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Description of Eating Behavior, Physical Activity with the Incidence of Overweight in Student Elementary School at Surabaya

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ABSTRACT
Indonesia is developing country that faces many nutrition problems. The double nutritional challenge facing Indonesia today is the unresolved problem of under-nutrition and at the same time the problem of overnutrition. Overweight and obe-sity. The highest prevalence of obesity in primary school children in 2010-2013 was in Surabaya at 10.6%. To determine the description of eating behavior, phys-ical activity, and the incidence of overweight in 5th grade students at SDN Pacar Keling V Surabaya City. This type of research is descriptive and the sampling technique is done by proportional random sampling technique. Eating behavior in the good category was 56.1%, mild physical activity level was 60.3% and the in-cidence of overweight was 48.9%. The results of this study indicate that there is no relationship between eating behavior and the incidence of overweight, there is a relationship between eating behavior and overweight, and there is a relationship between physical activity and the incidence of overweight. Implement good eating behavior and a balanced healthy diet with sufficient physical activity for elemen-tary school children.

Keywords: Eating Behavior, Physical Activity, Overweight Incidence

INTRODUCTION

In 2020 research by United Nations Children's Fund. Point by point there has been a change in the eating regimen of youngsters in Indonesia, which has encountered a two-overlap expansion in the utilization of greasy and handled food sources. The variety of food hotspots for youngsters in Indonesia is additionally generally poor, with just 25% devouring wellsprings of iron and significant micronutrients from crea-ture and plant sources. An investigation of a gathering of youngsters likewise saw that as 57.6% of respondents had an eating routine that didn't follow General Guidelines for Balanced Nutrition and 57.6% of respondents consumed fewer natural products. Another fixation likewise viewed that 97.5% of teenagers had not met their day-to-day energy use as indicated by RDA. Then again, the degree of active work of young people was likewise observed as exceptionally low, in particular under one and a half hours/week [1–7].

In the meantime, East Java Region has a higher commonness of overnutrition than public information, to be specific the wellbeing status of juvenile heftiness of 11.3% and weight of 5.1%. Surabaya is the biggest city and the downtown area in East Java whose weight predominance has likewise surpassed public information and a normal of 8.3% [8]. The highest prevalence of obesity in elementary school children between 2010-2013 was in Surabaya with 10.6%. This prevalence data shows that the prevalence of obesity in elementary school children in Surabaya is quite high [9–14]. Based on initial research conducted at SDN Pacar Keling V in Surabaya City, researchers found that 90% of the 10 children measured were obese, and 10% were overweight. Observations also indicated that many vendors continue to sell sweet and high-calorie snacks.

Consequently, the researchers aimed to investigate the levels of physical activity and the incidence of obesity among fifth-grade children at SDN Pacar Keling V in Surabaya.

RESULT AND DISCUSSION

This cross-sectional observational study was conducted on 255 fifth-grade students from SDN Pacar Keling V in Surabaya, with a sample size of 73 students selected randomly. The study collected data on nutritional status through BMI measurements and categorized the students into overweight and non-overweight groups. Additionally, an eating behavior questionnaire and a Physical Activity Level (PAL) questionnaire were used to assess the students' eating habits and physical activity levels. The data were analyzed using univariate analysis to identify patterns in the frequency distribution.

Table 1. Distribution of Characteristic Participants

Age (Years)	n	%	Mean	Min-Max
10	14	19.2	10.88	14-18 years old
11	58	79.4		
12	1	1.4		
Total	73	100.0		

Based on table 1 shows that the total number of samples is 73 students, the mayoriti of sample aged 11 years old are 58 sample (79,4%). They are age range fluctuated between 10-12 years old, with a typical period of 10 years and 8 months.

Table 2. Frequency Distribution of Eating Behavior

Variabel	n	%
Eating Behavior		
Deficit <60%	18	24.7
Enough 60-75%	14	19.2
Good >76%	41	56.1
Physical Activity		
Light	44	60.3
Moderate	26	35.6
Heavy	3	4.1
Overweight Categori		
Overweight	43	58.9
Non-overweight	30	41.1

According to Table 2, the study's findings indicate that 56.1 percent of respondents exhibit healthy eating habits. The majority of respondents (60.3%) participate in light physical activity, followed by 35.6% in moderate physical activity and 4.1% in heavy physical activity.

Since social and environmental factors have a significant impact on children, environmental change is anticipated to be significant throughout this developmental stage. But rather than emphasizing environmental changes that support healthier behavioral choices, the majority of interventions were centered mostly on individual-based educational approaches, such as nutrition/diet education sessions coupled with the promotion of physical activity and lifestyle to students, parents, and school staff [8, 15–19]. Maintaining public health mostly depends on eating a balanced, healthful diet and getting regular exercise. Because dietary and physical activity modifications can result in disorders like overweight, these behaviors have gained significant relevance [20–22].

The results of this research show that the results of the 2024 Taihuin Baihwai Paidai University, the 5th class results at SDN Pacar Keling V Surabaya, are the highest frequency results and good performance, with 41 students with a percentage of 56.1%. Consuming food in large portions and not in proportion to it can lead to overweight which carries the risk of causing harm to health, especially degenerative diseases. As a result, the pattern of maikain tends to choose to make the dish saturated fat, simple carbohydrates, and low fiber. A pattern of eating that is high in fat, especially fat that is accompanied by certain fat levels, can trigger obesity [23].

Practice good nutrition if you do it according to the nutrition domain as typed

by the Ministry of Health and Occupational Safety. According to AIfrinai, a study of eating involving the consumption of induced foods, nutrition as a result of family growth. This study was conducted by Cahyaning who found that the habit of consuming fast food, play drinks, and processed foods tends to cause excess weight because these foods are high in fat and calories but low in nutritional value [24–26].

The findings of this study indicate that in the 2024 academic year, grade 5 students at SDN Pacar Keling V Surabaya had the highest frequency of light physical activities, namely 44 students with a percentage of 60.3%. The results of the questionnaire showed that most of the respondents carried out physical activities with light intensity. The low level of physical activity can be seen from the large changes in the lifestyle of the students, such as the many electronic games that replace physical activities [27–29].

A balanced diet and regular exercise are like a tandem that you can't attain without the other, and physical activity is crucial to achieving the health benefits of food. In our study, there was a greater proportion of participants who did not engage in physical activity. When comparing our findings to previous research, the proportion of participants who did not engage in physical exercise was greater (70.6% versus 59.6%) [30].

Overweight status in grade 5 was assessed using BMI calculation which was then categorized based on z-score as a measure of deviation from individual values. The results of BMI calculation showed that 43 students (58.9%) were classified as overweight, while 30 students (41.1%) were not classified as overweight. This research shows that most of the respondents have overweight nutritional status, which can be interpreted as nutritional consumption that exceeds their nutritional needs. Other physical activities also play an important role in determining their nutritional status. A healthy and balanced food pattern, by choosing the right food, contributes to good nutritional conditions. Dietary intake that exceeds nutritional needs may lead to overweight and disease due to excess nutrition, while dietary intake that exceeds nutritional needs may lead to decreased dietary intake and increased risk of disease23–26. Dietary intake that is nutritionally balanced may help meet nutritional needs. their hair, which is paid in turn to support growth, development, and optimal health [31–37].

CONCLUSION

All respondents were 73 people, who were 10-12 years old, 14 students aged 10, 58 students aged 11 years and 1 student aged 12 years. The eating behavior of 73 re-spondents, 18 of them showed poor eating patterns, 14 respondents had eating be-havior in the sufficient category, and 41 respondents in the good category. Based on physical activity responded, 44 students were in the category of light physical activi-ty, 26 students were in the category of physical activity; am in the moderate catego-ry, and 3 of them were in the severe category, for the occurrence of overweight at SDN V Pacar Keling as many as 43 students were overweight, and 30 other students were not overweight.

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