



## The Influence of Consumption of Carbohydrate to Adequacy Nutrition for Student of Elementary School Class 6 Tunas Karya Desa Karyawangi

Reza Ramadhan\*, Asep Bayu Dani Nandiyanto

Universitas Pendidikan Indonesia, Bandung, Indonesia

\*Correspondence: E-mail: [rezaramadhan193@upi.edu](mailto:rezaramadhan193@upi.edu)

### ABSTRACT

**Background:** Study this aim for knowing the influence of carbohydrate consumption to adequate nutrition of students grade 6 Tunas Karya Elementary School students Desa Karyawangi. Research conducted to 12 students, consisting of 7 boys and 5 girls with a range ages 10-12 years.

**Research Methods:** As for the stages of research carried out, is (i) deployment pre-test questionnaire, (ii) giving education about the importance of carbohydrates for the body via powerpoint, and (iii) deployment post-test questionnaire. Analysis results show the mean pretest score was 66.7 and the post-test mean was 84.6. Comparison results from results between pre-test and post-test showed existence enhancement knowledge for students after holding education.

**Research Result:** Result of N-Gain calculation is known to have an average N-Gain value of 0.53 which states education about importance carbohydrate for body this not enough effective for student school base.

**Conclusion:** Remember activity education is conducted only at meetings only, implications obtained are not effective and still many students who haven't once got education or eye lessons like this. from what we hope with existence study this education about importance carbohydrate or nutrition balanced more echoed return especially in children student school the basis for them understands importance consume carbohydrate for sufficient needs nutrition.

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## 1. INTRODUCTION

The process of growth among child 11 years old school basic (SD) is good man nor woman is a main capital and a very crucial asset, need substances nutrition like energy, protein and nutrients nutrition other. one factor can influence the growth and development of a child is physical activity (Fitriani, R., & Adawiyah, R. 2018). The World Health Organization (WHO) states nutrition is the main pillar from health and wellbeing along cycle life (Soekirman 2002). Efforts to improve nutritional status for development source power quality human beings must start as early as maybe one of them in child age school (Djamarah 2006). Fitness physically is an ability for somebody to do Duty profession daily without causing significant fatigue (Toho Cholik Mutohir et al., 2007). For could reach condition freshness a person 's prime physique needs to do practice physically involving component freshness physically with correct exercise (Santoso, D. A. 2016). Proper nutrition for supporting freshness in a physical child consists of micronutrients and macronutrients (Hastuti, N. P., & Zulaekah, S. 2009). Needed micronutrients consist of minerals and vitamins. Minerals needed by the body are calcium, sodium, chloride, potassium and other substances iron, while macronutrients consist from carbohydrates, proteins and fats (Ilyas, 2004).

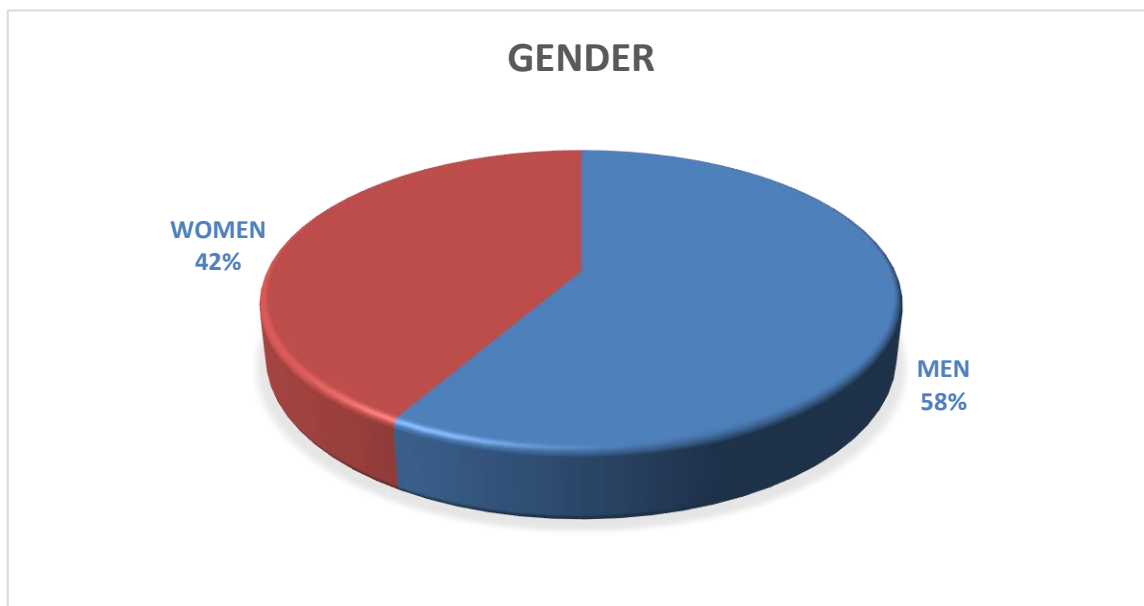
Consumption of high carbohydrate will increase stash glycogen body, and the taller stash glycogen the more the high activity can be done, will influence freshness physically (Koswara, 2008). American Dietetic Association (2000), states carbohydrates, proteins and fats are nutrition important for active people. Amount carbohydrates, proteins and fats needed depending on intensity practice physical, time, frequency, composition body, age and type gender. Carbohydrates, protein and fat are recommended for activity physique every day. In line with the statement put forward by Almatsier (2010), Energy results from burning from a substance macro which includes carbohydrates, proteins and fats (Maradesa, E., Kapantow, N. H., & Punuh, M. I. 2015). Man needs energy to maintain life, support growth and do physical activity (Sutrio 2017). Needs energy somebody according to WHO, is consumption energy from necessary food for cover expenditure energy somebody when have size composition body and activity (Hidayat 2015).

Method research researchers Use is method descriptive quantitative to students grade 6 Tunas Karya Elementary School students with see results from pretest then given treatment in the form of education about understanding the importance of carbohydrate for body man special it's in children 11 years old. Then Step next researcher to do posttest to use knowing already the extent to which the understanding obtained by the students after given education about the importance of good carbs for the body. Novelty from study is (1) Students more understanding about the importance of education about balanced nutrition; (2) Students could know about the importance of carbohydrates.

## 2. METHODS

### 2.1. Subject Study

Type study is descriptive quantitative study. Research location at Tunas Karya Elementary School students Desa Karyawangi, with sample whole students and students grade 6 Tunas Karya Elementary School students totaling 12 students. Respondents consist of 7 males and 5 females (Figure 1). First step with stage pretest in the form of a questionnaire and distributed to whole students containing the importance of carbohydrates for the human body.



Figures 1. Presentation type sex Tunas Karya Elementary School students Desa Karyawangi

## 2.2. Research Design Analysis

Research data collection conducted with spread questionnaires to Tunas Karya Elementary School students Desa Karyawangi, Parongpong. There are 3 stages in data collection, namely (i) distribution pre-test questionnaire, (ii) giving education about the importance of carbohydrates for the body via PowerPoint, and (iii) deployment post-test questionnaire (Mardiana, M., Yuniarti, H., Yulianto, Y., & Yusuf, M. 2022). Approach data processing used is quantitative. We had 20 questions pre-test and post-test (Saputro, T. A., Nurfahrudianto, A., & Hima, L. R. 2022). Table 2 shows questions pre-test and post-test in study. Making questions focused on education about the importance of carbohydrates for the body (Jana, P. 2017). Type question pre-test and post-test is type question answer yes and no. Giving a score answer be marked as for answer true and 0 for wrong answer.

Table 1. Pre-Test & Post-Test Questions

No.	Question	Yes	Not
1.	Do you know about Nutrition Balanced?		
2.	Do you know what is 4 healthy 5 perfect?		
3.	Do you know where the source of Carbohydrate comes from?		
4.	Do you know the types of Carbohydrates?		
5.	Do you know the source of carbohydrate complex?		
6.	Do you know the source of carbohydrate simply?		
7.	Do you know the substance of the chemical contained in carbohydrates?		
8.	Is it necessary to consume carbohydrates every day?		
9.	Is Carbohydrate important for the body?		
10.	Did you already feel amount brother carbohydrates consumption already sufficient?		
11.	Does the food consumption daily contain carbohydrates?		
12.	Do you know about carbohydrates is the main source of energy?		
13.	Do you know the types the foods contain carbohydrates?		
14.	Do you know when you exercise, carbohydrates have an important role??		

No.	Question	Yes	Not
15.	Do you know the amount of the carbohydrates needed by the body?		
16.	Do you know the consequences of lack of carbohydrates?		
17.	Do you know the consequences of consuming excess carbohydrates? ?		
18.	According to you, when we consume tempeh, is it including the carbohydrates?		
19.	Do you know the amount of carbohydrates contained in the type of food? ?		
20.	Is there any food in your canteen contains carbohydrates?		

### 2.3. Analysis of N-Gain Value

N-gain analysis is comparison Among average gain obtained with maximum possible average gain (Gain = score posttest – score pretest). The mean N-gain equation introduced by Hake (1998), According to Hake in Sundayana (2014) “The Gain Normality Test is a test can give description general enhancement score results learning Among before and after applied something treatment, is as following:

$$N\ Gain = \frac{Skor\ Posttest - Or\ Pretest}{Skor\ Ideal - Skor\ Pretest}$$

View from analysis where the ideal score is score maximum can be obtained by the respondent when filling in pre-test and post-test questions (Utomo, A. P., & Tehupeiry, K. P. 2014).

Table 2. Distribution of N-Gain Score

N-Gain Value	Category
$g > 0.7$	Tall
$0.3 \leq g < 0.7$	Currently
$g < 0.3$	Low

## 3. RESULTS AND DISCUSSION

Table 3 shows results from gain analysis. Calculation gains value done for knowing quality enhancement and understanding students after giving an Action. Table 3 is known the average value of N-gain, which is 0.53 which indicates given action is in the form of education importance carbohydrate for body man not enough effectively used by student’s school base. in line with research conducted by Hake (1998) where if you score a minimum presentation of 20% and a maximum of 88% then the method is not sufficiently effective. This thing still caused a lack of understanding students because they have not yet gotten an eye lesson about nutrition balanced and just given one education course.

Table 3. Analysis of Pre-Test and Post-Test Gain Values

NO	Student Name	Score		Post-Pre	Ideal Score (100)-Pre	N-Gain Score	Category
		Pre	Post				
1	Aditya Shaban	70	80	10	30	0.33	Currently

NO	Student Name	Score		Post-Pre	Ideal Score (100)-Pre	N-Gain Score	Category
		Pre	Post				
	Alfaridzi						
2	Alif Rahman Kurniawan	70	80	10	30	0.33	Currently
3	Dandi Kartiwa	70	90	20	30	0.67	Currently
4	Devi Oktora	60	75	15	40	0.38	Currently
5	Dita Oktaviani	60	95	35	40	0.88	Tall
6	Word Dhikr	60	90	30	40	0.75	Tall
7	Intan Nur Ainun	60	85	25	40	0.63	Currently
8	Satria Nugraha	80	90	10	20	0.50	Currently
9	Refi Alfiany Ansah	65	75	10	35	0.29	Low
10	Ridwan	65	85	20	35	0.57	Currently
11	Syifa Rizkiana	70	80	10	30	0.33	Currently
12	Zafira Putri Aprilia	70	90	20	30	0.67	Currently
	Average	66.7	84.6	17.9	33.3	0.53	

Figure 1 shows analysis difference results pretest and posttest per question. Based on the picture they could see the whole results respondent experience increases from each question indicator. So, if you look at the results, the use of PowerPoint media is still used in convey Theory to students although in study this does not have high effectiveness. Education Importance of carbohydrates for body man to Tunas Karya Elementary School students Desa Karyawangi, the results positive to perception and understanding respondent To use increase knowledge students (Oktavianingtyas et al., 2018; Anggraeni & Maryanti, 2021; Millatina et al., 2022).

#### 4. CONCLUSION

Based on the results of the research we doing about the importance of carbohydrate to adequate nutrition for students in grade 6 Tunas Karya Elementary School students Desa Karyawangi. There are 3 main things to do in study is (i) deployment pre-test questionnaire; (ii) giving education about the importance of carbohydrates for the body via PowerPoint, and (iii) deployment post-test questionnaire. Results of the research we do to the students of Tunas Karya Elementary School students Desa Karyawangi show there is improvement in questionnaire scores during pre-test and post-test. Analysis results show the mean pretest score was 66.7 and the post-test mean was 84.6. Comparison results from results between pre-test and post-test showed existence enhancement knowledge for students after holding education. However, in aspect cognitive students felt still need effort enhancement because education about things this new held once. So, it is necessary existence education continuous for focus discuss about how importance influence adequacy nutrition balanced for child age early. Hopefully after I did this study, many related institutions for increased education about this.

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