

Analysis of Nutritional Status of Junior High School 3 Belawa Wajo Regency

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Abstract

This study aims to obtain answers to the research question: What is the nutritional status of students at Junior High School 3 Belawa Wajo, Regency. This research is descriptive in nature with a single (independent) variable. The study population consisted of 81 female students of Junior high School 3 Belawa Wajo, class IX, in 2024. The research sample comprised 30 students selected through purposive sampling. The data analysis technique used was descriptive analysis (percentage) employing the SPSS Version 18.00 software. Based on the results of data analysis, it can be concluded that the nutritional status of the female students in class IX Junior High school 3 Belawa Wajo in 2024 varied according to the following classification: Low = 14 students (48%), Ideal = 14 students (45.33%), and Overweight = 2 students (6.67%). The mean value was 17.4317, with a standard deviation of 2.6521 variance of 8.765, range of 12.16, minimum value of 13, 78, and maximum value of 24.72. Therefore, it can be concluded that the nutritional status of the female students in class IX at Junior High School 3 belawa , Wajo in 2024 was predominantly in the Low Body category.

Keyword: Analysis, Nutritional Status, Students of Junior High School.

INTRODUCTION

Nutritional problems related to food have a significant influence on children's growth and development. There are six essential nutrients: carbohydrates, fats, proteins, minerals, vitamins, and water (Latifah, 2022). A deficiency in any of these nutrients can decrease the

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body's immunity, reduce physical capacity, and hinder both physical and mental development in children. Therefore, nutritional needs must be met through adequate food consumption, both in terms of quantity and quality.

School-aged children need sufficient food intake to be able to learn effectively in class and participate in outdoor activities. At SMP Negeri 3 Belawa, Wajo Regency, the school canteen is available to meet students' food needs. However, many outside vendors also sell various snacks such as siomay, sausages, ice pops, fried foods, and packaged snacks. Unfortunately, not all of these snacks are considered healthy or nutritious; some even contain additives such as artificial coloring, which can pose health risks to children.

In general, school children have quite busy activities, so they need adequate nutritional intake to maintain stamina. Nutrient deficiencies can lead to impaired bodily functions and metabolism. The condition at SMP Negeri 3 Belawa, Wajo Regency, shows that the implementation of a balanced nutritious diet (the "four healthy, five perfect" concept) has not been fully realized. This can be seen from students who skip breakfast due to their parents' limited economic conditions—most of whom work as farmers or laborers. Even among those who do eat breakfast, the nutritional content often does not meet their energy needs.

As a result, many students experience fatigue and lack concentration in their studies (Adrianto & Ningrum, 2021). This condition also affects physical education classes, where students often appear tired quickly, lack enthusiasm, or ask for permission to rest. Physical education (PE) teachers play an important role in monitoring students' physical fitness conditions so they can adjust activities and exercise intensity according to each student's ability.

Physical education is an essential part of overall education because it not only emphasizes physical activity but also understanding the importance of nutrition for the body. Therefore, PE teachers are expected to provide students with lessons about nutrition.

In addition, the government also pays great attention to improving public nutrition as an effort to enhance the quality of human resources. Good nutritional status reflects a person's quality of life. Optimal health and physical fitness support daily activities and contribute to improving the quality of human resources.

Thus, physical fitness is influenced not only by physical activity but also by healthy and nutritious eating habits (Ferida, 2023). Students who receive balanced and proportional nutritional intake tend to have good nutritional status (Mexitalia et al., 2024).

METHOD

This study employed a quantitative approach with an observational design, aiming to



describe phenomena based on observations of variables without giving direct treatment to the subjects (Arifin, 2021; Sugiyono, 2022).

The population in this study consisted of 180 respondents. Considering the relatively large population size, the sampling was conducted using a random sampling technique to ensure that each member of the population had an equal chance of being selected as a research sample (Sugiyono, 2022). Based on the calculation results, the number of samples used was 30 respondents.

Data were collected through the measurement of Body Mass Index (BMI), which includes two main parameters: height and weight. This technique was used to objectively assess the nutritional status of individuals (Abduh et al., 2021).

The obtained data were analyzed using descriptive analysis to provide a general overview of the sample characteristics. In addition, nutritional status analysis was conducted using the Body Mass Index (BMI) formula to determine the nutritional classification of each respondent (Abduh et al., 2021; Mexitalia et al., 2020).

RESULTS AND DISCUSSION

Based on the research findings, an overview of respondents' characteristics by age and gender is presented. In terms of age, the majority of respondents were between 14–15 years old, accounting for 43% of the total sample. The remaining respondents were aged 12–13 years.

Descriptive analysis of the measurement results showed that students' heights ranged from a minimum of 125 cm to a maximum of 143 cm, with an average height of 141 cm. As for body weight, the results indicated a minimum value of 27 kg and a maximum of 45 kg, with an average weight of 37 kg among the 30 respondents.

After calculating and classifying based on the Body Mass Index (BMI), the descriptive analysis yielded the following results: the mean value was 1.231 points, the standard error of the mean was 0.015 points, the standard deviation was 0.114 points, the variance was 0.018 points, the range was 0.641 points, with a minimum value of 1.102 points and a maximum value of 1.432 points.

The analysis of the nutritional status of students at Junior high school 3 Belawa District, Wajo Regency, revealed variations in nutritional status categories based on BMI standards. Among the 30 students sampled, the results were as follows: "Very high" category: 1 student (3.3%) "High" category: 5 students (16.7%) "Above average" category: 13 students (43.3%) "Below average" category: 6 students (20.0%) "Low" category: 3 students (10.0%) "Very low" category: 2 students (6.7%)



Based on the analysis of nutritional status by gender, it was found that among male students, the distribution was as follows: Very high": 1 student (4.5%) "High": 4 students (18.2%) "Above average": 8 students (36.4%) "Below average": 4 students (18.2%) "Low": 3 students (13.6%) "Very low": 2 students (9.1%)

Meanwhile, among female students, the analysis showed the following distribution: "High": 1 student (12.5%) "Above average": 5 students (62.5%) "Below average": 2 students (25.0%). No students were found in the "very high," "low," or "very low" categories.

Overall, considering the highest frequency and percentage, it can be concluded that the majority of students at Junior high school 3 Belawa District, Wajo Regency, fall within the "above average" nutritional status category, with a percentage of 43.3% and an average value of 1.277 kg/cm³.

Based on the data analysis of 30 respondents, it was found that the nutritional status of students at SMP Negeri 3 Belawa, Wajo Regency, was generally within the "normal" category. The distribution of nutritional status showed that 1 student (3%) was in the severely underweight category, 5 students (17%) were mildly underweight, 23 students (77%) were in the normal weight category, while no students (0%) were mildly overweight, and 1 student (3%) was in the severely overweight category.

These findings indicate that most students have a balanced nutritional status, suggesting that their daily nutrient intake generally meets their body's energy needs. This result aligns with the study by Rahmawati et al. (2022), which reported that most elementary school children in rural areas of Indonesia have normal nutritional status due to predominantly home-cooked meals and relatively high levels of physical activity.

Nevertheless, the presence of students with both undernutrition and overnutrition requires attention. Children with undernutrition are at risk of growth retardation, decreased immunity, and cognitive development delays (Fitriana & Dewi, 2021). Conversely, overweight or obese children are at risk of developing metabolic disorders at an early age, such as type 2 diabetes and hypertension (Yuliani et al., 2023).

According to the Indonesian Ministry of Health (2023), normal nutritional status among school-aged children reflects a balance between nutrient intake and the body's energy needs, influenced by dietary patterns, physical activity, and family socioeconomic conditions. Other factors, such as parents' education level and nutritional knowledge, also affect the quality of children's food intake (Nurhayati et al., 2024).

Therefore, these research findings indicate that although most students fall within the normal nutrition category, regular nutritional status monitoring programs remain necessary—

particularly to detect early cases of undernutrition or overnutrition among elementary school children. Nutrition education programs for students and parents are expected to help maintain and improve children's nutritional status optimally.

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