The Relationship Between Snacks Consumption Patterns And Nutritional Status In Paya Peunaga Elementary School Children In Meureubo Sub-District

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Abstract

One demographic at risk for dietary issues is elementary school-aged youngsters. Snacking is a common practice among youngsters of school age. When you grow up in a household, nibbling becomes second nature. Snacking on unhealthy foods poses risks to children's health, reduces their appetite, and, in the long run, impacts their nutritional condition. Consumption of nutrients in inadequate amounts is the root cause of nutritional disorders. The focus of this study is on the students of Paya Peunaga Elementary School in the Meureubo District, and specifically how their snacking habits relate to their nutritional condition. This study used a cross-sectional strategy to examine correlations. For this research, 75 participants were used as a sample. The statistical tests were applied to each of the variables that were examined. Out of the 75 respondents surveyed, the following conclusions were drawn from the study and subsequent discussion, 30 respondents (40%) were male and 45 were female. (604%). Most of the ages were 10-12 years old totaling 48 students (64%) and the remaining 8-9 years old totaling 27 students (36%). It is known that there is no significant relationship between snack consumption patterns and nutritional status among Paya Peunaga Elementary School children, Meureubo District with a value of 00.045 (p > 0.05) where Fcount is 0.321 > Ftable 0.05. Advice for the Principal of Paya Peunaga Elementary School is that the school should be more selective in choosing what snacks will be included in the school canteen.

Keywords: Nutritional Status; Pattern; Snack Consumption

Introduction

Food consumption patterns, especially children's snacks, have shifted. From wet food to dry food, many foods sold in the community have changed, especially the use of preservatives and colourings. The impact is less healthy for children who consume these snacks Zelika Riandini Prischilia et al. (2018). In terms of under-five nutritional health, social, economic and environmental issues are all interconnected, and over-nutrition is another type of malnutrition. According to the 2022 Riskesdas, the percentage of overweight children under five in urban areas was 25.1%, while in rural areas it was 17.8%. People in wealthier socioeconomic groups also tend to be heavier and fatter (Riskesdas, 2018).

There are many nutritional mismatches happening today. A person's nutritional status may change depending on the rate of physical development. In addition to linking physical activity and nutrition to risk

factors for non-communicable diseases including obesity, high blood pressure, and cardiometabolic, a study found that these variables have a significant impact on child development. Many people attribute children's current fast food culture to globalisation and urbanisation, when children eat a lot of empty calories and do not exercise (Riskesdas, 2018).

Among Indonesian children aged 5 to 12 years, 30.7 per cent were underweight, 11.2 per cent were too thin, and 18.8 per cent were overweight. Among Indonesian provinces, East Nusa Tenggara ranks third for the largest rate of underweight and very underweight people, while the lowest rate of obesity is found there. Parents give their children indirect support for their snacking habits, according to Eunice (2009: 29-38). Consistent daily or weekly pocket money is one way parents help their children. The survey found that almost all participants (93%) received pocket money. While 7% of students did not have access to regular spending money, those students who did had to bring food from home to make ends meet. The journal also found that while 92.5% of students ate their snacks in the school cafeteria, 33.0% bought their food from outside the school grounds, and 21.0% bought their snacks from within the school grounds (Sasmito, A. B, 2018).

According to the PJAS National Safety Profile Monitoring and Verification Report in 2022, it was found that 98.02% of children ate snacks in canteens, both school canteens and canteens in their respective villages and only 2% never ate snacks in canteens (Tanziha, 2016). Based on the PJAS National Safety Profile Monitoring and Verification Report 2022, PJA comprises 27.44% of protein and 31.06% of calories in daily snacks, according to previous statistics. The majority of snack eaters among school-aged children (PJAS) are between seven and twelve years old, according to statistics compiled by the Information Centre of the Indonesian Ministry of Health. (PJAS, 2022).

According to the World Health Organisation (WHO), a country is considered to have adequate nutritional status if the prevalence of underweight is less than 5% (Adawiah et al., 2019). The Ministry of Health of the Republic of Indonesia (2018) reported that 7.5% of children aged 5 to 12 years were undernourished in 2017, based on the findings of nutritional status monitoring in 2017. According to Adawiah et al. (2019), this highlights the important role of nutritional status in Indonesia.

According to Hutabarat (2023), a person's nutritional status can be influenced by two sources: first, their direct consumption of food and infectious diseases; and second, their indirect knowledge of nutrition, education, and income level (Punjastuti et al., 2023). In addition, Hapsari et al. argue that food insecurity and poor income levels contribute to children's nutritional status, especially their risk of undernutrition (Lehan et al., 2023).

Inadequate nutrition during childhood hinders children's cognitive development, which in turn affects their capacity to produce and work as adults (Adawiah, N. J., Avianty, I., & Sari, M. M. 2019). Given this, the state of nutrition, especially in young people, is a key indicator of the quality of human capital. Sambo, M., Ciuantasari, F., & Maria, G. (2020).

The results of the Indonesian Demographic Health Survey 2022 and Riskesdas 2022 show that the

nutritional incidence rate for stunting from 24.4 per cent in 2021 to 21.6 per cent in 2022, then Wasting increased from 7.1 in 2021 to 7.7 per cent in 2022, then Underweight and Overweight decreased from 3.8 per cent in 2021 to 3.5 per cent in 2022 (Department of Health, 2022). Based on previous research by Rahma (2023) in Denpasar city in 2022, it was revealed that non-obese samples constituted the majority (88.1%). The remaining students had a body mass index (BMI) of 24.9, meaning that 11.9% of Denpasar City primary school students were overweight. Assessment of nutritional status based on the tuberculin/urea ratio can be categorised as normal or obstructed, depending on the length of time since the last meal. According to the findings, of the 30 samples, the majority were in normal condition. However, of the 50 samples, 40 had stunted growth, which accounted for 10.3% of the total.

One of the symptoms of malnutrition is the lack of normal, age-appropriate linear growth. Inhibition of growth hormone (GH) metabolism leads to decreased production and release of insulin-like growth factor (IGF-1), which in turn leads to malnutrition. During the formative years of a person's life, when they have an increased need for essential nutrients including protein, calcium, and folate. Delays in tooth eruption can result from growth retardation and bone maturity caused by deficiencies in protein and calcium, which are essential substances in growth (Alshukairi, 2019; Lantu et al., 2015; Wiyono, 2016).Malnutrition affected 30.8% of the population in Indonesia in 2018, according to statistics from the Basic Health Research (MoH RI).

According to the preliminary findings, Paya Peunaga Primary School does have a school canteen; however, there are more vendors selling various foods around the school. Paya Peunaga Primary School has a policy that students should not leave the school grounds when classes are in session. There are many types of snacks sold in the school, including tea pochi, ice candles, ice skins, Qettela, Chiki-Chiki, Somay, and various drinks. Given this background, the researchers wanted to dig deeper into the correlation between the snacking habits of primary school students and their nutritional status. Meureubo district in Paya Peunaga.

Methods

This study used a descriptive quantitative research method with a cross-sectional design. The population in this study were students of class 3A (20 students), 4A (20 students), 4B (20 students) and class 5A of Paya Peunaga Elementary School (15 students), the population size was (75) people. A total of 75 children from classes 3A, 4A, 4B, and 5A became the research sample. The sample was selected using a complete sampling strategy that does not rely on chance. sampling approach in which every member of the population has an equal chance of being selected from the pool, regardless of how many or few there are in the population (Mashuri 2010). Questionnaires were used to collect data, which were then tested using Chi-square exact test and Fisher.

Results

Univariat Analysis

Of the 75 students surveyed, 45 were female (604% of the total) and 30 were male (40% of the total). This information is shown in Table 1. That more females than males were involved is evident from these statistics.

Table 1. Frequency Distribution Based on Gender

Gender	F	%
Male	30	40
Female	45	60
Total	**75**	**100**

(Source: Primary Data, 2023)

According to the snack consumption categories in Table 2, the majority of the sample (10 samples, or 10%) ate snacks at least once a day, with an average of twice a day (or 80%).

Table 2. Frequency distribution based on snack consumption

Frequency of snacks consumption	f	%
1 X A Day (Rarely)	10	10
2 X A Day (Frequently)	40	80
3x a day (more often)	25	10
Total	**75**	**100**

(Source: Primary Data, 2023)

Berdasarkan tabel diatas diketahui bahwa di SD paya peunaga terdapat pengukuran status gizi (IMT/U) responden dikategorikan menjadi 3 kelompok yaitu pada anak kurus sebanyak 9 atau 12%, normal sebanyak 54, atau 72% dan gemuk sebanyak 12, atau 16%.

Table 3. Frequency Distribution Based on Nutritional Status

Nutritional status	f	%
Skinny	9	12
Normal	54	72
Fat	12	16
Total	**75**	**100 %**

(Source: Primary Data, 2023)

Bivariat Analysisi

The relationship between snacks consumption patterns and nutritional status of elementary school children at Paya Peunaga Elementary School, Meureubo District.

Table 4. Nutritional Status Of Snack Types

Variable Type	Nutritional status (IMT/U)				P Value
	Baik		Kurang		
	f	%	f	%	
Types of snacks					
Good	37	70	16	30	0,045
Not Good	22	100	0	100	

(Source: Primary Data, 2023)

From the table above, the statistical test results obtained a significance value = 0.045 (p> 0.05) where

Fhitung 0.321> Ftabel 0.05 so Ha is accepted with the category of good consumption patterns on nutritional status is 30 percent while the less good snacks consumption patterns on nutritional status is 11%. So it can be concluded that there is no relationship between snacks consumption patterns and nutritional status in elementary school children of Paya Peunaga, Meureubo District.

Table 5. Nutritional Status Of Snacks Consumption Pattern

| Variable Type | Status Gizi (IMT/U) | | | | P Value |
| | Baik | | Kurang | | |
	f	%	f	%	
Snack consumption					0,654
Good	40	89	5	11	
Not Good	21	70	9	70	

(Source: Primary Data, 2023)

From the table above, the statistical test results obtained a significance value = 0.654 (p> 0.05) where Fcount 0.321> Ftable 0.05 so Ha is accepted with the category of good consumption patterns on nutritional status is 30 percent while the poor consumption patterns of snacks on nutritional status is 11 percent. So it can be concluded that there is no relationship between snacks consumption patterns and nutritional status in elementary school children of Paya Peunaga, Meureubo District

Discussion

Snacking patterns are a set of habits that children exhibit when they are in the early grades of school, such as eating various snacks. According to the findings of the study, 82% of primary school students had unhealthy snacking behaviour, while only 16% had healthy snacks. Then, since the SIG value was 0.004 <0.05, the null hypothesis (Ho) was accepted and rejected according to the findings of the bivariate test and cross tabulation analysis. Ha! Thus, snacking habits are the independent variable while nutritional status is the dependent variable. The findings of this study are consistent with the findings of Noviani et al. (2016), who also found no correlation between snacking and nutritional status (p=0.781, p>0.005).

The same study by Anggi ddk (2014) did not find a significant relationship between snack consumption habits and the nutritional status of elementary school students at IKIP I Makassar. This is confirmed by the p value of 0.828 obtained using the Chi Square test. Unlike the work of Marliza A. (2013), this investigation took a unique approach. The findings showed a strong correlation between children's snacking behaviour and their nutritional health, as indicated by the statistical test showing a p value of 0.001 <0.05. Another study (2021) found no relationship between snack consumption habits and nutritional status as an independent variable, and the p value was 0.274 > 0.05, suggesting that the Kendall-Tau test results are consistent with these findings. This is because, in addition to snacking patterns, this study failed to include children's breakfast habits, which may have an impact on their nutritional status. Seventy per cent of primary school students in Bogor City snack frequently, according to this survey and previous research in the area. In addition, research conducted at 'SDN Palasari 02 Bogor found that snacks had no effect on nutritional status but increased z-

score (17). In contrast, 63.7% of primary school children at N Koroulon 1 Ngemplak Sleman' do not regularly snack, according to a separate study. Many things can influence these results; some of them are parental influence, cultural norms, peer pressure, cost, brand, level of understanding and attitude.

While the first study was conducted in a rural area, the current study involved children from SD Negeri Kledokan Depok Sleman Yogyakarta which is basically an urban environment. The result is that food for children acts differently. One type of eating behaviour is snacking. How often people eat, what kind of food they eat, how much they eat, whether they believe in food (such as abstinence), how they share food with family members, how they accept food (like or dislike), and how they choose what to eat are examples of snacking habits and behaviours. The majority of students in this study ate snacks regularly (40 out of 80). The frequency of snacks eaten by young people was 43.1%, according to Pristiyanti (2017). One factor that attracts students to buy snacks is the number of sellers operating outside the school grounds. Primary school students at SD Negeri 156 Maluku Tengah showed no association between snack intake and nutritional status, according to the findings of the study. The findings of this study corroborate the findings of Novianti, A. (2016). according to her, the eating habits of primary school children have no impact on their nutritional health. Bentul Sonosewu Yogyakarta.

The availability of snacks in primary school cafeterias can also affect children's intake while attending school, according to a study by Sri Indra Wahyuni (2020). No single food can provide all the nutrients the human body needs. Children at school have to consume a wide variety of foods, even those sold on the street, because of this. Children in the school age group need extra dietary support as they experience rapid physical, cognitive, emotional and social development. Taking this into consideration is crucial because, starting from infancy, a person's eating habits determine their nutrition for the rest of their lives. Assuming one's dietary nutrient intake is equal to one's metabolic nutrient requirements, one is said to be in a state of nutrition. Gender, physical activity level, body weight and other factors all play a role in determining one's specific dietary needs.

Optimal nutrition Children who are healthy in all respects - in terms of weight, immune to disease, physically active and agile - are considered high status. The nutritional status of children at Peunaga Paya Primary School is a cause for concern, even though balanced nutrition is essential for optimal child development. This is due to the fact that many students engage in unhealthy snacking habits while at school, which increases the risk of obesity and malnutrition. These figures show that snacks contain a lot of calories and fat but little fibre. One of the causes of obesity may be that people eat fewer types of food but more frequently. Especially if the respondent's parents are overweight. The nutritional status of the respondent will be affected by this. Direct factors, such as food consumption, and infectious diseases are two major determinants of nutritional status. Indirect variables, such as economic circumstances, family dynamics, productivity, and housing, are responsible for both elements. (Saputra & wahyu, 2017).

Consumption of such snacks is not healthy for growth and development. However, with good education, primary school children compensate with consumption of vegetables and fruits in the form of fruit

pieces or in the form of juice, so that the nutritional status of primary school children is well maintained..

Conclusion

The frequency of snacks consumption of elementary school students of paya puenaga sub-district meureubo is 1x a day with a total of 10 samples (10%) and the average frequency of snacks consumption is 2 times / day, which is 80%. Based on the significance value = 0.045 (p> 0.05) where f value 0.321> 0.05 so Ha is accepted with the category of good consumption patterns on nutritional status is 30%, while the less good snacks consumption patterns on nutritional status is 11%. The nutritional status of the IMT / U z-score value as a large sample of normal nutritional status with an average value of $3.28 \pm 0.71SD$.

To improve the snacking patterns of primary school children, parents should pay more attention to the snacks that children consume. One way is to bring food and drinks to class. It is important to be more careful when choosing snacks to sell to primary school students at small school stalls. For the health, safety and hygiene of snacks sold at stalls to primary school students. Researchers need to create more dietary and nutritional status factors. One way that can be done is to add more variables and create new variables to expand the research library in the field of nutrition

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