Healthy and Halal Food’s Contribution to Children After The Covid-19 Pandemic

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Abstract

This research aimed to educate children about healthy and halal food in their growth and development, provide experience to children about healthy and halal food practices, and analyze the improvement of children's post-service knowledge about healthy and halal food. The data analysis used quantitative and qualitative descriptive techniques. The researchers used quantitative analysis to observe the difference between pre-test and post-test, and these differences were subsequently explained. Qualitative analysis was used by researchers on observational data. The results of these observations were then described. Through the research process, this study found that children received education about healthy food and halal in the growth and development of children, as evidenced by the observations during the activities of children listening to explanations submitted by researchers. Furthermore, children enthusiastically worked on questions and answers, as observed through their eagerness to answer questions from researchers, and they enthusiastically worked on practical activities, as evidenced by the results of observations that they enthusiastically searched and pasted pictures and words. Halal food contributes to children's growth and development. This study initiative distinguished itself by placing a unique emphasis on providing knowledge to children regarding the complexities and advantages of nutritious and halal food for optimal growth in the aftermath of the COVID-19 pandemic in Indonesia. It aimed to fill a crucial gap in children's education. This study had its limitations as it was conducted only at one elementary school.

Keywords Healthy and Halal Food, Children Growth, post-pandemic

INTRODUCTION

Healthy and halal food is becoming increasingly important for children's health in Indonesia (Andriyani, 2019). However, in the post-pandemic situation, children are often exposed to various foods that are not necessarily healthy or halal, especially when they buy food on the roadside without guarantees of safety and halal. The food consumed by children significantly impacts their growth and development (Inten & Permatasari, 2019). Therefore, it is crucial to provide education and experiences encouraging an understanding of the importance of healthy and halal food in everyday life.

Healthy and halal food plays a crucial role in the growth and development of children in Indonesia after the COVID-19 pandemic. However, there is a notable lack of education on healthy and halal food for children in the post-COVID-19 era. The ease with which children purchase food on the roadside, without guaranteed safety and halal assurance, is a significant concern. This raises questions about the suitability of such food for consumption and its potential dangers to the growth and development of children in Indonesia.

In the aftermath of the COVID-19 pandemic in Indonesia, there exists a notable research gap concerning the impact of healthy and halal food on the growth and development of children. While
the pandemic has underscored the critical importance of health and well-being, there is a dearth of comprehensive studies specifically exploring the nexus between nutrition, particularly in halal food practices, and children's growth in the Indonesian context. Understanding how dietary choices, particularly those adhering to halal principles, contribute to the physical and cognitive development of children is crucial in a post-pandemic scenario. Moreover, considering the unique cultural and religious characteristics of Indonesia, investigating the role of healthy and halal dietary practices in mitigating the long-term effects of the pandemic on children's health represents an essential avenue for future research. This study can potentially inform public health policies, educational programs, and dietary guidelines tailored to the Indonesian population, promoting holistic well-being and resilience in the face of ongoing challenges. Research conducted by Izzuddin (2018) found that halal awareness and food ingredients affected buying interest, but halal labels did not affect consumer buying interest.

However, regarding the studies in the context of healthy and halal studies, some studies learn about this issue, resulting in different findings and contributions. Such as Sumarni et al. (2020) successfully improved students' understanding of healthy eating, as measured by pre-test and post-test results, where there was an increase in the percentage from 32% to 83%. Other studies by Sari et al. (2022) that trained students in an Islamic School (madrasah) in Padang, Indonesia, showed that there was an increase in literacy of halal snacks and thoyyib madrasah students after counselling and mentoring. This can be seen from the post-test scores and participants' perceptions of counselling and mentoring. The results were very good, and the participants responded positively to the counselling and assistance.

Hence, considering the previously discussed concerns related to health and halal matters, along with the elucidated research, this study aims to address this issue using a comprehensive approach, focusing on three main aspects:

1. For the educational provision, Children need to be given sufficient knowledge about healthy and halal food, as well as its urgency in their growth, opportunities, challenges, and the impact of halal food on child development.
2. For the Practical experience, Children were allowed to practice the concepts in everyday life. Thus, they could experience firsthand how to make healthy and halal food a practice in their lives.
3. Knowledge improvement analysis, where the effectiveness of this service was evaluated through the improvement of children's knowledge after participating in this program.

The study’s results showed whether this research successfully improved children’s understanding of healthy and halal food, the urgency, opportunities, challenges, and the impact of halal food on children’s development.

LITERATURE REVIEW
Healthy and Halal food

Food is an important part of human life. To ensure human health, it is important to choose foods that are healthy and identified as halal, especially for Muslims. Healthy and Halal food not only provides good nutrition for the body but also respects religious and cultural beliefs (Pakungwati & Anggraeni, 2023). Healthy foods provide essential nutrients such as vitamins, minerals, protein, and fibre the body needs. These include fruits, vegetables, whole grains, meat, and dairy products from clean and safe sources. A healthy diet helps humans maintain a balanced weight, increase energy, and reduce the risk of chronic diseases such as diabetes, high cholesterol, and obesity.

Meanwhile, Halal food refers to food that adheres to the principles of the Islamic religion. Halal includes the selection and processing of food following the Islamic rules prescribed in the
Quran. One of the main principles of Halal food is that meat must come from animals slaughtered in the right way, that is, in the name of Allah. Additionally, Halal food should also be free from all forms of alcohol and ingredients that are forbidden in Islam. Permissible Halal means following Islamic law. In other words, a product or service can be considered halal if it does not contradict the Islamic teachings of getting and processing it until it is consumed. In Indonesia, halal products are regulated by Law No. 33 of 2014 concerning food safety. A food product is declared safe if the food product is free from various contaminants such as physical contamination, chemical contamination, and microbiological contamination (Zaini et al., 2019). Indonesia's government is also responsible for providing safe, nutritious, and quality food, as outlined in government regulations (Sartika, 2020). In Islamic Shari'a law, a food product is declared halal if it meets conditions such as the product does not contain animal parts that are not halal or haram products, animals slaughtered in the name of Allah, during the preparation stage the ingredients are not prepared or produced using tools or equipment that are contaminated or used with non-Halal ingredients, and during the preparation, manufacture, packaging, storage, and distribution stages the product must be physically separated between halal and non-halal products.

Child Development in Indonesia After The COVID-19 Pandemic

The growth and development of children in Indonesia following the COVID-19 pandemic are important and relevant topics. The pandemic has significantly impacted the lives of children in Indonesia, affecting various aspects such as education, health, and overall well-being (Windarta, 2021; Wulandari et al., 2022). In this context, children's development refers to physical, mental, emotional, social, and intellectual development.

Children's education in Indonesia is one of the areas that has been particularly affected during the pandemic. Schools were closed to stop the spread of the virus, which significantly impacted children’s learning. Many children face difficulties accessing distance learning due to the limitations of technology and internet access (Murtado et al., 2023). This can hinder their intellectual development. However, the Indonesian government has been working hard to improve access to distance education and ensure children remain learning during the pandemic.

In addition, children’s health aspects are also a major concern. The COVID-19 pandemic has made many parents and children more aware of the importance of caring for their health (Asyraini et al., 2022). This includes awareness of the importance of Covid-19 vaccination and maintaining a healthy lifestyle. The government also supported by launching a mass vaccination program to protect children from viral infections.

In terms of child welfare, the pandemic has revealed the social inequalities that exist in Indonesia. Many disadvantaged children struggle to access quality health and education services. However, the pandemic has also sparked awareness of the importance of helping vulnerable children, and many non-governmental organizations and community groups have been involved in this effort.

The COVID-19 pandemic has been a challenging experience for children in Indonesia, but it has also taught many valuable lessons about resilience, solidarity and adaptation. Children's future development will be greatly influenced by how the Indonesian state and society collaborate to provide quality education, affordable health services, and a safe and supportive environment for children. With a shared commitment, Indonesia can ensure that its future generations grow and develop well after this pandemic.

Opportunities and Challenges of The Halal Industry

The world's largest Muslim population is expected to position Indonesia as a leading developer in the halal industry. However, the reality is the opposite; Indonesia remains the largest
The largest exporter of halal food is Brazil. According to the Global Islamic Indicator 2020/2021, Indonesia rose to 4th from 5th in 2019/2020. As noted by Ma'ruf Amin (Purnamasari, 2020), Indonesia secured the 4th (fourth) position in the Global Islamic Indicator 2020/2021 (GIER) due to the rapid progress in the Islamic economy; therefore it becomes an opportunity not only because of the largest number of halal product consumption but also because of the contribution of innovation in the Islamic economy industry, including the food, fashion, cosmetics, pharmaceutical, tourism, finance, media, and recreation industries.

The halal industry market in Indonesia experiences annual growth, with public awareness of labelling halal symbols on business products increasing. This is further supported by the growing global interest in using halal products. In the public perception, halal products signify a commitment to good quality, with production processes adhering to Islamic regulations, encompassing materials and packaging. Additionally, the quality of halal products is assured in terms of health, safety, ethics, and environmental friendliness. Moreover, Indonesia boasts abundant natural resources, making food supply easily accessible.

Indonesia holds the position of being the world’s largest consumer of halal food. According to data from the Global Islamic Economy Report 2020/2021, the total consumption of halal food in Indonesia is $144 billion. Despite Indonesia being recognized for having the largest Muslim population globally, it has yet to dominate the market share of halal food products as a producer. Indonesia has been more dominant as a consumer of halal products. To increase the growth of Indonesia as a halal food producer, the government has issued Law No. 33/2014 on Halal Product Assurance, providing a framework for business actors to ensure halal food production.

**Research Method**

The research was conducted on October 20, 2023 at Al-Azhar Syifa Budi Elementary School in Cikupa District, Tangerang Regency. The research involved healthy and halal food counselling activities to contribute to children’s growth and development after the pandemic. Two classes attended the session, consisting of 50 fourth-grade elementary school students aged ten years. Al-Azhar Syifa Budi Elementary School, chosen for implementing a healthy school program, provided an ideal setting for the researchers.

The instruments employed by the researchers included observation sheets pre-test and post-test assessment instruments, all prepared by the researchers themselves. Observations were conducted to assess the behaviour of children during counselling sessions. Pre-test and post-test instruments were used to measure any differences between pre-counseling and post-counseling stages. The counselling sessions conducted by the researchers used lecture techniques, which consisted of an introduction, counselling material delivery, and conclusion stages.

The research commenced with an introduction by the service team to the students. Subsequently, the research team distributed the pre-test questionnaire. The pre-test results indicated that the learners had a limited understanding of healthy food and halal. This was evident from the students’ average pre-test score of 50.

Afterwards, the research team conducted counselling by verbally explaining the concepts of healthy and halal food and their contribution to the growth and development of children. Following the oral presentation by the research team, observations indicated that the children responded positively, showing happiness during the lecture. This was evidenced by their engagement in the activity, attentively listening to the researchers’ explanations about the knowledge, importance and opportunities, challenges, and impacts of halal food in contributing to the growth and development of children. Furthermore, children showed enthusiasm during the question-and-answer session, actively participating in discussions related to knowledge about healthy and halal food, understanding their importance, and exploring the opportunities, challenges, and impacts of halal...
food on children’s growth and development. The children also showed enthusiasm for practical activities, as observed by the researchers when conducting hands-on exercises related to knowledge about healthy and halal food and the impact of halal food on the growth and development of children.

This research was carried out in several stages, which included:

a. Preparation: The researcher divided tasks with fellow service team members to ensure the service ran as smoothly as possible. This devotion also impacted the understanding of halal and healthy food for children. The preparations made by the researchers included preparing materials, observation sheets, and pre-test and post-test instruments that were given to children.

b. Execution: In this implementation stage, the researchers dedicated themselves to counselling children on halal and healthy food, focusing on post-pandemic child growth and development. During the counselling, the researchers also observed the children and found their enthusiasm during the counselling of halal and healthy food materials for children’s growth and development. When carrying out the service, the researchers also conducted pre-tests and post-tests for the children to assess their knowledge of halal and healthy food.

Data analysis used quantitative and qualitative descriptive techniques. Researchers utilized quantitative analysis to examine the differences between the pre-test and post-test. The differences were then described. The researcher used Qualitative analysis of observational data, with the results of these observations subsequently being described.

FINDINGS AND DISCUSSION

Before conducting counselling activities on healthy and halal foods that contribute to Child Development, researchers first conducted pre-tests for the children. The questions in the pre-test were the same as those in the post-test, consisting of multiple-choice questions totalling ten questions. During the pre-test, it was observed that the average score obtained by children was 50. The post-test results showed improvement, with a score of 74. All scores were categorized as within the medium range in both the pre-test and post-test.

Table 1. Results of student knowledge between before explanation (Pre-test)

<table>
<thead>
<tr>
<th>Number</th>
<th>Score</th>
<th>Category</th>
<th>Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>≥68</td>
<td>Very High</td>
<td>3</td>
<td>6,00</td>
</tr>
<tr>
<td>2</td>
<td>56-67</td>
<td>High</td>
<td>19</td>
<td>38,00</td>
</tr>
<tr>
<td>3</td>
<td>44-55</td>
<td>Medium</td>
<td>21</td>
<td>42,00</td>
</tr>
<tr>
<td>4</td>
<td>32-43</td>
<td>Low</td>
<td>6</td>
<td>12,00</td>
</tr>
<tr>
<td>5</td>
<td>≤31</td>
<td>Very Low</td>
<td>1</td>
<td>2,00</td>
</tr>
<tr>
<td>Amount</td>
<td></td>
<td></td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

From Table 1, the pre-test results indicate that three respondents were categorized as very high, with a percentage of 6%. Additionally, 19 respondents were classified as high categories with a percentage of 38%. Twenty-one respondents were classified as medium categories with a percentage of 42%. Furthermore, 6 respondents were categorized as low category with a percentage of 11%, and 1 respondent was classified as very low category with a percentage of 2%.

After conducting the pre-test, the researchers conducted counselling activities for children,
focusing on healthy and halal foods that contribute to children’s growth. The research results indicated that children enjoyed listening to explanations delivered by the researchers about healthy and halal food. Researchers provided an interactive explanation to spark the children’s curiosity. The explanation began with an interesting introduction, incorporating facts about malnutrition and its impact on children's growth and development. The researchers emphasized that food that looks halal may not necessarily be halal, as it is unclear whether the food is stolen or processed in a way that is not halal, making the food haram to eat. Creating an engaging learning opening can stimulate motivation and serve as a reference to capture children's attention for learning. The readiness of children built at the beginning of learning will certainly help children follow the learning process. Children are more motivated to learn the materials presented (Azis, 2016).

After presenting interesting facts in the opening section, the teacher explained in depth about healthy and halal food, including its benefits for children’s bodies, growth, and health. For example, teachers explained that healthy and halal food could increase children’s energy, endurance, and concentration while studying at school.

The teacher also emphasized the importance of halal food in terms of religion in a way that was easy for students to understand, such as knowing the origin of food and the process of making food. Teachers also used video media to provide clear and interesting illustrations. This was done to provoke curiosity in children so that they would ask researchers questions. Questions submitted by children became a space for discussion between researchers and children or discussions among children.

Overall, the atmosphere in the classroom became lively when researchers provided explanations full of enthusiasm to children. Children also showed their activeness by asking questions and expressing a willingness to change their diet to be healthier and to pay attention to halal food. This student activity affected the knowledge of children obtained at the time of the post-test, aligning with the statement put forward by Wilke (Umah et al., 2014) that the involvement of students actively contributes to psychological readiness so that it affects the ability to receive material, remember and solve problems related to the subject studied (cognitive intelligence).

After following the researcher’s explanation about healthy and halal food, the next step for the children involved practical activities, namely pasting words with pictures. The atmosphere in the classroom looked full of enthusiasm, with excited children searching for pictures that reflected the concept of healthy and halal food. Cooperation and active discussion between children were observed as they exchanged ideas about choosing pictures and words. The children did not just paste pictures randomly, but they chose carefully, creating diverse and interesting compositions. Creativity was evident in the composition of images and words, with students using bright colours and creating aesthetically pleasing layouts. This activity was not only a form of creative expression but also helped children deepen their understanding of healthy and halal food. After the practice, the children were asked to display their work in class, fostering a sense of pride. This impacted children who had gained experience in contributing to a shared understanding of the importance of choosing healthy and halal foods for optimal growth and development, especially in the context of the post-COVID-19 pandemic.

After the researchers provided counselling on healthy and halal foods that contribute to children’s growth, the researchers conducted a post-test with the children to determine whether there was an increase or difference between the scores before and after receiving counselling. The post-test results can be observed in Table 2.
Table 2. Results of student knowledge after explanation (Post-test)

<table>
<thead>
<tr>
<th>Number</th>
<th>Score</th>
<th>Category</th>
<th>Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>≥92</td>
<td>Very High</td>
<td>3</td>
<td>6,00</td>
</tr>
<tr>
<td>2</td>
<td>80-91</td>
<td>High</td>
<td>20</td>
<td>40,00</td>
</tr>
<tr>
<td>3</td>
<td>68-79</td>
<td>Medium</td>
<td>16</td>
<td>32,00</td>
</tr>
<tr>
<td>4</td>
<td>56-67</td>
<td>Low</td>
<td>8</td>
<td>16,00</td>
</tr>
<tr>
<td>5</td>
<td>≤55</td>
<td>Very Low</td>
<td>3</td>
<td>6,00</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>

From Table 2 of the post-test results, it was observed that three respondents were categorized in the very high category, with a percentage of 6%. Twenty respondents were classified in the high category, with a percentage of 40%. Sixteen respondents were categorized in the medium category, with a percentage of 32%. Eight respondents were categorized as low, with a percentage of 16%, while three respondents were classified as very low, with a percentage of 6%.

The post-test questions were identical to the pre-test questions. It is known that the post-test values were higher than the pre-test, increasing from an average of 50 to 74. This signifies that student became more aware of healthy and halal food and its contribution to the growth and development of children after the pandemic. Students also gained awareness of the characteristics of unhealthy and halal foods that can potentially interfere with growth and development. Here are the results of the pre-test and post-test of students’ knowledge about healthy and halal foods and their contribution to the growth and development of children.

Table 3. Results of student knowledge between before and after explanation

<table>
<thead>
<tr>
<th>Type Test</th>
<th>Number of Respondent</th>
<th>Average</th>
<th>Knowledge Level Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>35</td>
<td>50</td>
<td>Medium</td>
</tr>
<tr>
<td>Post-test</td>
<td>35</td>
<td>74</td>
<td>Medium</td>
</tr>
</tbody>
</table>

From these results, it can be seen that counselling improved children's knowledge about healthy and halal foods, contributing to the growth and development of children. Additionally, students acquired a new perspective on the importance of healthy and halal foods for meeting their nutritional needs at school. This was crucial, as school students generally engaged in high levels of activities such as learning and playing, necessitating a need for balanced nutrition (Santi & Candra, 2022).

Increasing children's knowledge is an excellent starting condition for accustoming to a healthy life in children (Sumarni et al., 2020). Healthy food consumption in schools is one indicator of clean and healthy living behaviour in schools. Kemenkes RI (2011) stated indicators of clean and healthy behaviour at school, namely washing hands with running water, consuming healthy snacks in school canteens, using clean and healthy latrines, eradicating mosquito larvae, not smoking at school, weighing and measuring height every six months, and throwing garbage in place. Healthy food that indicates clean and healthy behaviour at school has implications for children's knowledge of the dangers of unhealthy snacks, which is an important key in maintaining children's health.
Healthy and halal food consumed can be vegetables and fruits that are low in calories (Hartmann et al., 2013).

However, the results obtained in the post-test did not reach the optimal score as they were still in the medium category. Several factors could cause this. First, the researchers performed only one treatment. This singular treatment might not have been sufficient to stimulate an optimal increase from pre-test to post-test scores. Improving knowledge typically requires time and repeated treatments to ensure that children thoroughly comprehend the material the researcher presents. Therefore, a single treatment may not be adequate to achieve an optimal increase from the pre-test value to the post-test.

Another factor that researchers found was children’s diverse character and learning styles. In providing this treatment, researchers only focused on lectures and practice. Both treatments were only suitable for children who had audio and kinesthetic learning styles, while children who had visual learning styles tended not to be able to receive the material presented by researchers. Therefore, variations were needed to meet the needs of children in receiving the material presented by researchers.

In addition, the increase in values on the post-test makes it possible for children to become aware of the need for healthy and halal food to grow and develop during the post-pandemic. However, parents and teachers still have challenges, such as changing children’s preferences in eating food, especially snacks around the school and home environment, because they still find unhealthy and non-halal foods in terms of origin and processing. Children tend to choose foods that look attractive and delicious to them without being able to determine the health and Halal of these foods.

The results of these findings have fulfilled the objectives of this study. Researchers provided education to children about healthy and halal food, emphasizing the urgency and opportunities, as well as the challenges and obstacles in children’s growth and development. Additionally, researchers offered practical experiences to children regarding healthy and halal food. Pre-tests and post-tests were administered to the children, and the results were analyzed to determine the increase in children’s knowledge after counselling about healthy and halal food. The results obtained in this study can theoretically serve as a foundation for health policies and nutrition programs that focus on fulfilling child nutrition.

In practical terms, the results of this study can be a guideline for parents, teachers, and healthcare providers in providing food that meets nutritional standards while paying attention to halal. This research can also be a practical guide for the food industry in designing products that are in accordance with the nutritional needs of children and can be consumed in a manner consistent with religious or halal requirements.

CONCLUSIONS

The conclusion of this research is: 1) children love to hear lectures evidenced by the results of observations during the activities of children listening to explanations delivered by researchers 2) Children enthusiastically work on questions and answers evidenced by children who are eager to answer questions from researchers 3) children enthusiastically working on practical activities evidenced by the results of observations that they enthusiastically seek and paste pictures and words. In addition, it can be seen from the higher post-test scores than the pre-test, which is from an average of 50 to 74, it can be said that research has succeeded in increasing children's knowledge of knowledge about healthy and halal food, urgency, and the opportunities, challenges and impacts of halal food contributing to Child Development.
LIMITATION & FURTHER RESEARCH

The limitation of this study is in the form of the use of research and design methods that are still simple; therefore, the researchers suggest that the following study can use research and design methods that are more complex and interactive in order to produce diverse findings. The next researcher can use the quasi-experimental method by presenting experimental and control classes that provide many treatments to children. The other limitation is also the limited number of subjects. The researcher also suggested to other researchers in the future to determine more diverse research subjects, both in number and characteristics, to enrich the findings. The characteristics of children that researchers suggest to improve this topic are children who can be invited to discuss or start thinking scientifically, such as children aged 11-12 years or students in Grade 5 or Grade 6 of elementary school.

REFERENCES


