

The Nutritional Status and Physical Freshness Review of SDN 013 Tambusai Utara Students'

Reny Widyanti^{1AB}, Muarif Arhas Putra^{*2B-D}, Ridwan Sinurat^{3C}, Riwaldi Putra^{4D}

¹²³⁴Teachers and Educational Science Faculty / Sport and Healthy Education Department, Universitas Pasir Pengaraian, Rokan Hulu, Indonesia

ABSTRACT

This research was motivated by the unknown data or information on the nutritional status and level of physical fitness of lower grade students at North Tambusai 013 State Elementary School. This study aims to determine the level of physical fitness and nutritional status of lower grade students at the North Tambusai 013 State Elementary School. The subjects in this research were lower grade students at North Tambusai 013 State Elementary School aged 7-9 years. This research is descriptive research, in this research the researcher only wants to describe the current situation without conducting hypothesis testing. The population used was 150 students taken by purposive sampling. Because the number of students in the sample is considered to represent the population of lower class students at North Tambusai State Primary School 013. The data collection technique uses the formula $BMI = \frac{BB}{TB^2}$ and physical fitness uses the Indonesian Physical Fitness Test (TKJI) and for data analysis uses quantitative descriptive analysis expressed in percentage form. The descriptive analysis formula is $p = \frac{f}{n} \times 100\%$. The results of research on the nutritional status of North Tambusai 013 State Elementary School students in this study from 60 sample students obtained a frequency distribution of 19 students included in the thin category (31.66%), 33 students included in the normal category (55%), 6 students included in the obese category (10%), 2 students are included in the obese category (3.34%). Meanwhile, the results of the analysis of the physical fitness of students at the North Tambusai 013 State Primary School showed that the total frequency was 0 students (0.00%) in the very good category, 16 students (27%) in the good category, 19 students (31%) in the poor category, 25 students (42%) were in the medium category, and 0 students (0.00%) were in the very poor category. The highest frequency is in the medium category.

Keywords: Nutritional Status; Physical Fitness; Primary Students'

Corresponding author:

*Muarif Arhas Putra, Universitas Pasir Pengaraian, Tuanku Tambusai, Kumu, Rambah Hilir, 28558 Email: muarifarhasputra@upp.ac.id

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INTRODUCTION

Indonesia is a developing country that is carrying out development in all fields, one of which is development in the field of sports. Currently, sport has experienced very rapid progress where sport has entered several aspects of life, namely industry, economy, education and others. In order to realize educational development in Indonesia, one way is to provide quality education supported by quality human resources.

The need for nutritional intake is very important for children's health. Because good nutrition can be obtained by providing sufficient amounts of food and a balanced menu. From the description above, it can be concluded that to achieve optimal health, nutrients are needed, and can stimulate brain development and physical growth. optimal work ability, as well as physical growth. Nutritional status is the result of balancing the food that enters the body with the body's needs for these substances. Optimal nutritional status is when you get enough nutrients that are used efficiently, thereby enabling physical growth, brain development, work ability and general health.



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Based on observations made by the author of students at Primary School 013 Tambusai Utara, and also according to the sports teacher, students can be seen doing sports activities, they look tired, like people who are exhausted, less enthusiastic, often sleepy during other class periods and their faces are pale as if they are not healthy.

LITERATURE REVIEW

Nutritional status

Nutritional status is the health condition of an individual or group which is determined by the degree of physical need for energy and other nutrients obtained from food and foods whose physical impacts are regulated anthropometrically. Symptoms of malnutrition on body processes depend on what nutrients a person does not consume enough. In accordance with the opinion of Almatier (2001), namely: "Lack of nutrition in general (food lacking in quantity and quality) causes disruption to the processes: 1) Growth, 2) Energy production, 3) Body defense, 4) Structure and function brain, and 5) Behavior". RP Putra & Aluwis (2022) stated that "Lack of nutrition in general can cause problems with growth resulting in feeling weak, weakness and decreased work productivity. Meanwhile, the impact of excess nutrition on body processes is that it causes overweight and obesity.

From the quote above, it is clear that nutritional status is the condition of a person's body resulting from consuming, absorbing and consuming food substances over a long period of time. Important parameters in determining nutritional status are a person's weight and height. For example, someone who has a body that weighs more or is not in balance with their height can be said to be a person whose nutritional status is unhealthy. To get sufficient energy or balanced nutrition, the various qualities and various nutritional elements contained in food must also be balanced or sufficient. Lack or excess of nutritional elements will cause various health problems.

Assessment of nutritional status, namely anthropometric measurements, is the most widely used technique because it is faster and easier and is able to provide information on a person's nutritional status. The measurement of Body Mass Index (BMI) in this study uses age for children aged 6-9 years. Determination of nutritional status is calculated by dividing body weight in kilograms (Kg) by the square of body height in meters (m). BMI formula = $BB \text{ (kg)}/TB^2 \text{ (m}^2\text{)}$.

Physical fitness

Physical fitness is the ability or ability of a person's body to carry out physical activities in daily activities on an ongoing basis without causing excessive fatigue, and still having energy reserves to enjoy free time and other sudden needs. According to Mikdar (2006, p. 45) physical fitness is "the ability of a person's body to carry out daily tasks and work without causing significant fatigue, so that the body still has energy reserves to cope with additional workloads". It can also be added that physical fitness is the ability to carry out tasks well even in difficult circumstances, where people who lack physical fitness will not be able to carry out their activities well.

A person's level of physical fitness is determined by several components in physical fitness. Therefore, someone needs to know, understand and train the components of physical fitness as a basis for improving efforts to increase their physical fitness. According to Bouchard in Agus (2012: 45) states "The components of physical fitness or elements contained in physical fitness are related to health values and motor skills".

According to Pate in Agus (2012) "suggests that the factors that influence a person's maximum oxygen volume are one measure of a person's level of physical fitness, namely age, gender, genetics (heredity) and physical activity." Maximum oxygen volume is an indicator to indicate a person's level of freshness.

METHOD

This research is classified as descriptive research. According to Yusuf (2005:83) descriptive research is "a type of research that aims to systematically, factually and accurately describe the facts and characteristics of a certain population or try to describe phenomena in detail".

This research aims to describe the nutritional status and physical fitness of students at North Tambusai 013 State Elementary School which is located on the football field. Meanwhile, the research was carried out from November 9 2023 to December 15 2023.

The sample in this study was 60, taken from a population of 660 people using a purposive sampling technique, the data in this study were primary data, nutritional status data was obtained using the BMI (Body Mass Index) formula according to the Ministry of Health (2010:4) by weighing body weight in units (Kg) and measuring height in units (M) with the age of children aged 5 – 18 years.

$$\text{Status Gizi} = \frac{BB \text{ (kg) saat penimbangan}}{TB \text{ (m}^2\text{) meter}}$$

Then, the technique for collecting data on students' physical fitness at North Tambusai 013 public elementary school is in the form of the Indonesian Physical Fitness test (TKJI) which aims to measure students' physical abilities and capabilities. The TKJI test series consists of 5 test items, namely: a) Running fast 30 meters, b) Hanging and lifting the body, c) Lying down, d) Jumping upright, e) Running 600 meters. This research aims to describe the nutritional status and physical fitness of students at North Tambusai 013 State Elementary School, using a numerical analysis technique using a frequency distribution technique with the formula $p = f / nx 100\%$.

RESULTS

The nutritional status of men can be grouped into 4 categories, namely 7 students are included in the thin category (23.34%), 16 students are included in the normal category (53.34%), 5 students are included in the fat category (16.66%), and 2 students fall into the obesity category (6.66%).

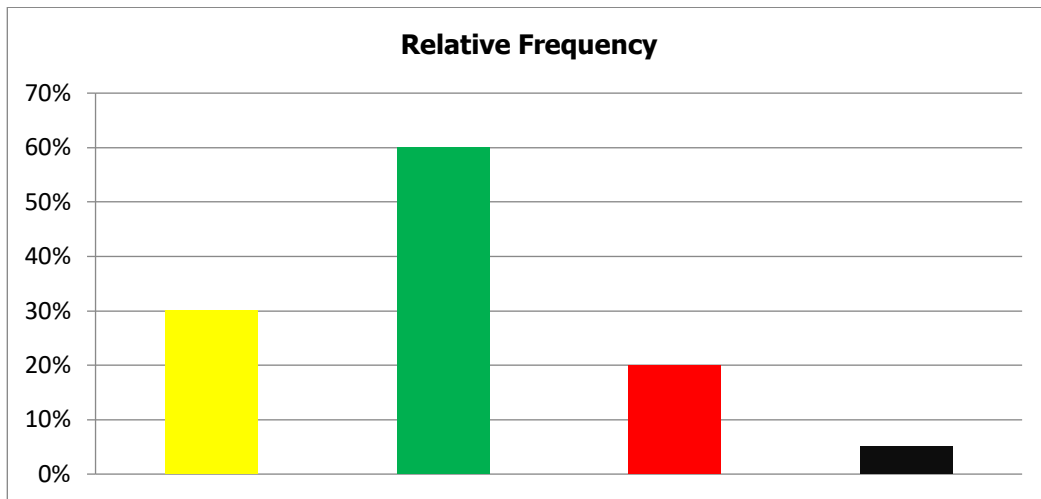


Figure 1. Relative Frequency Diagram of Nutritional Status Male Students

Then the nutritional status of female students was also grouped into 4 categories, namely 12 students were included in the thin category (40%), 17 students were included in the normal category (56.66%), 1 student was included in the fat category (3.34%).

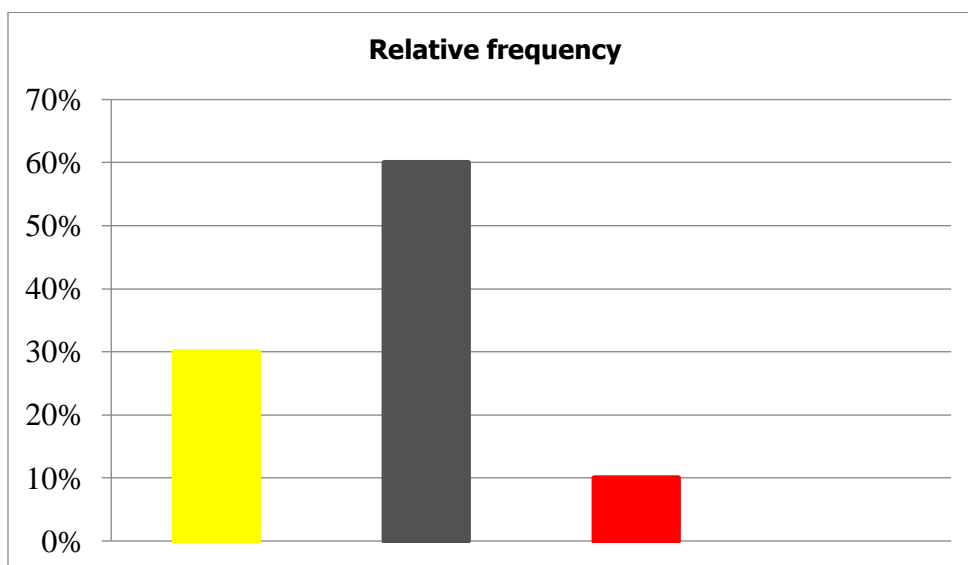


Figure 2. Relative Frequency Diagram of Female Students' Nutritional Status

The results of research on the physical fitness of male students at State Elementary School 013 North Tambusai were categorized into 5 categories using the Indonesian physical fitness test formula. The physical fitness of students at State Elementary School 013 Tambusai Utara boys is 0 students (0.00%) very good, 14 students (46.66%) in the good category, 10 students (33.34%) in the medium category, 6 students (20%) in the poor category, 0 students (0.00%) students in the very poor category.

The main cause of poor nutritional status is an imbalance in energy intake and expenditure. As stated by Syafrizar (2009: 116) "the main cause of being overweight

is energy intake exceeding what is expended. Meanwhile, the main cause of being underweight is eating disorders which reduce nutritional intake."

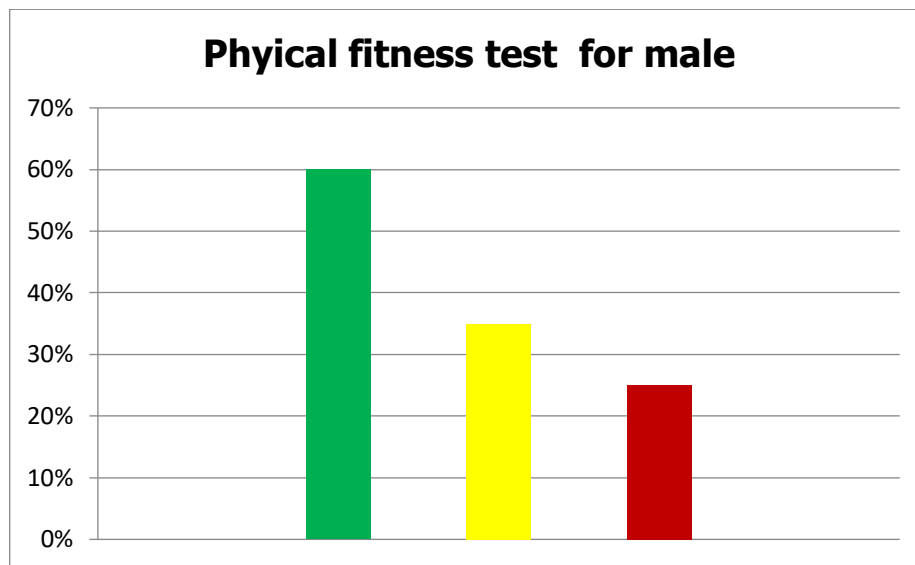


Figure 3. Relative Frequency Diagram of Physical Fitness Levels for Male Students

Then the physical fitness of students at State Elementary School 013 Tambusai Utara Putri is 0 students (0.00%) in the very good category, 2 students (6.66%) in the good category, 9 students (30%) in the poor category, 19 students (63.34%) in the moderate category, and 0 students (0.00%) in the very poor category.

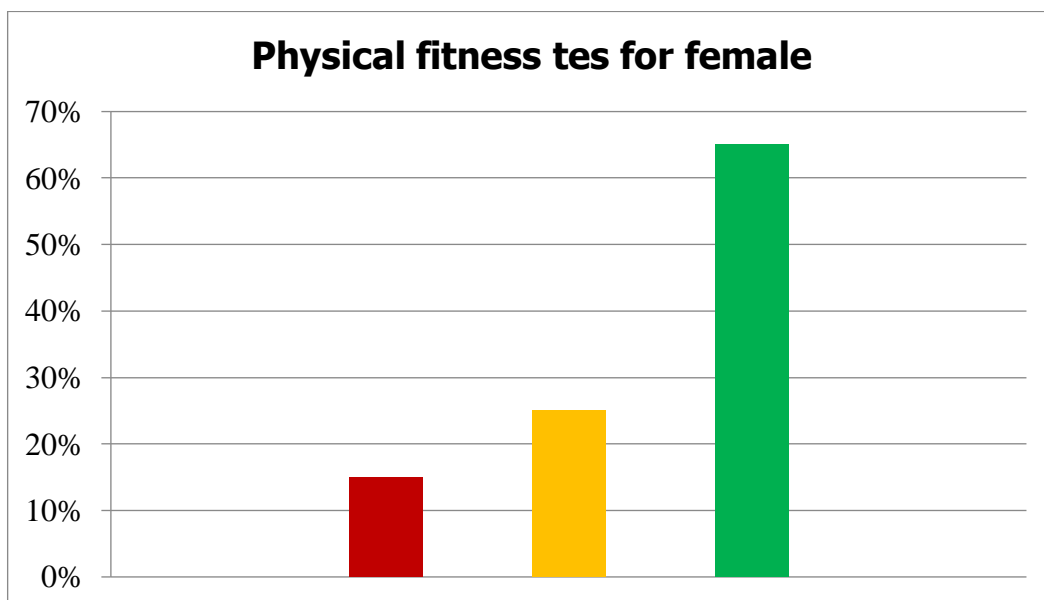


Figure 4. Relative Frequency Diagram of Physical Fitness Levels for female Students

Apart from that, students who have good physical fitness are of course supported by good nutritional intake as stated by Arsil (2010: 78) that "Students who have poor physical fitness are students who are lazy or not used to doing physical activities such as playing, always taking a vehicle to school, and in physical education learning about sports and health, they are not active in sports, so habits like these cause the elements

and components of their physical fitness to be low, as a result students are less able or have difficulty in carrying out physical activities in educational learning. physical exercise and health”.

DISCUSSION

A person's good physical fitness requires good nutritional intake to be consumed every day so that they can go through their days healthy and fit. This research looked at the nutritional status and physical fitness of students at SD Negeri 013 Tambusai Utara.

Knowledge is obtained through a scientific approach and is based on certain theories in a systematic way and implemented according to the correct steps or procedures so that the results of this learning can be accepted as true. So it is necessary to discuss the research results which are intended as descriptions so that it is easier to draw research conclusions. This research is a type of descriptive research with the aim of seeing or describing the nutritional status and level of physical fitness of students at Negeri 013 Tambusai Utara Primary School, so the data analysis technique that can be used is by using frequency distribution techniques (descriptive statistics) with percentage calculations..

Based on the results of the research, it can be concluded that the nutritional status and physical fitness of the lower class students at North Tambusai State Elementary School 013 are in the normal category and physical fitness is in the medium category. From the results obtained, the nutritional status of lower class students at North Tambusai State Elementary School 013 is in 4 categories, namely 19 students are included in the thin category (31.66%), 33 students are included in the normal category (55%), 6 students are included in the fat category. (10%), 2 students fall into the obesity category (3.34%). Meanwhile, the physical fitness of lower class students at North Tambusai State Primary School 013 was in the medium category, 0 students (0.00%) in the very good category, 16 students (27%) in the good category, 19 students (31%) in the poor category, 25 students (42%) in the moderate category, and 0 students (0.00%) in the very poor category.

The results of this study are also in line with research Moh. Joni Nayoko (2015). entitled "Nutritional status and level of physical fitness of students in class IV and class V of SD Muhammadiyah Kedung Pih Nglipar Gunung Kidul", Based on the results obtained, the nutritional status of students in class IV and V of SD Muhammadiyah Kedungpoh Nglipar Gunungkidul was 37 students (78.72%) with severe levels of underweight, 2 students (4.26%) with mild levels of underweight, 7 students (14.89%) with normal categories, and 1 student (2.13%) with overweight categories mild level, and 0 students (0.00%) in the severe level overweight category. Meanwhile, the physical fitness of class IV and V students at Kedungpoh Nglipar Gunungkidul is in the medium category, namely 0 students (0.00%) in the very good category, 7 students (15%) in the good category, 23 students (49%) in the poor category, 2 students (4%) in the very good category.

CONCLUSION

Based on the results of research and discussions that have been carried out previously, conclusions can be drawn on nutritional status students fall into the normal category (55%). And physical fitness is in the poor category less, 25 students (42%).

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CONFLICT OF INTEREST

Declare a conflict of interest or state "The author declares no conflict of interest." Authors should identify and declare any personal circumstances or interests that might be deemed to inappropriately influence the representation or interpretation of the reported research results. Any role of the funder in the design of the study; in the collection, analysis or interpretation of data; in writing a manuscript, or in a decision to publish, the results must be stated in this section. If there is no role, please state "The funder had no role in the design of the study; in the collection, analysis, or interpretation of data; in writing the manuscript, or in the decision to publish the results."

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