Description of Breakfast Habits, Nutritional Status and Level of Achievement of Al-Huda Madrasah Ibtidaiyah Kepuhbener Nganjuk District

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ABSTRACT

Breakfast is very important for elementary school children because with breakfast, the nutritional needs for their activities while at school can be fulfilled, with the fulfillment of nutritional needs. The purpose is to know the description of breakfast habits, breakfast intake, nutritional status and level of learning achievement at MI Al-Huda Kepuh Bener, Nganjuk Regency. Research method is descriptive using a proportional random sampling technique. The way to collect data is by means of anthropometric measurements, interviews using questionnaires, food recall interviews 3 times breakfast, observation of odd semester student report cards. It was obtained data on nutritional status based on (BMI/Age) as many as (76.9%) students had good nutritional status, (66.7%) had sufficient breakfast habits, (38.5%) had a deficit energy consumption level weight, (56.3%) had a deficit consumption level of protein intake and as many as (89.7%) had a good level of academic achievement. Concluded that most students have normal nutritional status, students who have good breakfast habits but a deficit consumption level, students have a deficit consumption level but a good level of learning achievement. It is recommended for students to eat a balanced diet and get used to breakfast.

INTRODUCTION

A nation is said to be successful in the process characterized by Human Resources who have a very persistent mentality, maximum fitness, tough physique and a high level of learning achievement.[1] Student achievement is influenced by many factors including concentration. Concentration can be raised if the body contains sufficient energy stocks for the brain. One of the good energy supplies for the brain is the nutrients obtained when eating processed morning.[2] Breakfast is an act of eating that is carried out in the morning, students need breakfast for resources to carry out activities. For students, breakfast is very critical to fulfill learning actions and is also needed for student progress.[3]

Processed morning meals will affect the dose of sugar in the blood that doubles. This incident has something to do with the most important brain role in focusing on learning in the morning. A scientist explains breakfast is a special preparation for the brain.[4] Lack of nutrition makes the body's progress restrained, the body is smaller, followed by a small brain capacity. The number of cells in the brain shrinks and imperfections in the biochemical organization of the brain occur.[5]

Based on the results of a study in Sub-District Elementary Schools by Fauzan (2021), the

Makassar city government stated that the results of the analysis of the relationship between nutritional status and children's learning achievement where the better the child's nutritional status will cause children's learning achievement to also increase.[6] Nutritional status is also included in the category of key aspects in contributing to the level of the child's growth and development process. Optimal nutrient supply has a critical role in order to lead to maximum weight gain and increased height.[7]

MI Al-Huda Kepuhbener is registered in one of the favorite Madrasah Ibtidaiyah in Tanjunganom sub-district, the excellence of its students lies in academic achievement. Therefore, researchers were adrift to see the picture of breakfast habits, nutritional status and level of learning achievement at MI Al-Huda Kepuhbener. Based on the results of a preliminary survey conducted by means of a grade 5 interview at MI Al-Huda Kepuhbener. It was found that 11 students (52%) had breakfast habits, 8 students (38%) rarely ate breakfast and as many as 2 students (10%) never had breakfast at all. However, preliminary surveys have not been able to describe breakfast habits, nutritional status and level of learning achievement at MI Al-Huda Kepuhbener. So, research is required to be carried out to find out the picture.

MATERIALS AND METHODS

This type of research is a descriptive study. The research was carried out at MI AlHuda Kepuhbener, Nganjuk Regency, from November to December 2022. The population in this study was all students in grades 4, 5 and 6. While the sample in this study was 39 people.

The sampling technique is to use propotional random sampling. Data collection techniques are run through primary and secondary. Primary data is data received directly, namely data on height, weight, data on breakfast habits and breakfast intake. Secondary data is data received through intermediaries, namely student report cards for odd semesters of the 2022/2023 academic year.

Data analysis is done using the SPSS program on the computer. Data processing by showing the frequency distribution table of each variable. Researchers wanted to know about the Overview of Breakfast Habits, Nutritional Status and Student Learning Achievement Level in MI Al-Huda Kepuhbener Nganjuk Regency.

RESULTS

Characteristics of Respondents by Gender

The frequency distribution of respondents by gender in MI Al-Huda Kepuhbener students of Nganjuk Regency can be classified:

Table 1. Characteristics of Respondents by gender

Nutritional Status	n	%
Male	20	51.35
Female	19	48.7
Total	**39**	**100**

Source: Primary data, 2023

It was found that 51.3% of respondents were male and 48.7% of respondents were female.

Nutritional Status

The frequency distribution of respondents according to nutritional status in MI Al-Huda Kepuhbener students of Nganjuk Regency can be classified.

Table 2. Distribution of Respondents by Nutritional Status in Students of Grades 4,5 and 6 in MI Al-Huda Kepuhener

Nutritional Status	n	%
Obesity	2	5.2
Normal	30	76.9
Underweight	7	17.9
Total	**39**	**100**

Source: Primary data, 2023

From the column above, respondents with normal nutritional status 76.9%, nutritional status obesity as much as 5.2% and nutritional status less as much as 17.9%.

Breakfast Habits

The frequency distribution of respondents based on breakfast habits in students of MI Al-Huda Kepuhbener Nganjuk Regency can be classified as follows:

Table 3. Distribution of Respondents by Breakfast Habits in Students of Grades 4,5 and 6 in MI Al-Huda Kepuhener

Breakfast Habits	n	%
Good	26	66.7
Enough	13	33.3
Poor	0	0
Total	**39**	**100**

Source: Primary data, 2023

From the column above, students with good breakfast habits were found as much as 66.7%, breakfast habits were enough 33.3% and those who had breakfast habits were less than 0%.

Morning Breakfast Intake

1. Energy Intake

The frequency distribution of respondents according to the level of breakfast energy consumption in MI Al-Huda Kepuhbener students of Nganjuk Regency can be classified:

Table 4. Distribution of Respondents by the level of Energy intake at Breakfast in Students of Grades 4,5 and 6 in MI Al-Huda Kepuhener

Energy Consumption Level	n	%
Excessive (>30%)	2	5.1
Normal (22.5-29.75%)	9	23.1
Mild Deficiency (20-22.25%)	4	10.2
Moderate Deficiency (17.5-19.75%)	9	23.1
Severe Deficiency (<17.5%)	15	38.5
Total	**39**	**100**

Source: Primary data, 2023

From the table above, the level of breakfast energy consumption was obtained from 39 respondents, a total of 2 respondents were included in the more category (5.1%), 9 respondents in the normal category (23.1%), 4 respondents in the mild deficit category (10.2%), 9 respondents in the moderate deficit category (23.1%) and 15 respondents in the severe deficit category (38.5%).

2. Protein intake

The frequency distribution of respondents according to the level of breakfast protein consumption in MI Al-Huda Kepuhbener students of Nganjuk Regency can be classified as follows:

Table 5. Distribution of Respondents by the level of Protein intake at Breakfast in Students of Grades 4,5 and 6 in MI Al-Huda Kepuhener

Protein Consumption Level	n	%
Excessive (>30%)	4	10.4
Normal (22.5-29.75%)	13	33.3
Mild Deficiency (20-22.25%)	7	17.9
Moderate Deficiency (17.5-19.75%)	5	12.8
Severe Deficiency (<17.5%)	10	25.6
Total	**39**	**100**

Source: Primary data, 2023

From the column above, the level of breakfast protein consumption was obtained from 39 respondents, a total of 4 respondents were included in the more category (10.4%), 13 respondents in the normal category (33.3%), 7 respondents in the mild deficit category (17.9%), 5 respondents in the moderate deficit category (12.8%) and 10 respondents in the severe deficit category (25.6%).

Students Learning Achievement Level

The frequency distribution of respondents according to the level of learning achievement in MI Al-Huda Kepuhbener students of Nganjuk Regency can be classified:

Table 6. Distribution of Respondents by the level of Learning Achievement in Students of Grades 4,5 and 6 in MI Al-Huda Kepuhener

Learning Achievement Level	n	%
Very Good	4	10.3

Good	35	89.7
Enough	0	0
Total	**39**	**100**

Source: Primary data 2023

Based on the students' report cards, the results of students who have a very good grade level are 10.3%, a good grade level of 89.7% and a sufficient grade level of 0%.

Breakfast Habits with Nutritional Status

Cross-tabulations according to breakfast habits with nutritional status in students of MI AlHuda Kepuhbener Nganjuk Regency can be classified as follows:

**Table 7. Cross-tabulation of Breakfast Habits with Nutritional Status
in Students of Grades 4,5 and 6 in MI Al-Huda Kepuhbener**

Breakfast Habits	Nutritional Status						Total	
	Obesity		Normal		Poor			
	n	%	n	%	n	%	n	%
Good	1	3.9	21	80.8	4	15.3	26	100
Enough	1	3.9	9	72.3	3	23.8	13	100
Total	2	5.1	30	76.9	7	18	39	100

Source: Primary data 2023

From the column above, it was obtained from 26 respondents who had good breakfast habits, there were still 4 students (15.3%) who were in the category of malnutrition status and a number of 21 students (80.8%) had good breakfast habits and their nutritional status was also good.

Breakfast Habits with Learning Achievement Level

Cross-tabulations based on breakfast habits with the level of learning achievement in MI AlHuda Kepuhbener students, Nganjuk Regency can be classified as follows:

**Table 8. Cross-tabulation of Breakfast Habits with the level of
Learning Achievement in Students of Grades 4,5 and 6 in MI Al-Huda
Kepuhbener**

Breakfast Habits	Level of Achievement				Total	
	Very good (88-100)		Good (74-87)			
	n	%	n	%	n	%
Good	4	15.3	22	84.7	26	100
Enoughl	0	0	13	100	13	100
Total	**4**	**10.2**	**35**	**89.8**	**39**	**100**

Source: Primary data, 2023

From the column above, it was obtained from 26 respondents whose breakfast habits were good, there were 22 respondents (84.7%) who had a good level of learning achievement and as

many as 4 respondents (15.3%) had a very good level of learning achievement, then there were 13 respondents (100%) whose breakfast habits were sufficient but the level of achievement was good.

DISCUSSION

Characteristics of Respondents by Gender

Based on the results of research that has been carried out on grade 4, 5 and 6 students of MI Al-Huda Kepuhbener shows that there are 20 male students (51.3%) and there are 19 female students (48.7%).

Energy needs for male gender respondents dominate from female gender respondents and in Permenkes (2019) it has also been stated that the needs of boys are also in fact from girls. Physical movement is more rapidly experienced by boys, but girls menstruate, so it requires a more dominant supply of protein and iron.[8] A person's energy needs are food-centered energy meals needed to cover a person's energy load if he or she has a dose and body with action levels in harmony with long-term health.[9]

Nutritional Status

From the results of research that has been carried out on grade 4, 5 and 6 students of MI AlHuda Kepuhbener regarding nutritional status shows that students with good nutritional status have the highest frequency, namely 30 students (76.9%), then obesity nutritional status is 2 students (5.2%) and undernutrition status is with 7 students (17.9%).

Nutritional status is influenced by the processed food and physical actions of students. Processed food is a prime factor in fulfilling nutrients in the body.[10] In addition to processed food, physical action also has an important role in achieving weighty human resources. Physical action is the action of the body that is realized by muscles in order to fulfill the allowance of energy.[11] This research is in line with Yusuf's research (2018) which showed that from 30 respondents, it was found that most respondents with good nutritional status were 20 students with a percentage of 66.7%, nutritional status was less than 6 students with a percentage of 20% and obese status was 4 students with a percentage of 13.3%.[12]

Breakfast Habits

From the results of research conducted in class work 4, 5 and 6 MI Al-Huda Kepuhbener regarding breakfast habits showed the frequency of breakfast habits in the sufficient category which was as many as 13 students (33.3%) while the frequency of breakfast habits in the good category was higher than the sufficient category which was as many as 26 students (66.7%).

Morning meals that are advised are to consume preparations that contain balanced nutrition and complete 20-25% of the total energy adequacy done in the morning before studying at school.[13] Cultivating breakfast is highly recommended because it can increase the fulfillment of daily nutritional needs.[14] This research is in line with Aprilia's research (2021) at SD Kartika VII-1 Pematangsiantar showing the results of breakfast habits with a good category of 56 students with a percentage (56.6%) and breakfast habits in the less category of 43 students with a percentage (43.4%).[15]

Morning Breakfast Intake

1. **Breakfast Energy Intake**

Based on the results of research that has been carried out on grade 4, 5 and 6 students of MI Al-Huda Kepuhbener regarding the level of consumption of breakfast energy intake shows that the highest frequency is in the severe deficit category as many as 15 students (38.5%), the normal category is the same as the moderate deficit category of 9 students (23.1%), the more category as many as 2 students (5.1%) and the mild deficit category as many as 4 students (10.2%).

Energy intake is a result of carbohydrate, protein and fat metabolism. Energy has the function of energy for metabolism, growth, temperature regulation and physical action.[16] This study is in line with Ariyani's (2020) research at SD Muhammadiyah Surau Gaandg Village, showing that the level of consumption of breakfast energy intake with a weight deficit category of 12 students (75%) and a normal level of 4 students (25%).[17]

2. **Breakfast Protein Intake**

For the level of consumption of breakfast protein intake, it showed that the highest frequency was in the normal category of 13 students (13.3%), the weight deficit category of 10 students (25.6%), the moderate deficit level of 5 students (12.8%), the mild deficit level of 7 students (17.9%) and the more category with 4 students (10.4%).

Protein is a nutrient that is very critical for the body because of its benefits as a source of energy in the body and also as a building substance.[18] This study is in line with Ariyani's (2020) research at SD Muhammadiyah Surau Gaandg Village for protein intake showing results with less than 10 students (62.5%) and good categories as many as 6 students (37.5%).

Learning Achievement Level

The results of research by grade 4, 5 and 6 students of MI Al-Huda regarding the level of learning achievement found that the frequency of the category was very good, which was 4 students (10.3%), then for the good category, it was higher at 35 students (89.7%).

Achievement is the arrangement of the final results of a work that has been exceeded, achievement is an activity that has been exceeded, formed both individually and in groups.[19] This

study is different from Triyanti's (2020) research showing that the percentage of students with good categories is (2.86%) and for the category is sufficient (57.14%).[20]

Breakfast Habits with Nutritional Status

Based on the results of cross-tabulation between breakfast habits and the nutritional status of grade 4, 5 and 6 students of MI Al-Huda Kepuhbener, it was found that from 26 respondents who had good breakfast habits, there were still 4 students (15.3%) who were in the category of malnutrition status, and a total of 21 students (80.8%) had good breakfast habits and their nutritional status was also good (normal). Furthermore, of the 13 respondents who had enough breakfast habits, there were 9 students (72.3%) whose nutritional status was good, but there was still 1 student (3.9%) who although his breakfast habits were sufficient but his nutritional status was obese.

This research is in line with research conducted by Monica (2019) that as many as (96.7%) children who have good breakfast habits with normal nutritional status.[21]

Breakfast Habits with Learning Achievement Level

Based on the results of cross-tabulation between breakfast habits and the achievement of learning achievement of grade 4, 5 and 6 students of MI Al-Huda Kepuhbener, it was found that of 26 respondents who had good breakfast habits, there were 22 respondents (84.7%) who had good achievement levels and as many as 4 respondents (15.3%) very good learning achievement levels and there were 13 (100%) respondents who had enough breakfast habits and good achievement levels.

Training your habit to do breakfast can meet the needs of nutritional intake, especially in energy and protein nutrients. Both macronutrients are needed to increase concentration.[22] The brain needs to get an adequate supply of glucose through blood circulation in the body, because glucose is important to relieve students from concentrating as the main source for the brain to work optimally so that students can improve learning achievement in school.[23] Thus, in addition to having benefits to reduce the continuation of nutritional status problems, breakfast habits are also useful for increasing student learning achievement at school.[24] As for the aspects that affect students who have less breakfast habits but their achievements are still good, according to research Al-Faida (2021), the influencing factor is the presence of energy supply that is still enough to be used for studying in the morning, the brain needs a constant supply of energy to support, maintain the body. How much brain activity requires energy, such as reading and learning.[25]

CONCLUSION

Based on the results of research that has been carried out, conclusions were obtained related to several things regarding the description of breakfast habits, nutritional status and the level of student achievement at MI Al-Huda Kepuhbener:

1. The characteristics of respondents consisted of men (51.3%), women (48.7%) and respondents aged 9 years (7.7%), those aged 11 and 12 years both numbered 10 children (25.6%) and most were 10 years old (38.5%).

2. Most (66.7%) students have good breakfast habits and as many (33.3%) still have enough breakfast habits.

3. For the level of consumption, breakfast intake showed that most of the weight deficit was for energy (38.5%), weight deficit and protein on average also deficit (56.3%).

4. Most (76.9%) students in grades 4, 5 and 6 have good or normal nutritional status based on BMI/Age index, students who have obese nutritional status (5.2%) and students with undernutrition status (7%).

5. Most (89.7%) respondents had a good learning achievement level and (10.3%) a very good learning achievement level.

The suggestion that can be given to the school is that the school can coordinate with health workers to hold counseling related to the importance of breakfast, so that students can get used to breakfast before going to school every day.

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