



Safe, Healthy, And Quality Food And Snack Education At State Elementary School 011 Sekupang Batam

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Abstract

It is important to educate about safe, healthy, and quality food and snacks in the school environment, especially for the generation between the ages of 7-12 years, who certainly have a tendency to consume junk food, both snacks in the school environment (canteen) and street food that is widespread in the city of Batam. Elementary school-aged children are a group that is very vulnerable to various health problems related to food and snack consumption. During the growth period, children tend to like snacks that are attractive in color, taste, and shape without paying attention to aspects of cleanliness, safety, and nutritional content. The purpose and message to be conveyed in this Community Service activity include that the role of education is not only to provide intellectual education, but can also pay attention to the health of school students, including the food they consume. Through this activity, teachers and students can share knowledge about food safety, food hygiene, and how to choose and process healthy snacks. This educational activity is expected to be able to shape healthier consumption behavior among elementary school students and encourage the school environment to pay more attention to food safety.

Keywords: education, food, snacks, healthy, school

INTRODUCTION

The implementation of the Community Service Program through socialization activities can provide alternative choices for interactive learning activities through sharing methods on problems that occur in the field, namely regarding safe food processing from hazardous materials and safe and healthy snacks. Based on Law No. 18 of 2012, food is the most important basic human need and its fulfillment is part of human rights guaranteed in the 1945 Constitution, and the state is obliged to realize the fulfillment of safe, quality, and nutritious food consumption. There have been many programs by the central government, in this case BPOM, and local governments in fulfilling healthy food that is free from hazardous materials in ensuring food safety and is suitable for consumption.

To ensure healthy food quality, the safety of the food or ingredients consumed is also an absolute requirement that must be met. Food safety is an absolute requirement, meaning that the food consumed by the public must be safe, meaning free from chemical, microbiological, and physical contamination. (Lukman et al., 2015) If connected to the world of education, it is important to conduct socialization and education about safe, healthy and quality food and snacks in the





school environment, especially for the generation around the age of 7-12 years who have a tendency to consume random snacks / food or junk food in the school environment or street food that is rampant in the city of Batam, especially targeting canteens in the school environment that provide canteen facilities for special snacks where students have a variety of choices during break time. In reality, packaged food and drinks dominate the offerings in school canteens, which requires more attention to the safety and health aspects.

Elementary school children are a vulnerable age group to various health risks related to food and snack consumption. During their growth period, children tend to prefer foods that are attractive in color, taste, and shape, without considering hygiene, safety, and nutritional content. Various studies have shown that many snacks sold in school environments do not meet food safety standards. Common findings include the use of textile dyes, excessive preservatives, and unhygienic processing. A laboratory study of eight snack samples from elementary schools in Makassar City found the presence of synthetic dyes, sweeteners, or preservatives in the snacks (Ad et al., 2016).

Food availability and safety are perceived as basic human rights and are currently a global concern, given reports that hundreds of millions of individuals suffer from illnesses caused by food poisoning (Hamida & Zulaekah, 2012). One group of people vulnerable to the effects of food poisoning are schoolchildren. Snacks consumed by schoolchildren are at risk of both biological and chemical contamination, which can harm their health in the short and long term (Rakhmawati et al., 2017).

The message conveyed in this community service activity is that the role of educators extends beyond providing intellectual education to the surrounding environment, including student health, including the food they consume. Suboptimal nutritional intake is correlated with decreased learning abilities in children. Research suggests that overall child nutrition is crucial for cognitive development; malnutrition can hinder brain development, thus affecting learning abilities (Impact et al., 2023).

As a vocational education institution specializing in tourism and culinary arts, Batam Tourism Polytechnic has a moral and social responsibility to contribute to improving the quality of life of the community through community service activities.





Through these activities, teachers and students can share knowledge about healthy eating patterns, food hygiene, and how to select and prepare healthy snacks. This educational activity is expected to foster healthier consumption behaviors among elementary school students and encourage the school environment to pay greater attention to food safety. This one-day activity was held on Friday, November 14, 2025, from 9:00-11:00 a.m. WIB. This PKM activity was carried out by a three-person community service team from Batam Tourism Polytechnic with assistance and support from the Batam Tourism Polytechnic's Community Service Center (PUSLITABMAS).

The material covered healthy food, healthy snacks, and healthy and nutritious food management. Students also received tips on how to select and sort healthy and nutritious snacks.

The focus of activities related to healthy snacks for elementary school students is increasingly directed at increasing children's knowledge, awareness, and ability to choose safe and nutritious foods. By providing examples of various types of healthy snacks, introducing various forms and nutritional content, and explaining the impacts of unhealthy snacks, it is hoped that students will have a wider range of appropriate choices and develop better eating habits from an early age. Furthermore, this education also aims to foster students' independence and awareness of their own health. An understanding of healthy eating patterns at elementary school age is considered an important foundation for improving quality of life and preventing the risk of future disease.

Through this community service activity, students are expected to gain basic knowledge about various healthy snacks, how to recognize the nutritional content of foods, and the ability to distinguish between safe and risky snacks. Using an engaging and interactive approach, children are also encouraged to come up with creative ideas, such as making simple healthy snacks, so that healthy eating habits can develop naturally in their daily lives.

Prior to the community service activity, the team communicated and coordinated with the elementary school, which serves as the program partner. From discussions with teachers and principals, several priority topics were identified that are important to convey to students based on various considerations, including:





1. Improving Consumption Quality: Education helps students understand the importance of choosing nutritious snacks, such as fruit, milk, and low-sugar foods, to support growth and learning activities.
2. Efficiency and Ease of Access to Healthy Snacks: Students are introduced to how to choose healthy foods that are easily found in the school environment and at home, so they can make quick and informed decisions when purchasing snacks.
3. Children's Needs and Habits: Children's tastes are constantly evolving, so education is needed to tailor information to their interests without neglecting health aspects.
4. Sustainability of Healthy Habits: Education about healthy snacks is designed to foster good long-term eating patterns while reducing the consumption of packaged foods high in potentially harmful additives.
5. Health and Risk Prevention: Through simple and easy-to-understand nutritional information, students are provided with an understanding of the impact of consuming foods high in sugar, colorings, or preservatives, as well as the benefits of choosing snacks that support optimal growth and development.

COMMUNITY OVERVIEW

SD Negeri 011 Sekupang Batam is one of the elementary schools with state status located in the Sekupang District, Batam City, Riau Islands. SD Negeri 011 Sekupang was established on April 23, 2008 with the Establishment Decree Number Kpts.178 / HKIV / 2008 which is under the auspices of the Ministry of Education and Culture of the Republic of Indonesia. Currently, SD Negeri 011 Sekupang uses the government's learning curriculum guide, namely SD Merdeka. In learning activities, the school, which has approximately 704 students, is guided by approximately 28 competent teachers in their fields. Currently, SD Negeri 011 Sekupang is headed by the Principal named, Mimi Herawati, S.Pd., M.M. While the school operator in charge is Arofi Apriyanti Alhar.





Front Yard of SD Negeri 011 Sekupang Batam, November 2025.

SD Negeri 011 Sekupang Batam has been accredited B with Accreditation Decree Number 1339 / BAN-SM / SK / 2019 on November 30, 2019. SD Negeri 011 Sekupang is a formal educational institution under the auspices of the Batam City Regional Government located on Jl. Gajah Mada, Taman Sari Hijau Housing Complex, Tiban Baru, Sekupang District, Batam City, Riau Islands Province. This school has a land area of 3,059 m².



One of the main buildings of SD Negeri 011 Batam, 2025.

Currently, SD Negeri 011 Sekupang plays a vital and strategic role in providing basic education in Batam City, particularly for the communities around Tiban Baru and its surrounding areas. With adequate facilities, a large student





capacity, and competent teaching staff, the school continuously strives to improve the quality of education to produce graduates who excel, have character, and are ready to face the changing times. Future challenges such as improving supporting facilities, adjusting the curriculum, and strengthening literacy and numeracy programs present opportunities for the school to continue developing and enhancing the quality of its educational services.

METHODOLOGY

This Community Service Program provides additional knowledge in healthy food management, healthy snacks, and healthy and nutritious food/snack selection. Furthermore, the expected benefit of this community service activity is that it will provide elementary school students with an understanding of healthy and nutritious food selection. The speakers and resource persons for this activity are lecturers from the Culinary Management Study Program.



Implementation of Community Service Socialization, November 2025

The community service activities began with the delivery of material through a face-to-face session, which included presentations and interactive discussions. The material was presented directly by the presenter, explaining the concepts of healthy snacks, safe food, and providing examples of food contamination incidents that frequently occur in the school environment. This face-to-face approach adheres to the principles of adult learning (Vutha, 2024) which emphasizes that participants—including teachers and food handlers—will more easily understand the material if it is delivered directly, is relevant to the task, and provides an opportunity to ask questions.





The instructors and resource persons in this activity are lecturers from the Culinary Management Study Program.

Based on the evaluation of the implementation and results of the activities, supporting and inhibiting factors in implementing this community service program can be identified. Broadly speaking, these supporting and inhibiting factors are as follows:

1. Supporting Factors

- a. High enthusiasm and interest from teachers and other educational staff, coupled with a commitment of time and active involvement throughout the activity. The addition of additional participants from food handlers, such as those making, selling, and serving snacks in the canteen, strengthened the impact of the activity.
- b. Strong support from the school, both in the form of technical assistance and readiness to continue in-depth learning activities related to food safety and healthy snacks.
- c. The high level of learning from food handlers and the enthusiasm of students during the educational process made the activity more interactive and easier to implement in practice.

2. Inhibiting Factors

- a. Time constraints prevented the comprehensive delivery of material related to safe and healthy food.
- b. Varying levels of student understanding, with some students requiring more time to grasp the material, resulting in less than optimal delivery effectiveness.

Furthermore, based on data from SD Negeri 011 Sekupang Batam, the issue of cafeteria cleanliness and sanitation remains a significant issue. Inadequate infrastructure and suboptimal food and beverage quality control highlight the need for ongoing education and outreach to students, teachers, and especially food handlers within the school environment.





Teachers from SDN 011 and community service lecturer documenting activities, 2025

SUTAINABLE RESULT AND POTENSIAL

Community service is one of the Tri Dharma of Higher Education obligations, alongside teaching and research. This community service activity aims to provide teachers, students, and food handlers in school cafeterias with understanding and skills related to education and socialization of healthy food and snacks through interactive and engaging learning methods. This activity took place on Friday, November 14, 2025, from 9:00 AM to 11:00 AM WIB. The Community Service Program (PKM) was conducted by a three-person team from the Culinary Management study program of the Batam Tourism Polytechnic, with support from the Community Service Center (PUSLITABMAS) of the Batam Tourism Polytechnic.

The initial target number of students was 80, but after the school's participation, this number increased to approximately 112. Therefore, the target number of participants was 100%. These figures indicate that the PKM activity was a success, based on the number of participants. Overall, the target achievement was good. The initial goal of this training was to provide students with additional knowledge about healthy, nutritious, and safe food. However, due to the outdoor location and the sweltering weather, not all material could be presented in detail. The achievement of the material targets in this PKM activity was quite good, as the mentoring material was fully presented.





The students' understanding of the material was slightly lacking, possibly due to their early stages of understanding the context. This was also due to the short timeframe and the varying abilities of the students.

CONCLUSION

The healthy and nutritious food education program for elementary school students, conducted through this community service program, has been quite successful in providing students with understanding and knowledge about healthy and nutritious foods. Students also demonstrated enthusiasm and a desire to learn about and choose healthy and nutritious foods. However, not all of the knowledge was conveyed to the students because their mindsets were still too immature to understand the context of the material.

This educational program was quite successful in improving students' understanding of the characteristics of safe, healthy, and high-quality food and snacks, as well as the risks of consuming unhygienic foods. Furthermore, students were able to recognize the dangers of risky food ingredients, such as textile dyes, borax, formaldehyde, used cooking oil, unpackaged snacks, and foods produced without hygiene standards. This was indicated by a positive change in attitudes among some students, leading to greater snack selection, based on pre- and post-test results that showed an increase in knowledge scores.

SUGGESTION

1. Further mentoring is needed for students and teachers to ensure that the knowledge gained is not only short-term but also applied to daily habits.
2. Collaboration with school canteens is needed to implement simple food safety standards, such as hygienic storage of ingredients, use of clean water, and the non-reuse of oil.
3. Periodic evaluation through post-activity monitoring (1–3 months) is needed to determine the long-term effectiveness of changes in student behavior regarding snack choices.

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