



## Description of The Level of Knowledge About Healthy Snack Foods in State Elementary SDN 106172

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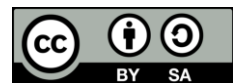
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### ABSTRACT

Healthy snacks are light meals or snacks that have good nutritional value and provide many benefits to health. Healthy snacks generally contain important nutrients such as vitamins, minerals, fiber, protein, and healthy fats. Therefore, snack foods are also a matter that needs attention from the public, as there are some snack foods that are unhygienic and pose a significant risk of contamination that can affect health. This is particularly important for elementary school children who are very vulnerable to this issue because they do not yet understand how to choose healthy snacks, which can have negative effects on their own health (Suci, 2009). This counseling aims to assess the knowledge of students at SD Negeri 106172 Tuntungan regarding healthy snacks and the benefits that can be obtained from consuming such foods. The method used in this research is a quantitative descriptive design method that involves three stages: pre-test, providing material through counseling and role-playing with the students, and post-test. The total number of respondents in this study was 30 people aged between 10-12 years old. The results of this study show that the level of knowledge about healthy snacks for students at SD Negeri 106172 Tuntungan falls into the category of "sufficient." However, after being provided with material about healthy snacks, their knowledge improved and reached the "good" category. The knowledge level of students at SD Negeri 106172 Tuntungan regarding healthy snacks during the pre-test was 74.6%, and after providing the material, conducting question and answer sessions, and administering the post-test, the knowledge level increased from 74.6% to 90.6%.

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## 1. INTRODUCTION

Street food is one of the issues that concerns the public, as some snacks are unhealthy and highly susceptible to contamination, which can affect health. Elementary school children are particularly vulnerable to this problem because they do not know how to choose healthy snacks, which can have negative impacts on their own health (Suci, 2009). School children often skip breakfast and buy snacks at school. Children buy snacks based on their preferences, without considering the ingredients in them (Judarwanto, 2008). Children are among the high-risk groups for contracting diseases from food and drinks (Antara, 2004). Children often fall victim to foodborne illnesses due to consuming snacks they buy at school canteens or from street vendors (WHO, 2006). The incidence of food poisoning among school children increased in 2004. The majority of outbreaks occurred in elementary schools, with 19 cases out of a total of 575 (Executive Secretary of the Food Intelligence Network, 2005). Many snacks do not meet health standards, thus endangering children's health (Khomsan, 2003).

School food resilience for the poor (PJAS) remains a major concern. PJAS surveillance data from the Indonesian National Agency of Drug and Food Control, covering 26 Regional Offices throughout Indonesia in 2007, showed that 45% of PJAS did not comply due to containing hazardous chemicals such as formaldehyde and borax, food additives containing rhodamine BTP, such as cyclamate and benzoate, exceeding the safe limits, and microbial contamination. According to a survey conducted at SD Negeri 106172 Tuntungan, many snack vendors were found outside the school gate and next to the school, selling various snacks such as cilok (meatballs), colorful ice, fried meatballs, flavored crispy snacks with MSG, wafers, and others. Based on the survey, it can be seen that many students buy snacks both outside the gate and at the stalls next to the school. Most of the snacks sold only contain carbohydrates and salt, which only provide a quick feeling of fullness to the children. This can disrupt their appetite, resulting in reduced food consumption and lower energy intake from snacks compared to the body's energy needs. The presence of street vendors outside the school gate and along the roadside leads to unhygienic snacks being sold, as they can be contaminated by dirt such as dust. The sauce used by the vendors has a thin texture and slightly vibrant color. In addition, the vendors sell powdered drinks with various flavors that contain artificial sweeteners, which can be harmful to the body when consumed continuously, such as aspartame and cyclamate. Based on the aforementioned background, it is necessary to examine the level of knowledge and behavior of elementary school children regarding the selection of snacks related to the nutritional status of children in SD Negeri 106172 Tuntungan.

## 2. RESEARCH METHOD

This study uses a quantitative method, namely quasi experiment. The quasi-experimental method is a research method that aims to explain the causal relationship (causality) between one variable and another (variable X and variable Y) (Sandu Siyoto, 2015). The research design used in this study was a one group pretest - posttest design, which involved three stages: pre-test, providing material with counseling along with role playing with students, and finally giving a post-test. This research was conducted on Wednesday, March 20 2023, at SD Negeri 10172 Tuntungan, which is located on Jalan Kutalimbaru, Tuntungan I Village, North Sumatra. The number of respondents in this study were 30 people with an age range between 10-12 years. The first stage was the distribution of pre-test questions to the respondents, then continued with the provision of counseling materials using the PowerPoint presentation method and role playing with the students. The final stage is the distribution of post-test questions to respondents to

evaluate the increase in adolescent knowledge after attending counseling. The counseling media contains material on the meaning of healthy snacks, the benefits of healthy snacks, the impact of consuming healthy snacks, how to choose healthy snacks, as well as examples of healthy snacks and unhealthy snacks.

### 3. RESULT AND ANALYSIS

The results of the study presented a univariate analysis including gender, age and level of knowledge. The characteristics of the respondents in this study were children. The age range of the respondents in this study was 10-12 years.

**Table 1 Data on Respondents' Gender and Age**

Variabel	N	%
Gender		
Man	15	50,0%
Woman	15	50,0%
<b>Total Number</b>	<b>30</b>	<b>100%</b>
Usia		
10 years	5	16,6
11 years	23	76,6
12 years	2	6,6
<b>Total</b>	<b>30</b>	<b>100%</b>

Based on Table 1, it shows that the gender distribution of the total respondents shows that the male sex is 50.0% as much as the female sex is 50.0%. The age distribution shows that respondents aged 10 years were 16.6%, 11 years old were 76.6%, and 12 years old were 6.6%.

**Table 2 Level of Knowledge of Children about Healthy Snacks**

Variabel	Pre-test		Post-test	
	Correct	Wrong	Correct	Wrong
Healthy food/snacks are foods that have nutrition and are not preservatives	23	7	27	3
Vitamins are good ingredients in healthy foods/snacks	24	6	28	2
Unhealthy food/snacks can cause disease	25	5	28	2
Vegetable Bakwan is an example of a healthy snack	20	10	28	2
Colorful powdered ice is an example of an unhealthy snack	20	10	25	5
<b>Total</b>	<b>74,6%</b>	<b>25,3%</b>	<b>90,6%</b>	<b>9,3%</b>

Based on Table 2 shows that when given pre-test questions, the children who

**Table 3 Children's Attitudes and Understanding of Healthy Foods/Snacks**

Variabel	Pre-test			Post-test		
	Yes	No	Don't know	Yes	No	Don't Know
Is it true that healthy snacks are cheese risol, vegetable bakwan, and lupis cake?	26	4	-	30	-	-
Is it true that unhealthy snacks are powdered ice and colorful candies?	22	6	2	29	1	-
Is it true that unhealthy snacks can make us healthy?	4	26	-	2	28	-
Is it true that healthy snacks can make us sick?	3	27	-	-	30	-
Is it true that in order for us to stay healthy we have to eat snacks with sauce?	2	26	2	1	28	1
Is it true that we have to choose healthy snacks to keep the body healthy?	26	-	4	29	-	1
<b>Total</b>	46,1%	49,4%	4,4%	50,5%	53,8%	1,1%

answered correctly were 74.6% and 25.3% were wrong. Then when answering the post-test, the children who answered correctly were 90.6% and 1.3% wrong.

Based on Table 3 shows that the attitude and understanding of students who know about healthy food/snacks when given the pretest results show that 46.1% of youth answered "Yes", 49.4% answered "No" and 4.4 answered "Don't Know" %. Then when answering the post-test questions, the children who answered "Yes" were 50.5%, answered "No" as much as 53.8% and answered "Don't Know" as much as 1.1%.

### **An overview of the level of knowledge of elementary school children regarding healthy food/snacks**

Description of the Level of Knowledge about Healthy Snacks for students of the Public Elementary School of SD Negeri 106172 Tuntungan fall into the sufficient category. However, after being given material about healthy snacks, their knowledge increased to a good category. The level of knowledge of Tuntungan 106172 Public Elementary School students regarding healthy snack foods when given a pre-test was 74.6%, after that they were given material and a question and answer session was then given a post-test. The level of knowledge is increasing from 74.6% to 90.6%. Attitude and understanding on Tables. 3 also stated that there was an increase when answering questions. When answering the pre-test, there were children who still misunderstood about choosing healthy snacks to keep their bodies healthy. Giving material turned out to be very influential in increasing knowledge about healthy snacks for elementary school children. Based on the results of the BPOM survey, it shows that 99% of school children buy snacks at school. The test results for School Children's Snack Food (PJAS) from 2009 to 2013 increased from 57.36% to 80.78% for food that met the requirements such as not containing hazardous materials, maintaining hygiene and being

free from heavy metal contamination. In 2013, a survey was carried out in 30 cities from 884 elementary schools and Madrasah Ibtidaiyah, out of a total of 5,566 results that did not meet the requirements, there were 1,730 or 31.08% (BPOM, 2013). According to the Ministry of Health of the Republic of Indonesia, snacks are food and drinks that can be consumed directly and can be purchased from food vendors, which are produced by these sellers or produced by other people, without further processing. So far, people often consume ingredients that can be categorized as Food Additives (BTP), which can be in the form of dyes (to add visual appeal), thickeners (to improve texture), flavorings (to enhance taste), sweeteners (to enhance taste).

BTP can be added to food during the processing period and ensured safety in its use (Indrati and Gardjito, 2014). To fulfill healthy and nutritious snack foods, through Government Regulation (PP) No. 19 of 2005 concerning National Education Standards (SNP) that every education unit is required to have facilities and infrastructure, including a canteen or school canteen.

#### 4. DISCUSSION

The results of research conducted by the Center for Physical Quality Development of the Ministry of National Education in 2007 concerning healthy schools out of 640 elementary schools in 20 provinces studied, 40% did not yet have a canteen and 60% of those who had a canteen 84.3% of the canteens had not met health requirements and around 35, 5% of unsafe school children's snacks (Depkes RI, 2011). The factors that influence the selection of snack foods are internal factors and external factors. Internal factors include knowledge in the form of knowledge of nutrition, perception, intelligence, emotion and motivation from outside. Knowledge of nutrition is the ability to choose healthy snacks which are a source of nutrients. Nutritional knowledge in a child has an influence on the selection of snack foods. A child's attitude is an important component that influences the choice of snacks. A child's positive attitude towards health may not have an impact on the child's behavior to be positive, but a negative attitude towards health will almost certainly have an impact on his behavior (Notoatmodjo, 2012).

##### **The benefits of school children consuming healthy snacks**

Healthy food is defined as food that contains various food ingredients so that it contains various nutrients. A balanced healthy diet that contains carbohydrates, proteins, fats, vitamins and minerals. Eating healthy food can protect the body from various non-communicable diseases such as heart disease, diabetes and cancer. A variety of healthy food choices, namely: vegetables such as broccoli, kale, fruits, meat and eggs, nuts and seeds, milk, fish and other seafood. A healthy diet is needed for optimal child development. The important thing here is that the child's diet will usually follow the eating behavior of other family members. For example, children who grow up in a family environment that likes sweet foods, these children will prefer sweet foods too. Likewise, if the eating patterns of their environment are used to healthy food, the child has a tendency to follow healthy eating patterns from their environment.

Therefore, through street food, children can get to know a variety of foods that are available so that it helps a child to form a variety of appetites, so that when he grows up he can enjoy a variety of foods (Khomsan, 2003). Meanwhile, according to Irianto, P (2007) in general, children prefer snacks in stalls and school canteens rather than food that is available at home. The benefits/advantages of children's snack habits are: (1) To meet energy needs (2) Introducing diversification (diversity) of food types (3) Increasing prestige among friends. In addition, it's sorry for the child's body in consuming healthy

snack foods, namely; (1) Avoid Obesity. Healthy snacks will not make children gain weight quickly. Healthy snacks do not contain excess sugar, salt and fat. Healthy snack food will have a positive impact, such as stable body weight and less susceptibility to disease. (2) Children will not have Digestive Disorders. Healthy snacks are of course in a hygienic place, so germs and bacteria don't stick easily. With this, children will not have digestive problems such as diarrhea, dysentery, and so on. (3) Helps as a booster when hungry. Snacks can regulate appetite. When you have consumed healthy snacks, large portions will not be excessive. Because of that, healthy snacks are the right choice as a booster when your stomach starts to feel hungry. (4) Children who have consumed healthy snacks far enough have a sense of calm and focus so that they can sharpen children's intelligence.

## 5. CONCLUSION

Giving material has a positive influence on increasing students' knowledge about healthy snacks at SD Negeri 106172 Tuntungan. This emphasizes the importance of education and education regarding healthy snack foods at the elementary education level in order to form better eating patterns and awareness of the importance of maintaining health. Food besides containing nutritional value is also a medium for the growth of microbes or germs. School children are a group of people who often experience food poisoning problems. Snacks consumed by school children have a risk of being contaminated by biological or chemical substances which can have a negative impact on health, both in the short and long term. Health experts suggest that snacks for children should contain balanced and good nutrition. This snack food has many risks. The role of schools, health professionals and parents is needed to educate children in recognizing the characteristics of unhealthy snack foods and the dangers of consuming unhealthy snack foods. It is hoped that this will help parents teach their children about the characteristics of unhealthy snacks so that children do not buy unhealthy snacks. In addition, parents can prepare provisions for their children so that the food that enters the children's body is guaranteed to be clean and healthy.

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