

# Differences Of Snack Consumption And Breakfast Consumption Of Elementary School Children Towards Drowsiness

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## Differences Of Snack Consumption And Breakfast Consumption Of Elementary School Children Towards Drowsiness In Sd Negeri 2 Kedungwaru Tulungagung

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### ABSTRACT

The optimal growth of school-age children depends on providing nutrition with good and right quality and quantity. The purpose of this study was to determine differences in consumption of breakfast and consumption of snacks for elementary school children to drowsiness in SD Negeri 2 Kedungwaru Tulungagung. In this study using observational research design with a cross-sectional approach. The population is all grade 3-5 students at SDN 2 Kedungwaru Tulungagung with a sample of 47 respondents stratified random sampling. Data were obtained from questionnaires and processed by independent T test statistic test. The results showed that the average breakfast group consumed breakfast 5 times a week, while the snack group consumed snacks 18 times a week, or 3 times a day. And the mean value of drowsiness in the breakfast group was 37.79. Whereas in the snack group the mean value of drowsiness is 49.74 from the maximum value. Statistical test results obtained P value 0.012 < a 0.05 then H0 is rejected which means that there is a difference in consumption of breakfast and consumption of snacks for elementary school children to drowsiness in SD Negeri 2 Kedungwaru Tulungagung. Consuming breakfast is more effective to maintain concentration and reduce drowsiness when learning compared to consuming jajanan food.

### BACKGROUND

School-age children are valuable investments because they are the next generation of the nation. The optimal growth of school-age children depends on providing nutrition with good and correct quality and quantity (Pudjiadi 2005). High children's activities require more stamina, which is supported by adequate and quality food and nutritional intake. Stamina of school-age children must remain fit while participating in extra-curricular

activities, the main means of nutrition is breakfast (Notoatmodjo, 2003).

But in reality parents usually face problems in giving breakfast to children before going to school. Problems with breakfast in children are usually caused by children having difficulty eating or not eating. If this is not immediately addressed, it can cause children to be malnourished so that it can interfere with growth, development, and also affect the child's learning process, especially in concentration and learning achievement of children. In

addition, school children generally often do not want to eat breakfast or breakfast for various reasons, for example not used to breakfast, fear of being late to school so they are in a hurry to go to school, or are lazy to eat and others.

Based on a preliminary study conducted by researchers on Saturday 24 February 2018 in Kedungwaru Elementary School 2, there were 53 students in grade 3 to grade 5. From the results of interviews with 5 guardians of the student class it is known that almost all students experience a decrease in learning value. This is indicated by the frequency of students yawning and drowsiness during class hours. Even some students have difficulty giving answers when given questions after the teacher explains. Sleepiness and Nutrition at school age begins with breakfast habits for each individual. The pattern of food intake in children has become a matter of much special concern because eating patterns at the beginning of life tend to remain until the future. Breakfast habits get a lot of attention in childhood and adolescence. Various studies have shown that elimination or consumption of inadequate breakfast can be a factor that affects the insufficiency of the body, because with a lack of nutritional intake, consumption is not fulfilled at other times. For the people breakfast is considered the most important in everyday life. Most parents consider breakfast as a prerequisite for success in the process of achieving learning achievement. The existence of research that provides the fact that breakfast does have a positive impact on someone both in concentration, cognitive ability, learning quality and academic performance (Soedibyo, S and Gunawan, H, 2009).

In increasing sleepiness can be achieved in various ways, one of which is breakfast or commonly called breakfast. Breakfast or breakfast has an important role for school-age children, namely to fulfill nutrition in the morning, where children leave for school and have very dense activities in school. If children are accustomed to breakfast, it will affect the intelligence of the brain, especially children's memory so that it can support children's learning achievement towards a better. Breakfast is the best energy supply for the brain in order to concentrate in school (Sumadi Suryabrata, 2010). In addition to breakfast or breakfast, school children cannot be separated from snacks at school. Snack food is an effort to meet energy needs because of high school activities (especially for children who do not eat breakfast), the introduction of various types of snack foods will foster a habit of diversifying food since childhood (Devi, 2012). Research (Ulya, 2003) found that the contribution of snack foods to daily consumption ranged from 10% - 20%, namely the energy from snack foods contributed 17.36% and macro nutrients such as protein 12.4%, 15.1% carbohydrates, and fat 21.1% for daily consumption

#### RESEARCH PURPOSES

To find out the difference in consumption of breakfast and consumption of snacks for elementary school children to drowsiness in SD Negeri 2 Kedungwaru Tulungagung.

#### RESEARCH METHODS

In this study using observational research design with a cross-sectional approach. The population is all grade 3-5 students at SDN 2 KedungwaruTulungagung with a

sample of 47 respondents stratified random sampling. Data were obtained from questionnaires and processed by independent T test statistic test

## RESULTS

### Subject Characteristics

**Table 1.** Characteristics of respondents in this study include age and gender.

No	Characteristics	Breakfast		Snack	
		ΣN	Σ%	ΣN	Σ%
1	Age (year)				
	9	9	38	8	35
	10	7	29	8	33
	11	8	33	7	30
2	Gender				
	Man	17	71	13	57
	Female	7	29	10	43
	<b>Total</b>	<b>24</b>	<b>100</b>	<b>23</b>	<b>100</b>

**Table 2.** Comparison of drowsiness between breakfast groups and snack groups

	Breakfast
Mean	37,79
Max	68
Min	20
Std.Dev	13,683

### STATISTICAL TEST RESULTS

**Table 2.** T independent statistical test results

Drowsiness	Mean	t count	sig
Breakfast	37,79	-2,608	0,012
Snack	49,74		

Based on data collection, then data analysis was carried out using the independent T test. the first statistical test seen is the distribution of the normality test using shapiro-wilk. The results of the normality and

homogeneity test are 0.104 and 0.082 with  $\alpha = 0.05$  which if  $> 0.05$  then the data is said to be normally distributed and can be continued to the T independent statistical test. Based on the results of the independent t statistic test, the results obtained a significant value of 0.012 with  $\alpha = 0.05$  which if  $< 0.05$  then  $H_0$  is rejected, it can be concluded that there are differences in consumption of breakfast and consumption of elementary school snacks for drowsiness in public elementary school 2 kedungwaru Tulungagung.

Based on table 2, we can compare the breakfast group and the snack group that the results of the statistical test using the independent T test were lower than the snack group, meaning that the level of drowsiness in the snack group was higher compared to the breakfast group.

## DISCUSSION

### Eat breakfast with drowsiness at Kedungwaru Elementary School 2, Tulungagung

From the results of the research obtained during the study it was found that the total number of students used as research respondents was 47 people divided into two groups 1 (Breakfast Group) which amounted to 24 respondents (51.1%) and group 2 (Snack Groups) which amounted to 23 respondents ( 48.9%). In this study students in the breakfast group were observed for one week starting on 27 August to 3 September 2018 to find out the consistency of

breakfast. the breakfast group consumes breakfast on average 5 times a week. In the breakfast group the mean results were 37.79.

Breakfast is food eaten on the morning before the activity, with food consisting of sources of energy substances, sources of building materials and sources of regulatory substances (MOH, 2005). Breakfast is a human need that is needed regularly every morning, the need for nutrition and brain development for children starts early (Waryono, 2010).

Children who skip breakfast will experience physical disorders, especially lack of energy for activities. Other impacts will also be felt in the teaching and learning process, namely children become less concentrated, easily tired, easily drowsy and other physical disorders. Children who have breakfast perform better in cognitive development in school than those who do not have breakfast. The problem of drowsiness or high drowsiness causes children to have difficulty in the learning process or having difficulty concentrating at school (Ahmad et al., 2011).

The results of the study were cross tabulations between the illiterate group and the snack group on drowsiness that the level of high drowsiness was mostly snack groups with 9 respondents. But in the breakfast group there were also high levels of drowsiness by 2 respondents. While the results of the independent T statistical test get the breakfast group mean of 37.79 or can be rounded 38 which means that the average level of drowsiness in the breakfast group is moderate. Almost the same as the snack group whose average (mean) has a moderate level of sleepiness. There are also a number of causes which make the average level of drowsiness in the

breakfast group moderate, because the respondents have consistency of breakfast for one week that is not good or regular. But indeed the breakfast group has more nutritional adequacy that can affect the learning process.

#### **Consumption of snacks for drowsiness in Kedungwaru Elementary School 2 Tulungagung**

The results obtained during the study revealed that the total number of students used as research respondents was 47 people divided into two intervention groups, namely group 1 (Breakfast Group) which amounted to 24 respondents and group 2 (Snack Group) which amounted to 23 respondents. In this study students in the snack group were observed for one week to find out student / wielder snack habits. the average group consumes snacks 18 times a week or 3 times a day. In the snack group the mean results were 49.74 and t count was -2.594. Most of the snack group had high levels of drowsiness with 9 respondents.

Food is the main source of nutrition to fulfill daily efforts by fulfilling the body's needs both in terms of quantity or portion and the quality of its nutritional content. The availability of food at home is a positive step in achieving food which is known in quantity and quality. But with activity and activities that can require humans to consume food outside the home both main food and snack foods (Khomsan, 2010).

Based on the description above the researcher argues that in the learning activities students will be better if before the learning activities they have maximum energy. For the development of a good learning process and increase the concentration of learning. As for also more effective and efficient if



children consume nutritious food. Sometimes school children do choose to buy food at school. It will be good enough to add energy to the learning process. However, it should be corrected for snacks that are good at consumption. Because snacks don't all have the same nutrition. Moreover, the content in snacks. So it is better for school children to consume snacks in healthy canteens available at school. And get used to breakfast or armed with food from home.

#### **Difference in Consumption of Breakfast and Snack Consumption of Elementary School Children towards Drowsiness in Kedungwaru Elementary School 2 Tulungagung**

Of the two differences in consumption of breakfast and consumption of snacks for drowsiness above it can be concluded that the consumption of breakfast is more influential to minimize drowsiness compared to consumption of snacks. This can be seen through the results of the T-Independent analysis that the average value of breakfast consumption is better than the consumption of snacks, which is the average value of breakfast consumption of 37.79 while the average value of snack consumption is 49.74 with P value 0.012 and  $0.013 < \alpha (0.05)$  then reject  $H_0$  and accept  $H_1$ . This means that there is a difference in consumption of breakfast and consumption of snacks for elementary school children in drowsiness at SD Negeri 2 Kedungwaru Tulungagung.

School children really need nutrition, breakfast is very important for school children. Children who are accustomed to breakfast will have better abilities than children who are not used to breakfast. Breakfast will spur growth and maximize children's abilities in

school (Moedji, 2009). Children who are not used to breakfast will have low glucose levels. Blood glucose is the only channel of energy for the brain to work optimally. Low glucose up to  $<70$  mg / dl will cause a decrease in the concentration of learning or memory (Devi, 2012).

A consistent breakfast is needed to reduce the level of drowsiness. It can be seen that the level of drowsiness in the breakfast group and the snack group had moderate levels of drowsiness, but the snack group was higher in mean than the breakfast group. This is because the breakfast group has observational data for some respondents who do breakfast regularly. Whereas in the snack group had a moderate average level of drowsiness, this snack group had less nutritional intake in snack foods. Because the content of snack foods that do not contain a lot of nutrients, a few examples such as cilok, egg rolls, toast, burger sellers, cotton candy, sugar cane ice, and so on. In the content of snacks that are in the school area have less nutritional content to support and increase concentration in learning. Especially if someone does not have sufficient intake, it will certainly be very easy to sleep. Because they don't have enough energy

#### **CONCLUSION**

1. Frequency of breakfast at SDN 2 Kedungwaru Tulungagung for breakfast groups on average 5 times a week.
2. Frequency of snacks at SDN 2 Kedungwaru Tulungagung for snack groups on average 18 times a week or 3 times during school.
3. There is a difference in sleepiness seen from the consumption of breakfast and consumption of snacks

for elementary school children at SDN 2 Kedungwaru Tulungagung.

### SUGGESTION

Develop learning techniques favored by children so that children are not easily drowsy during the learning process in the classroom. And provide a healthy canteen and provide food with high nutritional value. Get used to eating breakfast with healthy and nutritious food. And also need to overcome sleepiness during the learning process, for example by washing your face when you start feeling sleepy.

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