



Making Processed White Bread Products into Healthy Snacks in the Tahfidzul Qur'an Amanah Middle School Environment

Siti Khairani^{*1}, Siti Nurlani Harahap¹, Heri Yusuf Simbolon¹, Candra Sigalingging¹, Demonius Sarumaha², Ruhilah Lubis¹,

¹Agricultural Cultivation Study Program, Universitas Nahdlatul Ulama Sumatera Utara, Medan, Indonesia

²Informatics Engineering, Universitas Nahdlatul Ulama Sumatera Utara, Medan, Indonesia

*Corresponding Author: khairani.sk@gmail.com

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ABSTRACT

Snacks play an important role in providing energy and other nutritional intake for school-aged children. Children's consumption of snacks is expected to contribute energy and other nutrients that are useful for children's growth. Bread is a food that is popular with people because it has a simple shape, so it is often chosen as a breakfast food before starting daily activities or as a snack to fill the stomach before the actual meal time arrives. Community service activities are carried out at Tahfidzul Qur'an Amanah Middle School in Sei Mencirim, Deli Serdang Regency. The aim is to increase students' understanding of the importance of healthy snacks and the potential dangers of additives contained in processed foods. This activity was carried out on December 7, 2023, including a pre-test to assess students' knowledge about healthy snacks, a comprehensive educational session about the importance of a healthy diet and the dangers of additives, as well as a post-test to evaluate the effectiveness of the intervention. Apart from that, practical demonstrations were carried out on how to turn bread into healthier snacks, especially chocolate rolls. The results of the pre-test and post-test show a significant increase in students' understanding of healthy snacks. The success of this activity shows the potential of similar interventions in promoting health education and better eating habits among school students.

Keyword: Socialization, Healthy Snacks, Processed Bread, PKM, Intervention

1. Introduction

Bread is a food that is popular with the public because it has a simple shape, so it is often chosen as a breakfast food before starting daily activities or as a snack to fill the stomach before the actual meal time arrives. Bread is a food product made from wheat flour fermented with yeast or other rising ingredients, which is then processed by baking. Bread is divided into two types, namely sweet bread and white bread. Sweet bread is bread that has a prominent sweet taste, a soft texture, and can generally be added with various kinds of fillings [1]. White bread is bread made from high-protein wheat flour, square in shape, white, and brown on the edges. White bread is one of the processed wheat flour foods and is widely consumed by the public. The price is affordable, so lower, middle, and upper-class people can easily enjoy fresh bread. This is proven by the increasing number of PIRT bakery industries and medium industries. The main raw material for making bread is wheat flour, and the basic raw material for making wheat flour is wheat. So far, Indonesia is still importing wheat, and wheat imports continue to increase [2].

The production of white bread in Indonesia is increasing every year. This plain bread is a flour-based food product that undergoes baking in the production process. In general, making white bread uses flour as a base ingredient, which contains gluten. Gluten plays an important role in making white bread because it is viscoelastic, that is, it can expand (extensible) and is elastic so that when stretched, it does not break and can form a thin layer that is able to hold gas or air. This property is important in making bread that requires a high

rise. Gluten is a reserve protein in wheat that consists of protein complexes such as gliadin and glutenin. However, gliadin can cause health problems, especially for people with celiac disease and people with autism. Therefore, it is important to strive for substitution or replacement of flour containing gluten with non-gluten flour [3].

Snacks play an important role in providing energy and other nutritional intake for school-aged children. School children's consumption of snacks needs to be considered due to children's high activity. Children's consumption of snacks is expected to contribute energy and other nutrients that are useful for children's growth [4]. Food availability and security are basic human rights. Currently, this problem is a world concern because hundreds of millions of people are reported to be suffering from disease due to food poisoning [5]. One group of people who often experience problems due to food poisoning are schoolchildren. School children's snacks are at risk of biological or chemical contamination, which can harm health in both the short and long term. Based on data from Extraordinary Events (KLB) on school snacks in 2004–2006, elementary school (SD) students most often experienced food poisoning. In 2004, BPOM survey showed that 60% of school snacks did not meet quality and safety standards. In 2007, BPOM survey also proved that 45% of school snacks were dangerous snacks [6].

School-aged children are in a period of growth and development, so they need nutrition or food to support their growth process. This is what causes the desire to consume snacks in the school environment because most of the time they are at school. However, snacks or food in the school environment sometimes do not guarantee the cleanliness and nutritional content of these snacks. Diseases that occur as a result of unhealthy snacking behavior can result in health problems such as cancer, poisoning, foodborne illnesses, and disruption of growth and development in the health of school-age children. Results of observations and interviews conducted by [7]. It was found that there were still many students whose behavior towards healthy snacks was low, and there were many children who had unhealthy snacks [7].

Unhealthy snacks that contain dangerous substances, if consumed continuously, will accumulate in the body and become carcinogenic substances, which will cause dangerous diseases and disrupt overall health. Safe food is the most important factor in the life cycle of improving health. The presence of substances needed to support growth and development is needed to achieve a healthy body. Therefore, a good food supply is needed to increase the quality and quantity that support life. In RI Law No. 7 of 1996 concerning food, food safety is defined as the conditions and efforts made to avoid food from possible biological, chemical, and other contamination that can disturb harm, and endanger health [8].

Snacks and children are two things that cannot be separated. Generally, children will buy snacks, especially when they are on break at school, and they don't care about the dangers they will experience when consuming unhealthy snacks. It is not uncommon to find snacks sold around schools containing additional substances such as preservatives and food coloring. The purposes of using these substances include coloring (to add visual appeal), thickening (improving texture), flavoring (strengthening taste), and sweetening (enhancing flavor) [9].

The presence of excess additives in food snacks can cause both mild and severe poisoning. The most frequently reported cases of poisoning in Indonesia from 2004–2014 were poisoning due to snacks and poisoning due to processed food. In 2014, the Food and Drug Supervisory Agency conducted tests on snack foods, and the results were: Of the 13,536 samples, 11,871 (87.69%) met the requirements, and 1,665 (12.31%) did not qualify [10].

Snack habits in children are closely related to the economy and the level of knowledge of children and parents regarding choosing healthy and nutritious food snacks. Based on the description above, it is considered important to carry out community service activities for Tahfidzul Qur'an Amanah Sei Mencirim Deli Serdang Middle School students to increase their knowledge about healthy and nutritious snacks. The aim of this activity is to increase knowledge about the importance of healthy and nutritious snacks; increase student awareness regarding the dangers of additives contained in food snacks; increasing students' knowledge about choosing healthy snacks; increasing students' knowledge about the dangers of unhealthy snacks; increase students' awareness of the importance of consuming a healthy diet.

The benefit of this activity for students is that it can provide knowledge so that later students will avoid the dangers of unhealthy snacks. It is hoped that these students will become agents of change in terms of consuming healthy and nutritious snacks within their families and among other community members. So, this counseling can also contribute to supporting the achievement of improving the level of public health. Benefits of school activities are a form of guidance for junior high school students in improving nutritional status and community health status. The benefit for the relevant agencies is increasing the presence of lecturers and students at Nahdlatul Ulama University, North Sumatra, among the community, especially for Tahfidzul Qur'an Amanah Middle School students as counseling participants.

2. Method

Community service activities are carried out by several lecturers from various fields of science and involve students. Community service activities are carried out at the Tahfidzul Qur'an Amanah Middle School located in the Sei Mencirim Area of Deli Serdang Regency. The activity begins by providing a letter of application to carry out community service activities at the school. After being approved by the school for the time to carry out the activities, the team immediately goes to the school to carry out community service activities according to the agreed-upon time. After arriving at school, the community service team gave a welcoming speech by the leader of the community service team, followed by giving pre-test questions about healthy snacks totaling 5 questions to students at Tahfidzul Qur'an Amanah Middle School. After that, the lecturer gave guidance or material to students about healthy snacks and processed bread snacks. Then, after providing the material, it was continued with giving post-test questions again to find out students' feedback on healthy snacks made from bread. After carrying out the post-test, the activity continued with a demonstration of simple processed bread dishes, namely making chocolate roll bread, while giving a quiz about making processed chocolate roll bread products. After the demonstration activity for making processed chocolate roll bread products was completed, it was continued with a group photo activity and closing.

Community service activities consist of three stages: the initial stage, the implementation stage, and the closing stage. The initial stage consists of initial coordination with the principal of Tahfidzul Qur'an Amanah Middle School for permission to carry out community service activities at the school. During implementation, it includes: (1). giving a pretest to students about making processed white bread products into healthy snacks. (2). Providing outreach about healthy snacks and processed bread products into healthy snacks. (3). Giving post-tests to students about making processed white bread products into healthy snacks. (4). Demonstration of making processed white bread products into healthy snacks. (5). Group photos and distribution of processed white bread products to school students. The reporting stage includes preparing documents in the form of reports on the results of community service activities carried out at Tahfidzul Qur'an Amanah Middle School, Sei Mencirim, and Deli Serdang Regency.

3. Results And Discussion

Implementation of Community Service (PKM) activities at Tahfidzul Qur'an Amanah with the activity theme "Making Processed White Bread Products into Healthy Snacks in the Tahfidzul Qur'an Amanah Middle School Environment," which took place on Thursday, December 7, 2023, from 11.00 WIB to 14.00 WIB, runs smoothly. The participants in the PKM activity program were 29 junior high school students. This PKM activity also involved several UNUSU students who actively participated in the success of the PKM activity program.

The organizers of this community service program are several lecturers at Nahdlatul Ulama University, North Sumatra (UNUSU), who consist of various scientific disciplines and PKM, which is one of the Tri Dharma of Higher Education. Through this training, it is hoped that Tahfidzul Qur'an Amanah Middle School students can increase their knowledge about the importance of healthy and nutritious snacks, and it is also hoped that they will become agents of change in terms of the consumption of healthy and nutritious snacks in their families and other community members. The Tahfidzul Qur'an Amanah students were very enthusiastic during the activity, as seen from their active participation in practicing making processed white bread products into healthy snacks and actively asking and answering every question asked by the lecturers implementing the activity. The activity began with the opening of the event, with welcoming remarks from the chair of the PKM. Then it continues with the initial stage of conveying information to students regarding making processed white bread products into healthy snacks and introducing the tools and materials used.

3.1 Steps for Making Processed Choco Roll Products

Steps for making processed bread products include: (1). The white bread is flattened or ground one by one using a roller or grinder, then smeared with chocolate milk and sprinkled with cheese on top. (2). After that, the white bread is rolled and dipped in a mixture of eggs and ultra milk. (3). Heat the Teflon on a gas stove, then melt the margarine or butter, and after that, the white bread that has been rolled and dipped in egg and milk is ready to be fried. (4). When the bread is browned, we are ready to remove it. (5). Then arrange the chocolate rolls on a plate and decorate according to taste. (6). Choco rolls are ready to be enjoyed.



Figure 1. Making Choco Rolls



Figure 2. Choco Rolls that have been arranged

Next, there was a question and answer session with the PKM participants directly, and prizes were given to participants who could answer questions asked by the PKM implementing lecturer. Then the activity closed with a photo session together and giving processed white bread products as healthy snacks to each participant in the PKM activity. The indicator of the success of this service activity is the understanding of the PKM activity participants before and after the activity is carried out. Understanding can be seen when filling out the questionnaire given before and after the training is carried out. This can be used as an indication that service activities receive a good response from PKM activity participants.

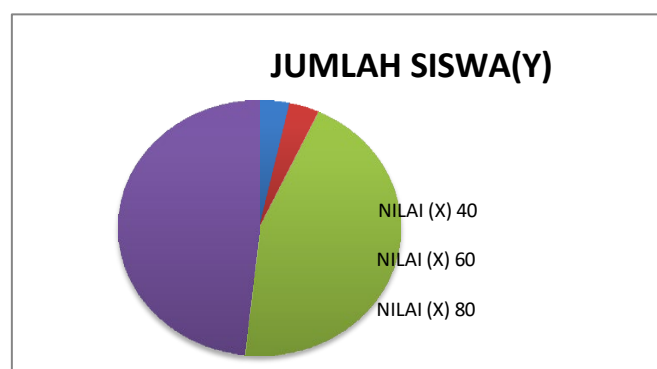


Figure 3. Diagram of Participants' Level of Understanding during Pretest

After the PKM activity was held, it had a significant impact on increasing participants' understanding of healthy snacks. As for evaluating participants' understanding after the socialization activity, they were asked the same questions at the end of the activity (post-test). Post test score data can be seen in Table 1 below:

Table 1. Healthy Snacks Post-Test Score Data

	Score(X)	
	80	100
The number of students (Y)	9	20

Based on table 1, it can be seen that participants' understanding of healthy snacks has increased, as seen from the post-test results. Of all the questions given, 9 people got a score of 80, while 20 people got a score of 100. This shows that almost all participants understand about healthy snacks and know the process of making white bread into healthy snacks. This increase in understanding indicates the success of the community service activities carried out. The students' enthusiasm for participating in this PKM activity was very high, and they were very enthusiastic about actively answering every question asked and participating in the process of making white bread into healthy snacks. This can be seen in the pictures below:



Figure 4. Students' activity in the process of making chocolate rolls

Through this training, it is hoped that the activity participants, namely Tahfidzul Qur'an Amanah Middle School students, will know how to choose healthy and nutritious snacks, know how to make white bread into healthy snacks, and will become agents of change in terms of consuming healthy and nutritious snacks with in their families and other communities.

4. Conclusion

The implementation of community service carried out by the team in the form of making processed white bread products into healthy snacks in the Tahfidzul Qur'an Amanah Middle School environment went smoothly; this was in separable from the enthusiasm of the students and the warm welcome from the school. So that in its implementation it gets good feedback from the school. This community service program had a significant impact on students' understanding of healthy snacks. This can be seen from the pre-test and post-test that have been carried out. Before carrying out the PKM activity, the participants' understanding of healthy snacks was quite good, although there were some who still did not understand it. Of all the questions given, 1 person got a score of 40, 1 person got a score of 60, 13 people got a score of 80, and 14 people got a score of 100. This shows that not all participants understand healthy snacks. Meanwhile, after the PKM activity was carried out, it could be seen that participants' understanding of healthy snacks had increased, as seen from the post-test results. Of all the questions given, 9 people got a score of 80, while 20 people got a score of 100. This shows that almost all participants understand healthy snacks.

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