantly improved students' awareness and habits, leading to better concentration during classroom activities. This highlights that promoting breakfast can positively affect students' mental well-being and learning environment. Consequently, educational institutions should integrate breakfast awareness campaigns and provide access to healthy food options on campus. This approach would foster a supportive environment for both mental and academic performance (Damayanti et al., 2025).

The results of this study also underline the importance of health interventions in higher education settings. University students often adopt unhealthy dietary patterns due to heavy academic workloads or extracurricular commitments. Low concentration levels may not only affect immediate classroom performance but also hinder long-term academic achievement. (Harahap, 2025) emphasized that students with regular breakfast habits performed significantly better academically compared to their peers who frequently skipped breakfast. Thus, universities should consider implementing health promotion programs, including nutrition education and breakfast awareness activities. Such interventions could encourage students to develop consistent breakfast habits that ultimately support their academic success and well being.

Overall, this study confirms that breakfast plays an important role in enhancing learning concentration among students. The findings align with recent research in Indonesia highlighting the positive association between breakfast and concentration levels in both school and university populations. While this study was limited to first semester students, its findings provide valuable insights that may be generalized to broader student

populations. Future research may explore additional factors such as types of breakfast, nutritional status, and sleep duration, which also affect cognitive performance. In conclusion, breakfast should be promoted as a healthy lifestyle practice to support students' readiness and academic achievement in higher education.

## 5 CONCLUSIONS

This study demonstrates that there is a significant difference in concentration levels between students who regularly eat breakfast and those who do not. Students with regular breakfast habits showed higher average concentration scores compared to those who skipped breakfast, with statistical results of  $p = 0.020$ . This finding confirms that breakfast not only serves to meet the body's energy needs but also plays an important role in maintaining cognitive functions, particularly learning concentration. The results are consistent with previous studies indicating that breakfast contributes positively to students' academic readiness. Therefore, breakfast can be considered one of the essential factors that must be taken into account in efforts to improve learning quality and academic achievement, especially during the early stages of university education.

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