Description of Knowledge, Attitudes, Behavior of Snacking Habits and Nutritional Status of Students at MI Darun Najah Kloposepuluh Sukodono Sidoarjo

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ARTICLE INFO	ABSTRACT
	Street food is food that is sold and served by street vendors on the side of the road and in public places, which can be eaten directly without further processing or preparation. This study aims to describe the level of knowledge, attitudes, behavior, eating habits, and nutritional status of students at MI Darun Najah Klopoten Sukodono Sidoarjo. This research method uses a descriptive method. The total population of this study was 311 students in grades 4, 5, and 6 and a sample of 56 students was taken using Proportionate Stratified Random Sampling. Data collection was carried out through interviews with knowledge questionnaires, attitudes, FFQ forms, and anthropometric measurements. From the results of the study, most of the students had a sufficient category of knowledge (64.3%), good attitude (71.4%), frequent snacking behavior (53.6%), and good nutritional status (55.4%). From this, it can be concluded that most students still have sufficient knowledge and behavior of frequent snacking habits. It is recommended that the school hold outreach to students regarding information on snacks and nutrition and how to eat good and healthy snacks. School canteens are also expected to provide nutritious snacks.

INTRODUCTION

The Food and Drug Administration has been given the responsibility of monitoring food supplies is very concerned about the safety of food served to schoolchildren.[1] Hawker is food or drink sold and served by street vendors on the street and in public places that can be consumed directly without further processing or preparation. School meals provide only about 20% of a child's daily caloric intake, as defined by *Food and Agricultural Organization* (FAO).[2] Children often consume a variety of snacks, but it does not rule out the possibility of children suffering from various health problems. Childhood obesity has become a major health problem today.[3] Meanwhile, good nutrition in school children serves as a crucial asset for the progress of a nation, as it is through this young generation that sustainable development can be continued[4–11].

Based on the BMI/Age index, Basic Health Research in 2018 found that 2.4% of children aged 5-12 years had very poor nutritional status, 6.8% were underweight, 10.8% were obese and 9.2% were obese. In contrast, the BMI/Age index shows that children aged 5-12 years in East Java have a nutritional status of 2.23% with very thin nutrition, 5.81% lean nutrition, 13.19% obese and obese children 11.08%. In Sidoarjo Regency, very thin 1.43%, underweight 5.21%, obese 16.34% and obese 13.54%. As for the underweight nutritional status of 7.15% The figure is higher than the

prevalence of East Java, with a difference of 1.34%. While the prevalence of obesity is 16.28% and obesity is 16.81%.

Based on the initial data collection with interviews through the distribution of questionnaires, the attitude of grade 5 students in consuming snacks is quite high, this is evidenced that they choose snacks, namely those with striking colors, the addition of a lot of flavoring and the price is cheap. It was found that the snack habit behavior of grade 5 students was 12 students (50%) more often consuming snacks, which is 1-2 times a day. In addition, the nutritional status of students with underweight nutritional status was 3 students (12.5%), 6 students with obese nutritional status (25%), and 3 students with obese nutritional status (12.5%).

Based on the background above, the author is interested in conducting research on "Overview of Knowledge, Attitudes, Behavior of Snacking Habits and Nutritional Status of Students in MI Darun Najah Klopoten Sukodono Sidoarjo". This study aims to determine the picture of knowledge, attitudes, behavior, snacking habits and nutritional status of students at MI Darun Najah Klopoten Sukodono Sidoarjo.

METHOD AND MATERIALS

This type of research is descriptive. The research was conducted at MI Darun Najah Klopoten Sukodono Sidoarjo, from November to May 2023. The population in this study was all students in grades 4, 5 and 6. While the sample in this study was 56 students. The sample size was calculated using the riyanto formula and the number of samples in this study was 56 students. Sampling using *Proportionate Stratified Random Sampling technique.*

Anthropometric data collection is carried out by direct measurement using digital balances and microtoa. The results of anthropometric measurements are then analyzed for the determination of Z-score values. Furthermore, the Z-score is compared with the Ministry of Health's standards in 2020.

To find out the snacking habits of respondents, interviews were conducted using questionnaires and *Food Frequency Questionnaire* (FFQ) forms with a period of 1 week. After FFQ is carried out, then the results of each sample are entered into the FFQ score classification.[12]

The data analysis used is statistically descriptive. Data processing using frequency distribution tables and percentage of each variable.

RESULTS
Characteristics of Respondents

Table 1. Characteristics of Respondents

	Characteristic	n	%
Age	10 years	5	8.9
	11 years	20	35.7
	12 years	21	37.5
	12 years	10	17.9
Gender	Male	31	55.4
	Female	25	44.6
Parents' Income	Rp. 500.000 – 1.000.000	5	8.9
	Rp. 1.000.000 – 3.000.000	41	73.2
	Rp. 3.000.000 – 5.000.000	10	17.9
Allowance	> 5.000	46	82.1
	< 5.000	10	17.9
	Total	**56**	**100**

Source: Primary Data, 2023

Based on the table above, most of the respondents in the study were 12-year-old students with 21 students (37.5%) with the highest number of respondents being men with 31 students (55.4%), most of the parent's income was 41 students (73.2%). The majority of respondents have an allowance of > 5,000 with a total of 46 students (82.1%).

Knowledge Level About Snacks

Table 2. Distribution of Knowledge Level of Respondents Grade 4, 5 and 6 MI Darun Najah Klopoten Sukodono Sidoarjo

Knowledge Level	n	%
Good	2	3.6
Enough	36	64.3
Less	18	32.1
Total	**56**	**100**

Source: Primary Data, 2023

Most of the 56 respondents (36 students or 64.3%) had a sufficient level of knowledge, as shown in the table of frequency distribution of respondents by knowledge level.

Snack Selection Attitude

Table 3. Distribution of Snack Selection Attitudes of Class 4, 5 and 6 MI Respondents Darun Najah Klopoten Sukodono Sidoarjo

Snack Selection Attitude	n	%
Good	40	71.4
Enough	16	28.6
Less	0	0
Total	**56**	**100**

Source: Primary Data, 2023

Based on the table above, it can be seen from 56 respondents, most of the attitudes in choosing good category snacks as many as 40 students (71.4%).

Snacking Habits Behavior

Table 4. Distribution of Snacking Habits of Grade 4, 5 and 6 Respondents MI Darun Najah Klopoten Sukodono Sidoarjo

Hawker Frequency	n	%
Often	30	53.6
Infrequently	26	46.4
Total	**56**	**100**

Source: Primary Data, 2023

Based on the table above, it can be seen from 56 respondents, most of the frequency of snack categories is often as many as 30 students with a percentage of 53.6%.

Nutritional Status

Table 5. Distribution of Nutritional Status of Respondents in Grades 4, 5 and 6 MI Darun Najah Klopoten Sukodono Sidoarjo

Nutritional Status	n	%
Undernutrition	2	3.6
Adequate Nutrition	31	55.4
Overnutrition	14	25
Obesity	9	16.1
Total	**56**	**100**

Source: Primary Data, 2023

Based on the table above shows that of the 56 people studied, most of the 31 students (55.4%) had a healthy diet and adequate nutrition.

Knowledge Level and Nutritional Status

Table 6. Cross-tabulation of Knowledge Level and Nutritional Status of MI Students Darun Najah Klopoten Sukodono Sidoarjo

		Nutritional Status								Total	
		Undernutrition		Normal		Overnutrition		Obesity			
		n	%	n	%	n	%	n	%	n	%
Level of Knowledge	Good	0	0	1	50	1	50	0	0	2	100
	Enough	1	2.7	17	47.3	10	27.8	8	22.2	36	100
	Less	1	5.5	13	72.3	3	16.7	1	5.5	18	100
Total										56	100

Source: Primary Data, 2023

Using the table above as a guideline, of the 36 respondents with a sufficient level of knowledge most nutritional status was normal. In addition, 17 students (47.3%) had above-average nutritional status, as did 10 students (27.8%). Of the 18 respondents with a good level of knowledge, 13 students (72.3%) had nutritional status above average, and 2 respondents with sufficient knowledge level had nutritional status both normal and more (50%).

Snack Selection Attitude and Nutritional Status

Table 7. Cross-Tabulation of Snack Selection Attitudes and Nutritional Status of MI Students Darun Najah Klopoten Sukodono Sidoarjo

| | | Nutritional Status | | | | | | | | Total | |
| | | Undernutrition | | Normal | | Overnutrition | | Obesity | | | |
		n	%	n	%	n	%	n	%	N	%
Snack Selection Attitude	Good	2	5	21	52,5	9	22,5	8	20	40	100
	Enough	0	0	10	62,5	5	31,25	1	6,25	16	100
	Total									56	100

Source: Primary Data, 2023

Based on the table above, it can be seen that 40 respondents have a good snack selection attitude, most of whom have normal nutritional status as many as 21 students (52.5%), and also have more nutritional status, there are 9 students (22.5%), then from 16 respondents who have a sufficient snack selection attitude also have normal nutritional status as many as 10 students (62.5%).

Snacking Habits and Nutritional Status

Table 8. Cross-Tabulation of Snack Selection Attitudes and Nutritional Status of MI Students Darun Najah Klopoten Sukodono Sidoarjo

| | | Nutritional Status | | | | | | | | Total | |
| | | Undernutrition | | Normal | | Overnutrition | | Obesity | | | |
		n	%	n	%	n	%	n	%	N	%
Snack Selection Attitude	Often	1	3,3	16	53,4	8	26,7	5	16,6	30	100
	Infrequently	1	3,8	15	57,7	6	23,1	4	15,4	26	100
	Total									56	100

Source: Primary Data, 2023

Based on the table above, it shows that among students who regularly consume snacks, 16 (53.4%) of the total with normal nutritional status, and also have more nutritional status there are 8 students (26.7%), then from 26 respondents who have rarely snack habit behavior, only 1 difference has normal nutritional status, there are 15 students (57.7%).

Pocket Money and Snack Habits

Table 9. Cross Tabulation of Pocket Money and Behavior of Snack Habits of MI Students Darun Najah Klopoten Sukodono Sidoarjo

| | | Snack Selection Attitude | | | | Total | |
| | | Often | | Infrequently | | | |
		n	%	n	%	N	%
Pocket money	> 5.000	26	56,5	20	43,5	46	100
	< 5.000	4	40	6	60	10	100
	Total					56	100

Source: Primary Data, 2023

The table above shows that among 46 respondents who have a weekly allowance of > Rp. 5,000, the majority of 26 students (56%) have snacking habits with frequent categories, and also

there are still those who have snack habits rarely there are 20 students (43.5%), then out of 10 respondents have pocket money < Rp. 5,000 have snack habits rarely there are 6 students (60%).

DISCUSSION

Characteristics of Respondents

Based on the results of the study, it is known that most of the nutritional status of grade 4, 5 and 6 students of MI Darun Najah Klopoten Sukodono Sidoarjo, most of them are 12 years old there are 21 students (37.5%). Age is one of the determining factors in meeting nutritional needs. Each age group has different nutritional needs as stated in the Daily Value (RDA) in 2019, that calorie needs in boys aged 10-12 years are 2000 kcal.

Most of the male students are 31 students (55.4%), most of the parents' income is Rp. 1,000,000-3,000,000 there are 41 students (73.2%), while most of the allowance is > 5,000 there are 46 students (82.1%). It is also influenced by parents' income, children are more likely to use pocket money, the number of snacks purchased can increase if parents do not encourage their child to eat more often in small portions.[13]

Knowledge Level

The level of knowledge about snacks was assessed by most respondents to be sufficient, namely 36 students (64.3%). Children's nutritional needs for optimal learning, concentration, and physical activity while at school. Knowledge of nutrition is an important calculation in deciding and giving food, the dishes to be served are determined by the level of knowledge of a person.[14]

This is in accordance with the findings of Tarigan's research (2021) which shows that there are 11 students who are well knowledgeable (26.2%), 26 students who are knowledgeable enough (61.9%), and 5 students who are less knowledgeable (11.9%).[15]

Snack Selection Attitude

Most respondents have a good attitude, there are 40 students (71.4%). Factors that influence the formation of attitudes also include the use of mass media in delivering messages, mass media will influence children in carrying out actions.

This is in accordance with the findings of Syarifuddin's research (2022) showing that out of 52 respondents, there were 30 students (57.7%) who had good attitudes and those with less attitudes as many as 22 students (42.3%).[16]

Snacking Habits Behavior

Snack habit behavior, most respondents have habitual behavior, there are often 30 students (53.6%). Human behavior can be influenced by several elements, including predisposing elements such as pocket money, busy parents, and social environment.

This is in accordance with the findings of Risganingrum's (2022) research showing that out of 40 respondents, there are 22 students (55%) who have a frequency of frequent snacking habits, while 18 students (45%) have a frequency of infrequent snacking habits.

Nutritional Status

The nutritional status of most students had normal nutritional status, there were 31 students (55.4%). Nutritional status is a measure where there is a balance between nutrients as a result of food and the use of nutrients / energy that enters the body and energy released according to individual needs.

This is in accordance with the findings of Ariska's research (2019) showing that out of 49 respondents there were 38 students (77.6%) having good nutritional status (normal), 1 student (2%) having less nutritional status, 3 students (6.1%) having more nutritional status, and 7 students (14.3%) having obese nutritional status.[17]

Cross-Tabulation of Knowledge and Nutritional Status

Based on cross-tabulation analysis, it was found that most respondents had sufficient knowledge level and normal nutritional status there were 17 students (47.3%), who had insufficient knowledge with normal nutritional status there were 13 students (72.3%), while sufficient knowledge with more nutritional status there were 10 students (27.8%).

This is in accordance with the findings of Juliniar & Lubis' (2021) research showing that a person's level of knowledge about snacks correlates with his ability to maintain a healthy diet.[18] And also in accordance with the research findings of Riamah, et al (2023) show that a person's level of knowledge correlates with a person's nutritional status.[19]

Cross-Tabulation of Attitudes and Nutritional Status

Based on cross-tabulation analysis, it was found that most respondents had a good attitude with normal nutritional status there were 21 students (52.5%), sufficient attitude with normal nutritional status there were 10 students (62.5%), while good attitude with more nutritional status there were 9 students (22.5%).

This is in accordance with the findings of Yani & Reynaldi's (2022) research showing that food selection attitudes are related to nutritional status.[20] And also in accordance with the findings of Lestari's research (2021) shows that there is a relationship between attitudes towards food selection with nutritional status, having an attitude towards choosing good snacks and normal or good nutritional status.[21]

Cross-Tabulation of Snacking Habits and Nutritional Status

Based on cross-tabulation analysis, it was found that most respondents had frequent snacking habits with normal nutritional status there were 16 students (53.4%), rare habit behavior with normal nutritional status there were 15 students (57.7%), while frequent habit behavior with more nutritional status there were 8 students (26.7%). This is because of the tendency to snacking which can lead to an increase in body fat if the amount of fat consumed exceeds the amount of energy expended.[22]

This is in accordance with the findings of Nuryani & Rahmawati's (2018) research showing that it found a relationship between eating behavior and nutritional status, namely (72.4%) having frequent snacking habits and normal or good nutritional status.[23] And also in accordance with the findings of Wihida's research (2019) shows that the relationship between snacks and nutritional status, especially (39.13%) who often snack and have normal or good nutritional status.[24]

Cross-Tabulation of Pocket Money and Snack Habit Behavior

Based on cross-tabulation analysis, it was found that most respondents had pocket money > 5,000 with snack habit behavior there were often 26 students (56.5%), while > 5,000 with snack habit behavior there were rarely 20 students (43.5%). This is because pocket money also affects children's shopping behavior. The more pocket money a child gets, the more often they have to buy the food they want.[25]

This is in accordance with the findings of research by Desi, et al (2018) showing that there is a relationship between pocket money and snacks, so many (95%) have pocket money of Rp.5,000 – Rp.10,000 and often consume snacks.[26]

The behavior of choosing student snacks is certainly influenced by various factors. Among them are knowledge, attitudes and also students' pocket money related to healthy food and snack selection.[27]

CONCLUSION

1. Characteristics of students in this study:
   1. According to the age of 12 years, there were 21 students (37.5%),
   2. By Gender: Male, 31 students (55.4%),
   3. According to parents' income, which is Rp. 1,000,000 - Rp. 3,000,000 as many as 41 students (73.2%),
   4. According to the students' allowance, which is > Rp. 5,000, as many as 46 students (82.1%).
2. The level of knowledge about school snacks for grade 4, 5, 6 students of MI Darun Najah Klopoten is mostly categorized as 36 students with a percentage of 64.3%.

3. The attitude of selecting snacks for grade 4, 5, 6 students of MI Darun Najah Klopoten was categorized as good as 40 students with a percentage of 71.4%.

4. The snack habit behavior of grade 4, 5, 6 students of MI Darun Najah Klopoten is often categorized as many as 30 students with a percentage of 53.6%.

5. The nutritional status of grade 4, 5, 6 students of MI Darun Najah Klopoten is categorized as good or normal nutrition as many as 31 students with a percentage of 55.4%.

Suggestions to the school can provide education to students about knowledge about nutrition by using media that is easy and understood by students and information about healthy consumption of school snacks so that student behavior is good in consuming snacks. In addition, it is also expected that the school will hold regular supervision so that students do not often buy snacks carelessly and the school cafeteria provides healthy snacks and contains nutrient-dense foods.

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