THE RELATIONSHIP BETWEEN POCKET MONEY AMOUNT AND BREAKFAST HABITS WITH CHILDERN'S NUTRITIONAL STATUS AT SDN 1 MULYASARI

Raka Unggul Widiansyah [*], Milliyantri Elvandari, Linda Riski Sefrina
Program Studi S1 Gizi, Fakultas Ilmu Kesehatan, Universitas Singaperbangsa Karawang
Jl. HS.Ronggo Waluyo, Puseurjaya, Kec. Telukjambe Timur, Kabupaten Karawang, Jawa Barat 16162,
Indonesia
Email: *2310631220040@student.unsika.ac.id*

Abstract
The nutritional status of elementary school children is influenced by various factors, including breakfast habits and the amount of pocket money received each day. This study aims to determine the effect of pocket money and breakfast habits on the nutritional status of children at SDN 1 Mulyasari. This study employs a quantitative approach with a cross-sectional design. The sample consists of 48 students selected through total sampling. Data were collected via questionnaires and anthropometric measurements using the body mass index (BMI) according to age. Data analysis was conducted using univariate and bivariate methods (chi-square test with Fisher's exact test as an alternative). The results show that most respondents have high pocket money (91.7%) and often eat breakfast (72.9%). The majority of respondents (72.9%) have a normal BMI. There was no significant relationship between pocket money and BMI ($p = 0.445$), nor between breakfast frequency and BMI ($p = 0.254$). The conclusion of this study is that the amount of pocket money and breakfast habits do not have a strong influence on children's nutritional status. These findings are expected to serve as a consideration for schools and parents in fostering healthy eating habits in children.
Keywords: Pocket Money, Breakfast, Nutritional Status

Introduction

Childhood is a crucial period in the growth and development process, during which balanced nutritional needs are essential for optimal physical, cognitive, and social-emotional development[1]. At the elementary school level, attention to children's nutritional status is very important because it is directly related to academic achievement and has an impact on their future quality of life in the long term[2]. Factors that are often considered to play a role in children's nutritional status include breakfast habits and daily pocket money[3]. A nutritious breakfast is believed to support children's activities throughout the day, while pocket money is considered to influence the food choices children make while away from home.

Previous studies have shown that breakfast habits and the amount of pocket money some students receive can affect BMI. However, existing research results still show varying and inconsistent findings. Some studies have found that higher pocket money can trigger unhealthy food consumption, while other studies have shown a positive relationship between pocket money and nutritional status. The results of this study are in line with research by [4] and [5] where pocket money and breakfast habits were not significantly related to students' nutritional status. On the other hand, breakfast is usually associated with energy balance and daily nutrient intake, but it is not always directly proportional to BMI status. This gap is the basis for this study. The purpose of this study is to

determine the relationship between pocket money and the frequency of breakfast on the BMI status of elementary school students.

From a physiological and behavioral consumption perspective, pocket money and breakfast habits can affect nutritional status through several mechanisms. Larger amounts of pocket money have the potential to increase access to high-calorie foods or unhealthy snacks, especially when not accompanied by adequate control or nutritional education(6). On the contrary, a nutritious breakfast can help balance energy intake and metabolism throughout the day, as well as reduce the tendency to overeat during the afternoon or evening(7). Therefore, even though a number of studies have not found a significant relationship, it is important to continue examining these two factors because they both play a role in shaping children's daily eating patterns.

This study aims to explore and analyze the relationship between daily pocket money and breakfast habits with the nutritional status of elementary school students at SDN 1 Mulyasari. Through this approach, the study also seeks to re-examine previous findings that indicated no significant relationship between these variables, particularly in a local context. Thus, the results of this study are expected to contribute to enriching understanding of behavioral factors that may influence children's nutritional status, while also serving as a basis for consideration in nutrition interventions within the elementary school environment.

Method

This study is a quantitative cross-sectional study that aims to determine the effect of pocket money and breakfast habits on the nutritional status of elementary school students. The sample consisted of 48 students taken from the entire population without using specific criteria. Data sources were derived from primary data collected through questionnaires and anthropometric measurements. The instruments used included a structured questionnaire regarding pocket money amount and breakfast frequency, as well as digital height and weight measurement tools to assess nutritional status based on body mass index (BMI) according to age, following WHO standards. Data collection techniques were conducted through structured interviews and direct measurements by the researchers. Data analysis was performed using univariate analysis to describe respondent characteristics, and bivariate analysis using the chi-square test with Fisher's exact test as an alternative to examine relationships between variables.

A quantitative approach with a cross-sectional study design was used in this study because it was considered most appropriate for describing the relationship between independent and dependent variables in a specific period of time. This design allows researchers to identify trends in the relationship between pocket money and breakfast habits on nutritional status without direct intervention on the subjects. Although this method cannot be used to draw causal conclusions, it is effective in providing a general overview of the patterns observed in the field. The choice of this design also took into account time and resource constraints, enabling it to be used efficiently to obtain relevant and representative data.

Prior to conducting the research, the researcher first developed a plan that included activity preparation, testing the feasibility of the instruments to be used, and technical coordination with the school to ensure the smooth running of the activities. This research was conducted in accordance with research ethics principles, such as providing respondents with complete information about the purpose and procedures of the research, and obtaining consent through an Informed Consent form as a form of voluntary participation without coercion. Data confidentiality was well maintained and used only for scientific analysis purposes. After the data was collected, it was processed and analyzed using SPSS version 25. The data underwent editing to check completeness, coding to group the data, entry into

statistical software, and tabulation to facilitate the analysis process in accordance with the research objectives.

Result

This study involved 48 respondents to examine the relationship between pocket money and breakfast habits with nutritional status. The results of data processing are presented in Table 3.1 below.

Table 3.1. frequency distribution of respondents based on pocket money amount and breakfast habits in relation to nutritional status (n = 48). The univariate analysis of his study describes the frequency distribution of the responden characteristic

3.1 Table

Table 1. Frequency Distribution

Characteristic	(n)	(%)
Nutritional Status		
Underweight	3	6,3
Obese	10	20,8
Normal	35	72,9
Pocket Money		
Low	4	8,3
High	44	91,7
Breakfast		
Rarely	13	27,1
Often	35	72,9
Total	48	100

Table 1. Presenting the frequency distribution of respondents based on nutritional status, pocket money amount, and breakfast habits among 48 students at SDN 1 Mulyasari, where most respondents had normal nutritional status (72.9%), high pocket money (91.7%), and frequent breakfast habits (72.9%).

The bivariate analysis of this study illustrates the relationship between pocket money amount and breakfast habits with children's nutritional status.

3.1 Tabel

Table 2. The Relationship Between Pocket Money Amount and Breakfast Habits with Children's Nutritional Status

Variabels	Characteristic	Underweight		Normal		Obese		Total		p-value
		n	%	n	%	n	%	n	%	
Pocket Money	Low	0	0	4	100	0	0	48	100	0,445
	High	3	6,8	31	70,5	10	22,7			
Breakfast	Often	1	2,9	27	77,1	7	20	48	100	0,254
	Rarely	2	15,4	3	23,1	8	61,5			

The data shows that respondents with high pocket money are more likely to be obese (22.7%) than those with low pocket money (0%). Meanwhile, in terms of breakfast habits, respondents who rarely eat breakfast show a higher proportion of obesity (61.5%) than those who eat breakfast regularly (20%).

Discussion

The results of the study indicate that the majority of respondents with high pocket money amounts had normal nutritional status (70.5%), but a proportion of 22.7% in this group were found to be obese. Conversely, all respondents with low pocket money had normal nutritional status. These findings suggest a tendency for high pocket money to potentially influence nutritional status, although statistical tests showed no significant association between pocket money and nutritional status (p = 0.445).

The findings are consistent with research (4) at SMPN 16 Semarang, which showed that there was no significant relationship between the amount of pocket money and the nutritional status of students (p = 0.530). This is possible because pocket money is not always allocated for food, but also for other needs such as transportation, phone credit, or other school needs (8). However, students with higher allowances have greater access to high-calorie foods, so this remains an issue that needs to be addressed in the context of nutrition education and consumption monitoring.

In terms of breakfast habits, this study shows that most respondents who rarely eat breakfast have obese nutritional status (61.5%), while those who frequently eat breakfast are predominantly of normal nutritional status (77.1%). Although statistical tests did not show a significant relationship (p = 0.254), these findings descriptively support the basic concept that breakfast plays an important role in regulating daily calorie intake and maintaining metabolic balance in the body.

One possible reason why breakfast habits do not show a significant relationship with nutritional status is because the quality and type of food consumed at breakfast is not standardized(9). Even though students claim to eat breakfast regularly, it does not necessarily mean that their intake meets the energy and macro and micro nutrient requirements needed by the body(10). In some cases, breakfast consists only of snacks or instant drinks that are low in nutrients, so they do not contribute enough to the daily energy balance. In addition, the effect of breakfast on nutritional status can also be influenced by overall eating patterns, including intake during the day and at night, as well as daily physical activity. Thus, the frequency of breakfast alone is not sufficient to reflect nutritional consumption patterns that directly impact students' nutritional status(11).

In addition to food quality, another factor that may explain the insignificant relationship between breakfast habits and nutritional status is children's consumption behavior, which is influenced by their social environment and family habits(12). Some children may be accustomed to eating small portions in the morning and shifting their energy intake to other times of the day, without causing an overall energy imbalance. In addition, children's tendency to consume high-energy, low-nutrient foods outside of breakfast hours also affects their nutritional status, regardless of whether they eat breakfast or not(13). This pattern shows that overall eating behavior throughout the day is more decisive in determining nutritional status than looking at just one aspect, such as breakfast frequency(14).

These results are consistent with research (5) at Bunda Mulia High School in West Jakarta, where the proportion of malnutrition was higher among students who did not eat breakfast (31.6%) than among those who ate breakfast regularly (22.1%). Although the p-value was also not significant (p = 0.139), both studies highlight the importance of establishing healthy breakfast habits as part of preventive measures against adolescent obesity.

Based on a literature review by (15), It was found that although pocket money can increase children's purchasing power for food, the direct relationship between the amount of pocket money and nutritional status is not always significant. One study at SMPN 16 Semarang (72 respondents) using the Spearman rank test showed a p-value of 0.534, indicating no significant relationship between pocket money and nutritional status; conversely, dietary patterns were found to be significantly correlated (p < 0.001, r = 0.479). Similar results are reinforced by research from (16) which states that

the amount of pocket money students receive is not significantly related to their nutritional status, while physical activity has a significant effect on obesity.

These findings indicate that pocket money is not the main determinant of children's nutritional status; rather, how the money is used (e.g., to purchase healthy or unhealthy foods) and other moderating factors such as consumption patterns and physical activity play a more direct role. School environment conditions, such as the availability of unhealthy snacks, can also indirectly influence the impact of pocket money on nutritional status(17) .

The phenomenon of the morning breakfast habit can also be explained physiologically by hormonal mechanisms. (18) revealed that breakfast helps stabilize the hormones leptin and ghrelin, which play a role in regulating feelings of fullness and hunger. Skipping breakfast causes an imbalance in these hormones, resulting in increased appetite and excessive calorie consumption during the day. This study also found that respondents who rarely ate breakfast were more likely to be obese(19).

Conclusion

This study aims to determine the relationship between pocket money and breakfast frequency with the BMI status of students. Based on the analysis of 48 respondents, it was found that most had high pocket money, frequently ate breakfast, and had a normal BMI status. However, no statistically significant relationship was found between pocket money and BMI or between breakfast frequency and BMI. These results suggest that the amount of pocket money or breakfast habits may not directly influence students' nutritional status. Other factors may also influence BMI, such as overall food consumption, daily physical activity, and other lifestyle factors. Therefore, further research is needed, considering more variables and using a larger sample size to generalize the results. Additional studies are also recommended to explore qualitative aspects of students' eating habits to gain a more comprehensive understanding of the factors influencing their nutritional status.

References

[1] Ayu H, Hidayah N, Widayanti A, Masykuroh K. Mengenalkan Pentingnya Makanan Gizi Seimbang untuk Pertumbuhan Anak Usia 5-6 Tahun di KB Kenanga Desa Jagan. J Nusant Berbakti. 2025;3:126–38.

[2] Subagio R, Simamora R, Indrawati L. HUBUNGAN STATUS GIZI DENGAN PRESTASI BELAJAR ANAK SEKOLAH DASAR. J Peduli Masy. 2024;6:1955–64.

[3] Rahma S, Noerfitri. Hubungan antara Pengetahuan Gizi dan Uang Saku dengan Sikap dalam Memilih Makanan oleh Siswa SMA Islam PB Soedirman Selama Masa Pandemi Covid-19. J Penelit Kesehat Suara Forikes. 2022;13(3):2020–3.

[4] Hakimi A, Sholichah F, Hayati N. Hubungan Uang Saku dan Pola Konsumsi Makanan Terhadap Status Gizi Siswa SMP Negeri 16 Semarang. J Ilm Gizi dan Kesehat. 2023;4(02):32–6.

[5] Sulianto J, Charissa O. HUBUNGAN KEBIASAAN SARAPAN DENGAN STATUS GIZI PADA SISWA-SISWI SMA BUNDA MULIA JAKARTA. J Ilmu Kedokt dan Kesehat. 2024;11(6):1211–9.

[6] Sartika W, Herlina S, Qomariah S, Juwita S. Pengaruh Uang Saku Terhadap Kejadian Gizi Lebih Pada Remaja di Masa Pandemi Covid-19 The Effect of Pocket Money on The Events of Overnutrition In Youth Times Pandemic Covid 19. J Heal Technol Med. 2022;8(1):400–5.

[7] Wang K, Niu Y, Lu Z, Duo B, Effah CY, Guan L. The effect of breakfast on childhood obesity: a systematic review and meta-analysis. Front Nutr. 2023;10(September).

[8]   Hanum N, Ramadhani S. Pengaruh jumlah uang saku pada keputusan konsumsi makanan cepat saji di kalangan mahasiswa ketintang. J Media Akad. 2024;2(12).

[9]   Yunawati I, Hadi H, Julia M. Kebiasaan sarapan tidak berhubungan dengan status gizi anak sekolah dasar di Kabupaten Timor Tengah Selatan, Provinsi Nusa Tenggara Timur. J Gizi dan Diet Indones (Indonesian J Nutr Diet. 2016;3(2):77.

[10]   Kadir S. Relationship of Integrated Macro Nutrition. Jambura J. 2019;1(1):1–6.

[11]   Sammeng W, Soumokil O. Hubungan Sarapan Pagi Dengan Status Gizi Dan Prestasi Akademik Mahasiswa. J Kesehat Terpadu (Integrated Heal Journal). 2024;14(2):100–9.

[12]   Hanim B, Ingelia I, Ariyani D. Kebiasaan Sarapan Pagi dengan Status Gizi Anak Sekolah Dasar. J Kebidanan Malakbi. 2022;3(1):28.

[13]   Natalia KD, Picauly I, Sinaga M. Hubungan riwayat sarapan pagi, tingkat kecukupan gizi makro dan status gizi dengan prestasi belajar anak di SD Inpres Lili Kabupaten Kupang. Public Heal Risk Assesment J. 2023;1(1):74–83.

[14]   Purnama NLA. Perilaku makan dan status gizi remaja. J Penelit Kesehat. 2019;9(2):57–62.

[15]   Adhikarapatni I. Literature Review Hubungan Pemberian Uang Saku Dan Aktivitas Fisik Dengan Kejadian Overweight Pada Remaja. 2020;

[16]   Rosyidah Z, Andrias DR. SARAPAN BERHUBUNGAN DENGAN STATUS GIZI LEBIH ANAK SEKOLAH DASAR. J Media Gizi Indones. 2015;10:1–6.

[17]   Julinar, Lubis S. HUBUNGAN KEBIASAAN JAJAN DENGAN STATUS GIZI SISWA SD NEGERI 55 KOTA BANDA ACEH. J Sains Ris. 2021;11(September):303–14.

[18]   Chowdhury EA, Richardson JD, Tsintzas K, Thompson D, Betts JA. Carbohydrate-rich breakfast attenuates glycaemic, insulinaemic and ghrelin response to ad libitum lunch relative to morning fasting in lean adults. Br J Nutr. 2015;114(1):98–107.

[19]   Mahdi S, Dickerson A, Infield Solar G, Caton SJ. Timing of energy intake and BMI in children: Differential impacts by age and sex. Br J Nutr. 2023;130(1):71–82.