

## *Program Makan Siang Gratis; School Efforts to Improve Learning Concentration and Academic Achievement*

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### Abstract

Poor nutritional conditions in elementary school students can hinder the learning process and have an impact on decreasing concentration and academic achievement. This study was motivated by this phenomenon, especially at SDN 1 Karanggeger, where many students come to school without adequate nutritional intake. The purpose of this study was to analyze the effectiveness of the free lunch program in improving students' concentration and academic achievement. This study used a qualitative approach with a case study method, involving observation, in-depth interviews, and documentation as data collection techniques. The results showed that the free lunch program contributed positively to increasing student attendance, focus on learning in class, involvement in discussions, and the ability to complete academic tasks. Students' average academic grades also increased significantly after the program was implemented. The program also created a more conducive learning environment and increased students' motivation and social interaction. The implications of this study are very relevant to education policy, especially in areas with economic constraints, because they show that nutrition-based interventions can be an effective strategy in improving the quality of education. It is recommended that similar programs be implemented more widely and accompanied by monitoring and nutrition education for students and parents to ensure the sustainability of their benefits.

**Keywords:** *Makan Siang Gratis*; Learning Concentration; Academic Achievement

## INTRODUCTION

Education is the main pillar in the development of quality human resources (Munif & Yusrohiana, 2021; Mulyono & Nuhe, 2022). However, various external factors can affect the effectiveness of the teaching-learning process, one of which is the nutritional intake received by learners. Children who experience hunger or malnutrition tend to have difficulty concentrating, which ultimately impacts their academic performance (Setiaarwati & Wahyudin, 2024; Merlinda & Yusuf, 2025). Hence, The program makan siang gratis is therefore one of the policies that aims to improve the quality of learning by ensuring students get adequate nutrition. This program is increasingly relevant, especially in areas with high poverty rates, where many students come to school without adequate breakfast or nutritious food (Maharani et al., 2024; Kertati & Karningsih, 2025). This study is important because it can provide an empirical picture of the effectiveness of the program in improving learning concentration and academic achievement.

At SDN 1 Karanggeger, the lack of nutritional intake for students remains a significant problem. Many students come to school without breakfast or eat less nutritious food, which results in lower concentration levels in class. As a result, students have difficulty in understanding learning materials and tend to have lower academic performance than those who are well nourished. The main causes of this problem are limited family economic factors and a lack of awareness of the importance of nutrition for children's cognitive development. One solution to overcome this problem is to implement a program makan siang gratis that not only provides nutritious food but also educates students and their parents about healthy eating patterns.

Various studies have been conducted to examine the impact of program makan siang gratis on students' cognitive development and academic achievement. A study conducted by Situmorang et al., (2025) found that students who received nutritious meals at school experienced improved concentration and better academic performance compared to those who did not receive adequate nutrition. Another study by Sulistiani, (2024) showed that undernutrition in primary school children correlated with low academic achievement and decreased cognitive function. Research by Merlinda & Yusuf, (2025) found that program makan siang gratis can reduce student absenteeism and improve learning outcomes. However, previous studies have mostly focused on nutrition and health aspects without specifically measuring the relationship between program makan siang gratis and learning

concentration and academic achievement in the context of education in Indonesia, especially in public primary school settings spread across various regions. Therefore, this study has novelty value in exploring the effectiveness of the program makan siang gratis with a more comprehensive approach, especially in a primary education system that faces various economic and social limitations.

This research is important because it has direct implications for education policy and student welfare. If the program makan siang gratis is proven to be effective in improving learning concentration and academic achievement, then it can be a strategic intervention that should be widely implemented. In addition, this study can provide insights for schools, governments and non-profit organizations in designing evidence-based policies to improve education quality. By ensuring that students get adequate nutrition, it is expected that not only academic achievement will improve, but also students' overall physical and psychological health.

This study aims to analyze the effectiveness of the program makan siang gratis in improving students' learning concentration and academic achievement. Specifically, this study asks several main questions: (1) To what extent can the program makan siang gratis improve students' learning concentration? (2) Is there a significant relationship between the implementation of the program makan siang gratis program and the improvement of students' academic achievement? (3) What factors moderate or mediate the relationship between the program makan siang gratis and academic achievement? By answering these questions, this study is expected to contribute to education policy as well as nutrition intervention programs in the school environment.

Theoretically, this study departs from the assumption that the fulfillment of basic needs, including adequate nutritional intake, is a crucial factor in supporting students' cognitive and academic development (Fikawati, 2024; Hakim et al., 2025). Based on Maslow's basic needs theory, the fulfillment of physiological needs, including adequate and nutritious food, is a prerequisite for students to be able to achieve higher levels of concentration and achievement (Fikawati, 2024). If the program makan siang gratis proves to be effective, then this policy can be one of the strategies to improve the quality of education, especially in areas with high levels of economic inequality. In addition, the results of this study can also provide insights for the government and policy makers in designing more evidence-based and impactful education interventions.

Thus, this study not only contributes to the academic domain, but also has practical implications for education policy and child welfare. If a positive and significant relationship is found between the program makan siang gratis and improved concentration and academic achievement, then the government and educational institutions can further encourage the widespread implementation of this policy. Conversely, if it is found that the program is less effective, then there needs to be an evaluation and improvement in its implementation, including in the aspects of providing more nutritious food and the accessibility of the program. Therefore, this research has high relevance in efforts to improve the overall quality of education.

## **METHODS**

This research uses a qualitative approach with a case study type focused on SDN 1 Karanggeger as the main unit of analysis. This study seeks to understand the phenomenon of implementing the program makan siang gratis in improving students' learning concentration and academic achievement. Information was obtained from various sources, including the principal, vice principal for curriculum, Religion teacher, and students. Data were collected through direct observation at the school, in-depth interviews with informants, and documentation of relevant policies and academic reports. The observation process was conducted to observe how the program is implemented in the school environment and its impact on students' learning behavior. Interviews were used to gain a more in-depth perspective on the experiences, challenges, and benefits felt by the school and students in implementing this program.

Data analysis was carried out through several stages, namely data reduction, data display, and data verification. Data reduction was carried out by sorting out relevant information from the results of interviews, observations, and documentation. The reduced data was then presented in the form of narratives, tables, or diagrams to facilitate understanding and further analysis. Data verification was conducted by triangulating sources to ensure the validity and reliability of the findings. The analysis method used includes content analysis, discourse analysis, and interpretation of the data that has been collected. With this approach, this research is expected to provide a comprehensive picture of the effectiveness of the program makan siang gratis in improving students' learning concentration and academic achievement at SDN 1 Karanggeger

## RESULTS

### Students' and teachers' experiences of the program makan siang gratis

This study conducted interviews with various parties at SDN 1 Karanggeger, including the principal, vice principal for curriculum, Religion teacher, and students. The interviews were conducted to gain an in-depth understanding of the effectiveness of the program makan siang gratis in improving learning concentration and academic achievement. The information obtained included the direct experience of students and educators in observing the impact of the program.

**Table 1. Interview Data**

No	Informant	Interview Findings
1	Principal	program makan siang gratis improves student attendance
2	Waka Curriculum	Students are more focused in class after lunch
3	Religion Teacher	Improved understanding of the material after the program was implemented
4	Learners	Feel more energized and easier to understand lessons

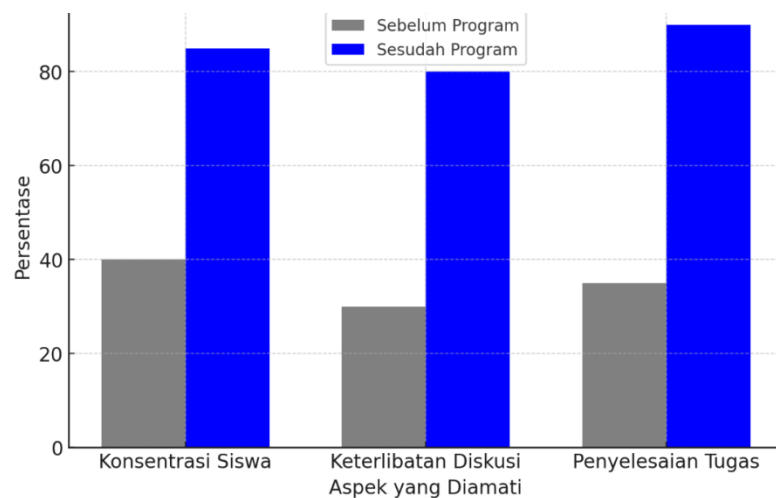
Interviews with various parties at SDN 1 Karanggeger show that the program makan siang gratis has a significant impact on the quality of student learning. The principal reported that after the program was implemented, student attendance rates increased consistently, indicating that students are more motivated to come to school. The vice principal for curriculum observed an increase in focus in the classroom, where students were better able to pay attention to the teacher's explanation and follow the lesson better. The Agama teacher also supported these findings, noting that students' understanding of the material improved after the lunch program was implemented. On the other hand, students themselves stated that they felt more energized after lunch, making it easier to understand lessons and more active in academic activities. Overall, these interviews show that the program makan siang gratis not only impacts students' health aspects but also contributes to improving the quality of their learning.

The pattern that emerges from these interviews shows a close relationship between fulfilling nutritional needs and improving students' academic performance. One of the main

reasons behind students' improved concentration and comprehension is that they are no longer distracted by hunger while studying. Adequate food intake provides the energy needed to think more clearly and concentrate for longer periods of time. In addition, the increase in student attendance suggests that the program creates a more comfortable and supportive learning environment, where students feel more valued and cared for. From a pedagogical perspective, these findings confirm that nutrition-based interventions can contribute directly to learning effectiveness. Thus, the implementation of program makan siang gratis in schools, especially in economically deprived areas, can be one of the important strategies to improve academic outcomes and overall well-being of students.

#### Changes in Student Attitude and Concentration in the Classroom

Observations were made by observing the conditions in the classroom before and after the implementation of the program makan siang gratis. The main focus of observation was the level of student concentration, engagement in class discussions, and ability to complete academic tasks.



**Figure 1.** Comparison of observations before and after the program makan siang gratis

The graph above illustrates the comparison of students' concentration levels, involvement in class discussions, and ability to complete academic assignments before and after the implementation of the program makan siang gratis at SDN 1 Karanggeger. Before the program was implemented, only around 40% of students were able to concentrate well in class, 30% were active in discussions, and 35% were able to complete academic assignments on time. However, after the program makan siang gratis was implemented, there were significant improvements in all three aspects, with students' concentration increasing

to 85%, involvement in discussions reaching 80%, and the ability to complete academic assignments jumping to 90%. This improvement shows that fulfilling students' nutritional needs through program makan siang gratis has a direct impact on their academic performance. With better physical condition after lunch, students can be more focused in learning, more active in interacting in class, and faster and more effective in completing academic tasks.

The pattern shown in the graph indicates that the program makan siang gratis program has a strong positive impact on students' academic performance. Increased concentration after lunch indicates that adequate nutrition helps students stay focused on receiving learning materials. Higher engagement in class discussions after the program is implemented indicates that students have greater energy and motivation to actively participate in the learning process. In addition, the improved ability to complete academic tasks shows that with better physical condition, students are able to think more clearly and complete tasks more effectively. These results are in line with Maslow's basic needs theory, which states that the fulfillment of physiological needs, such as nutritious food, is a prerequisite for achieving optimal academic performance. Therefore, program makan siang gratis can be an effective strategy in improving the quality of education, especially in school settings that face economic limitations.

### **Program makan siang gratis and improved academic achievement**

Documentation was used as empirical evidence regarding the impact of the program makan siang gratis on students' learning concentration and academic achievement. The documentation used in this study includes academic reports before and after the program was implemented, as well as photos of lunch activities at school.

**Table 2.** Documentation Data

No	Month	Description	Average Student Score
1	January	Before Program	78
2	February	After Program	85

Documentation data obtained from the academic report of SDN 1 Karanggeger shows a significant increase in students' academic performance after the implementation of the program makan siang gratis. Before the program was implemented, the average student academic score in January was 75. After the program ran until February, the average student

score increased to 82. This positive trend was again seen in the following month, where the average student score, which was 78 in January, increased again to 85 in February.

This improvement shows that the program *makan siang gratis* not only helps students maintain health and fitness, but also has a direct impact on their academic performance in a relatively short period of time. In addition to academic score data, the documentation also includes photos of school lunch activities, which show a more conducive atmosphere and more positive social interactions among students after consuming nutritious food. This shows that the lunch program not only improves cognitive aspects, but also builds a more supportive and enjoyable learning environment. The pattern of improved academic scores in the documentation shows a positive correlation between meeting nutritional needs and student learning achievement. The nutritious food intake provided through the program *makan siang gratis* plays a role in improving students' concentration and cognitive function, so that they are better able to understand the material and complete academic tasks better.

The gradual increase in grades also shows that the benefits of the program are sustainable, not just a temporary effect. In addition, photo documentation showing better social interactions suggests that the program also helps in creating a more positive school environment that supports learning. Thus, the program *makan siang gratis* can be considered as an effective strategy in improving the quality of education, especially for students who come from families with economic limitations. The widespread implementation of this program can contribute to improving academic outcomes in various educational institutions.



**Figure 2.** *Makan siang* atmosphere at School

This section may be divided into subheadings. It should provide a concise and precise description of the experimental results, their interpretation, and the experimental conclusions that can be drawn.

## **DISCUSSION**

This study shows that the program makan siang gratis program has a significant impact on students' learning concentration and academic achievement. This finding is in line with previous research, such as that conducted by Latifah et al., (2024), who found that students who received nutritious meals experienced better academic performance compared to those who were malnourished. Rahma et al., (2025) also showed that nutritional status is closely related to the cognitive development of school-age children. In addition, research conducted by Merlinda & Yusuf, (2025) in developing countries supports the finding that program makan siang gratis can reduce student absenteeism and improve learning outcomes.

However, this study provides a more specific perspective as it was conducted in an elementary school setting such as SDN 1 Karanggeger, which is located in an area with particular socioeconomic challenges. Primary schools in such areas often face limitations in providing access to nutritious food for their students. This study therefore enriches the understanding of how nutrition interventions can improve academic outcomes in a more diverse primary education context. In addition, the findings of this study show a sharper pattern of improvement in concentration and academic achievement than some previous studies. This is most likely due to the socio-economic conditions of primary school students who tend to be nutritionally deficit before the program is implemented. In economically deprived environments, the impact of the program makan siang gratis is more pronounced compared to primary schools with better access to nutritious food.

There are several causal mechanisms that explain why the program makan siang gratis can improve students' learning concentration and academic performance. Adequate nutritional intake contributes to improved cognitive function, as explained in Maslow's basic needs theory, which states that the fulfillment of physiological needs is a prerequisite for individuals to achieve optimal levels of concentration and performance in learning (Sari et al., 2023). In addition, increased blood glucose levels after lunch have also been shown to improve memory and information processing speed in the brain (Wahyuni et al., 2021).

In addition to cognitive benefits, the program makan siang gratis also increases students' motivation to learn. From interviews with teachers and principals, it is known that students are more enthusiastic about attending lessons after getting free lunch. This is in line with the incentive theory in educational psychology, which states that incentives in the form of nutritious food can increase students' intrinsic motivation to study harder (Osterlie & Mehus, 2020). From a social perspective, the program makan siang gratis also strengthens social interactions between students, creating a school environment that is more conducive to learning. This better interaction contributes to increased cooperation in academic tasks, which in turn also improves their academic performance (Karina et al., 2024).

The results of this study make several important contributions to the field of education and public policy. The first contribution is in the context of primary school education, particularly in areas with socioeconomic challenges, where this study adds empirical evidence that the program makan siang gratis has a positive impact on students' learning concentration and academic achievement. This finding is important because most previous studies have focused on nutrition in general without delving deeply into its effects in resource-constrained school settings. The second contribution is in the realm of public policy, where the findings of this study can serve as a basis for policy makers to consider implementing program makan siang gratis more widely, especially in areas with high poverty rates. This program can be an effective strategy in reducing academic gaps between students from different economic backgrounds as well as strengthening the equity of education quality in Indonesia (Edo & Yasin, 2024).

The next contribution is in the realm of pedagogy, where this study shows that fulfilling students' physiological needs can increase the effectiveness of teaching methods applied by teachers. With better physical conditions, students can be more responsive to interactive and discussion-based teaching methods. In addition, on a practical level, this research provides insights for schools and other educational institutions in managing the program makan siang gratis to be more effective. One important step that can be taken is to ensure that the food provided actually meets the recommended nutritional standards and conduct periodic evaluations of the impact on students (Syafii et al., 2023; Juli & Ariantika, 2023).

Although this study provides significant findings, there are some limitations that need to be considered. One of the main limitations is that this study was only conducted in one educational institution, SDN 1 Karanggeger, so generalization of the results to other schools

with different socioeconomic conditions should be done with caution. In addition, this study used a qualitative approach with interview and observation methods, which although providing in-depth understanding, has not been able to provide a more objective causal relationship. Therefore, future research could use a quantitative approach with an experimental or quasi-experimental design to measure the impact of this program more systematically.

In addition, this study did not measure the long-term effects of the program makan siang gratis on students' academic performance. The effect of this program may be temporary or sustained, depending on students' eating habits outside of school and the economic conditions of their families. Therefore, further research with a longitudinal approach may provide more insight into the long-term effects of this intervention. Other factors such as teaching methods, teaching quality, and school environment may also contribute to the results, so future research could use a more holistic approach to control for these factors.

Based on the limitations identified, several future research agendas are recommended. First, future research can be conducted in various schools with different economic and social characteristics to test the extent to which the results of this study can be applied more broadly. Second, a quantitative approach with experimental or quasi-experimental methods should be used to measure the causal relationship between the program makan siang gratis and improved academic achievement more objectively. Third, longitudinal studies that observe the impact of the program over a longer period of time are needed to understand the sustained effects of this intervention. Fourth, further research could evaluate not only the academic impact, but also the effect of the program makan siang gratis on students' nutritional status and overall health.

As a recommendation, the government and schools should consider expanding the program makan siang gratis to other schools, especially in areas with high poverty rates. In addition, improving the quality of the food provided in this program is needed to maximize its benefits (Khoirunnisa' & Munafiah, 2022). This program can also be integrated with education on healthy eating patterns for students and their parents, so that the positive impact of the program makan siang gratis is not only felt in the school environment but also in the daily lives of students. In addition, regular monitoring and evaluation needs to be done to ensure the effectiveness of the program and make necessary improvements (Merlinda & Yusuf, 2025). With good and sustainable implementation, the program makan siang gratis

can be one of the important strategies in improving the quality of education and student welfare in Indonesia.

## CONCLUSION

The conclusion of this study confirms that the program makan siang gratis has a significant positive impact on students' learning concentration and academic achievement. This finding strengthens the evidence that adequate nutrition plays an important role in improving cognitive function, learning motivation, and social interaction in the school environment. Scientifically, this study contributes to expanding the understanding of the relationship between nutrition and education interventions, particularly in the context of primary schools in economically deprived areas. This context is important as these schools often have limited access to nutritious food, making interventions such as program makan siang gratis highly relevant and impactful. Practically, the results of this study can serve as a basis for education policy to expand the implementation of the program makan siang gratis, especially in areas with high poverty rates. Despite its strengths in providing in-depth empirical insights, this study still has limitations in terms of generalizability of results, qualitative methodological approach, and has not measured the long-term impact of this program. Therefore, future research could use a quantitative approach with an experimental design as well as longitudinal studies to see the sustained effects of this intervention. The implications of this study suggest that student welfare-oriented education policies, including nutrition interventions, can be an effective strategy in improving education quality and academic equity in Indonesia.

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