

DEVELOPING THE KNOWLEDGE OF BALANCED NUTRITION AND HEALTHY LIVING BEHAVIOR OF JUNIOR HIGH SCHOOL STUDENTS IN BANDUNG, WEST JAVA

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ABSTRACT

Many Indonesian people, especially junior high school (SMP) students, are no longer concerned with nutritious food and only care about taste. This proves that many people are more concerned with eating viral, delicious, cheap and fast foods, regardless of the nutritional content and benefits of these foods. It is necessary to make efforts to build knowledge of junior high school students about nutrition and healthy eating behavior in the form of continuous education and self-habitation. With the above problems, the authors carry out a work program of socialization activities regarding Guidelines for Balanced Nutrition and Healthy Eating Behavior in daily life of Grade VII students at SMPN 15 Bandung. Students are good enough because students at least understand most of the material that has been presented regarding Guidelines for Balanced Nutrition and Healthy Eating Behavior in Daily Life. Of course, we hope that parents also play an important role in providing a good diet and nutrition for the child. Such as determining meal times, preparing healthy and nutritious food for the child to be healthy and regenerating good for the homeland and nation.

Keywords: Balanced Nutrition, Healthy Living

1. BACKGROUND

Food is one of the things that is very important to fulfill human energy in carrying out daily activities, such as exercising, going to school, working, doing hobbies and other activities. However, with the development of the times and the more densely busy humans are, nowadays there are more and more new food creations whose contents are still unclear. In addition, there are also more and more fast foods that help shorten the time of the food-making process. With this, many Indonesian people, especially junior high school (SMP) students, are no longer concerned with nutritious food and only care about taste. This proves that many people are more concerned with eating viral, delicious, cheap and fast foods, regardless of the nutritional content and benefits of these foods.

One of the efforts to improve health status is to improve community nutrition (Aridin, 2015). However, the poor attention from the public, especially junior high school students, which we observed at SMP Negeri 15 Bandung, became one of the serious problems with the large number of snacks around the school and the environment where most of the students forgot about their own body needs. In other words, students are still not able to know well and manage nutritious food patterns for themselves in their daily lives. For example, many students like foods that contain MSG. Another example, students only like to eat fast food which generally contains excessive sodium causing a lack of potassium, so that it can lead to a decrease in heart muscle function and sluggishness in the process of delivering nerve stimulation and difficulty in thinking which can interfere with students' brain performance in the learning process. In general, junior high school students still lack proper nutrition knowledge which makes them not understand their behavior and eating habits that have been wrong and if not realized early it will bring other unwanted health hazards in the future. Adolescent knowledge about nutritional knowledge is a person's understanding of nutrition, nutrition, and the interaction between nutrients on nutritional status and health. If adolescents lack knowledge about nutrition, the efforts made by adolescents to maintain a balance of food consumed with what is needed will decrease and cause problems of undernutrition or overnutrition (Notoadmodjo, 2003).

2. RESEARCH PROBLEM

Based on the background, It is necessary to make efforts to build knowledge of junior high school students about nutrition and healthy eating behavior in the form of continuous education and self-habitation. This education can be in the form of conveying the Nutrition group which is stated by Almatier, Soetardjo & Soekarti (2011) that nutrition is divided into 3 groups which are divided based on their function, namely:

- a. Energy Substances: Carbohydrates, Fats, and Proteins.

- b. Building Substances: Protein, Minerals and Water
- c. Regulatory Substances: Protein, Minerals, Vitamins and Water
- d. Thus students can find out the kinds of nutrients needed by the body in carrying out activities of daily life. In addition, according to Drummond & Brefere (2010), nutrients are divided into 2 types of nutrients according to the amount to be consumed:
- e. Macronutrients: “nutrients that the body needs in large amounts found in carbohydrates, lipids, and proteins”.
- f. Micronutrients: “nutrients that the body needs in small amounts found in vitamins and minerals”.

Table 1. Knowledge and Application of Students' Balanced Nutrition

No.	Question	Skor					Mean	Category
		1	2	3	4	5		
Nutrition Knowledge								
1	Rice, noodles, potatoes are a collection of foods that contain carbohydrates	0	1	2	9	20	4,5	Very good
2	Tofu, tempeh and beans are protein derived from plants	0	0	4	15	13	4,28	Very good
3	Red meat, fish, cheese, shellfish and shrimp are protein of animal origin	0	0	0	17	15	4,46	Very good
4	Carrots contain vitamin A which is good for human eye health	1	0	0	10	21	4,56	Very good
5	Sunbathing in the morning sun is good for bone health because it contains lots of vitamin D	0	0	0	15	17	4,53	Very good
6	Milk is a source of calcium and phosphorus which is beneficial for the growth of bones, teeth and prevention of early bone loss (osteoporosis).	0	0	5	12	15	4,31	Very good
7	Water is good to consume normally 2 liters / day or the same as 8-10 glasses a day	0	0	0	10	22	4,68	Very good
8	Vegetables are important to facilitate the digestive process in the body	0	0	0	14	18	4,46	Very good
9	Vegetables are useful for preventing colon cancer	0	1	7	17	7	3,9	Good
10	Vegetables function to remove bad cholesterol and lower high blood pressure	0	3	8	11	10	3,87	Good
11	Breakfast makes us focus in every lesson at school	0	3	7	14	8	3,84	Good
12	Food supplies from home are more guaranteed to be clean than outside the house	Very good	0	0	15	17	4,53	Sangat Baik
Total							4,32	Very good
Eating Behavior								
13	I always eat carbohydrates every day	2	2	1	13	14	4,03	Very good
14	I eat Vegetable protein in a week	0	2	12	13	5	3,65	Good
15	I eat animal protein in a week	1	6	8	14	3	3,37	Good
16	I bask a little in the morning sun of the week	0	2	8	12	11	3,96	Good
17	I wash my hands with soap before and after eating	0	0	3	7	22	4,59	Very good
18	I read the product expiration label before consuming it	0	1	6	16	9	4,03	Very good
19	I eat fruit every day	0	0	9	11	12	4,09	Very good
20	I eat vegetables every day	0	1	6	16	9	4	Very good
21	I drink milk in a week	0	2	4	14	12	4,15	Very good
22	I drink 2 liters of water a day	0	1	0	15	16	4,46	Very good
23	I always eat breakfast every day	0	4	5	12	11	3,9	Good
24	I eat canteen food in a week	5	7	13	6	1	2,71	Not good
Total							3,91	Good

With education about various nutrients and nutritional sources, students can get used to sorting food properly and appropriately. Of course, this nutrition must be accompanied by the eating behavior of the students themselves. Here are some education or habituation of eating behavior that must be done by students

- a. Eat regularly
- b. Drink 2 liters of water a day
- c. Bringing food from home
- d. Avoid excessive sweet foods
- e. Avoid foods that contain a lot of salt andicin
- f. Meet nutritious food
- g. Wash your hands with soap
- h. Eat While Sitting
- i. Drink milk once a week.

This research carried out an activity program to one of the schools in the Gegerkalong village, namely SMP 15 Bandung, we educated nutrition and healthy lifestyles to the students of that school. In the socialization, we explained the "Fill My Plate" education so that students know the nutritional content of the food brought to school. As an implementation of healthy eating behavior, we also distribute milk to students.

In addition, we also tested the junior high school students on their knowledge of Nutrition and Healthy Eating Behavior in daily life by asking some questions to the students. Then, get the results as seen on Tabel 1.

In terms of food nutrition knowledge, students can find out what nutrition or content is in food (such as rice containing carbohydrates, tempeh and tofu vegetable protein, meat containing animal protein, fruit containing vitamins, and vegetables containing fiber), so that In nutritional knowledge, many students already know what content is in their food. The knowledge of these students is good because physical education is interesting for them. However, in the eating behavior of the students of SMP Negeri 15 Bandung, they are still less aware of the presence of students who do not bring food and drinks from home so they prefer to buy snacks in the canteen and outside the school. This results in the use of waste in schools. there are still many found, such as mica and styrofoam waste, which are difficult to decompose.

Before educating about nutrition and healthy balanced food, we had conversations with school principals, students, science teachers and health workers. We know that the students of SMPN 15 Bandung do not fully understand the importance of having breakfast and bringing supplies and mineral water. This encourages us to cultivate the behavior of having breakfast before school, bringing our own lunches and drinks and reducing unhealthy snacks. Due to this problem, the condition of the school is in line with our mission to create new habits after the pandemic period regarding the importance of energy that can be obtained with healthy food.

Breakfast behavior is also a concern at school, because there are still many students who don't eat breakfast because they are in a hurry to go to school, which ultimately makes students not focus on learning in the morning. Therefore, it is necessary to habituate healthy eating behavior, especially for junior high school students to be more focused and enthusiastic in the learning process. Parents are also one of the important factors in students' eating behavior. This activity that we conducted at SMP Negeri 15 Bandung is aimed at building the habit of students to eat regularly. We urge and coordinate with physical education teachers to use physical education lessons so that students in grades 8-4 bring their lunch. Our activity is called "Breakfast Together", where we eat together while sharing knowledge about balanced nutrition.

In addition to educating on nutrition and balanced food, our work program also helps SMP Negeri 15 Bandung to do reforestation by planting family medicinal plants. Some of these types of plants are rosemary, dandelion and ginger. The family medicinal plants are planted in several strategic areas that make the land beautiful to look at. We chose these three types of plants because they can be used by residents at school. It is hoped that these plants will thrive and can become science teaching materials that will provide health insight for students.

Healthy Lifestyle of SMPN 15 Bandung Students

Adolescence is a period of developmental transition from children to adults which results in biological changes such as physical, cognitive, and psychosocial changes. (Susetyowati, 2017) During adolescence, the rapidly developing physical changes are the growth of the skeleton, the formation of muscles and organs in the body. With this happening, adolescents really need higher nutrition to help support their physical growth, so the fulfillment of nutrition in adolescents must be very carefully considered and in accordance with balanced nutritional needs. (Hafiza, Utami, & Niriyah, 2020).

The Balanced Nutrition Guidelines aim to provide guidelines for daily food consumption and healthy behavior based on the principles of consuming a variety of foods, clean living behavior, physical activity, and monitoring body weight

regularly in order to maintain a normal weight. Food consumption will affect a person's nutritional status, thus good nutritional status will occur if the body gets an efficient intake of nutrients that allow it to help physical growth, brain development, and general health (Minister of Health, 2014). As Susetyowati (2017) states that physical activity is one of the factors that influence energy needs in adolescents, and the energy needs of male adolescents are more than the needs of female adolescents where male adolescents need energy as much as 2,650 Kcal and women 2,100 Kcal. The protein requirements needed by men are 75 grams and women are 70 grams. The total fat requirement is 85 grams for men and 70 grams for women. In addition, the need for vitamins, minerals, calcium, best substances, zinc, iodine, etc. is also very necessary to help the rapid growth process. (Susetyowati, 2017).

One of the eating habits shown by adolescents is consuming snack foods such as eating fried foods, drinking colored drinks, soft drinks and consuming fast food. A processed food product contains many vitamins and minerals, but is often found to contain a lot of fat, sugar and even additives. Teenagers usually already have a choice of food they like. Many teenagers think that by eating a lot of food and having a full stomach, their nutritional needs have been met. In adolescence, unhealthy eating habits are sometimes formed, school children often eat snacks outside the home, sometimes teenagers do not have breakfast when they go to school (Mardalena, 2017).

In Balanced Nutrition, there are 4 (four) pillars which are a series of efforts to balance the incoming and outgoing nutrients by paying attention to body weight regularly. The 4 pillars of balanced nutrition are as follows:

a. Consume a variety of foods

What is meant by consuming a variety of foods is eating all foods that have balanced nutrition in sufficient quantities and carried out regularly as a healthy lifestyle.

b. Get used to clean living behavior

Clean living behavior is very influential on the ongoing health of life. Thus, it is necessary to apply healthy living behaviors in daily life such as:

- 1) Wash hands with soap and clean water
- 2) Shower 3 times daily
- 3) Closing food served to prevent food from being eaten by animals
- 4) Cover your mouth and nose when you sneeze to prevent the spread of germs.

c. Doing physical activity

Physical activity includes all activities related to one's body. Physical activity that can be done to maintain a healthy body is to exercise regularly to balance the intake and expenditure of nutrients in the body.

d. Maintain Normal Weight

Normal body weight is one indicator that shows the balance of nutrients in the body, where body weight must be ideal for height. This indicator is commonly known as the Body Mass Index (BMI) (Agustina & Permatasari, 2019).

Today's adults, in fact, nutritional problems in adolescents is a problem that often occurs in the community. Nutritional problems in adolescents often occur due to incorrect nutritional behavior due to an imbalance between the nutrients consumed and the recommended nutritional adequacy. (Moehji, 2017) The occurrence of this certainly cannot be separated from various influencing factors such as the economic level of the family, the environment, the lack of knowledge about nutrition. Economic factors are one of the factors that influence the selection of the type and amount of food consumed, because with this it affects the lifestyle and eating patterns of practical and ready-to-eat food which results in unbalanced nutritional quality. Furthermore, environmental factors are a factor that greatly affects the eating patterns of adolescents because basically teenagers are still very unstable and tend to follow what the surrounding environment does, so when their peers choose nutritious foods, they will also choose to choose nutritious foods, and vice versa. The lack of knowledge about nutrition will affect habits in daily life eating patterns, because with nutritional knowledge it will provide understanding for adolescents in sorting and choosing healthy foods to consume (Ramadhani & Khofifah, 2021).

3. METHOD

With the above problems, the authors carry out a work program of socialization activities regarding Guidelines for Balanced Nutrition and Healthy Eating Behavior in daily life. This socialization was carried out on August 3, 2022 which was carried out to Grade VII students of SMPN 15 Bandung, which was on Jl. Dr. Setiabudi No.89, Gegerkalong, Kec. Sukasari, Bandung City, West Java. The reason for determining the location to conduct socialization at SMPN 15 Bandung is because there are still students who do not understand about balanced nutrition and healthy eating behavior.

In addition to providing counseling on guidelines for balanced nutrition and healthy eating behavior, grade VII students were given a questionnaire on Clean and Healthy Living Behavior that had been submitted in the previous series with the aim of measuring the level of students' knowledge about what had been conveyed. Broadly speaking, the questionnaire given is summarized into 20 questions that must be filled out. There were 34 students who filled out this questionnaire, consisting of 17 male students and 17 female students with an average age of 12-13 years.

Through a questionnaire containing 20 questions regarding clean and healthy living behavior, there were 10 students who were able to answer 20 questions correctly, 12 people were only able to answer 19 questions correctly, 8 people were only able to answer 18 questions correctly, 3 people were only able to answer correctly. 17 questions correctly, 1 person was only able to answer 16 questions correctly, then 2 people were only able to answer 14 questions correctly.

Findings

After careful scrutiny, some students still did not correctly answer question number 5 regarding "Consuming too much fried food is not healthy for the body". This still makes grade VII students wrong, because the idea that they do not understand about consuming foods that contain excessive oil is not very good for the child's health development. After being given a re-understanding of healthy food, they also understand that consuming oil, sugar, or salt in moderation is not excessive. After that it also made them know that consuming too much fried food would be unhealthy.

In addition, the results of this questionnaire also show that question number 6 is about "Eating in excessive portions will not have a bad effect on the body". At the age of 12 to 13 years, he is in his phases of growth, especially for this seventh grader. Therefore, it still makes them wrong with the question. This is not recommended because, when we eat food outside the normal limits, it can cause obesity or obesity. This habit is not recommended to do, consume foods that contain balanced nutrition with the right dose according to personal needs.

In addition, there is one question that almost entirely answered correctly, regarding question number 17, namely "Fruits and vegetables contain fiber that is good for the body." This seventh grade student already understands and knows that consuming fruits and vegetables is very good for health, because in Fruits and vegetables contain fiber or minerals that are good for the development and growth of the body.

4. CONCLUSION

It can be concluded that indirectly students are good enough because students at least understand most of the material that has been presented regarding Guidelines for Balanced Nutrition and Healthy Eating Behavior in Daily Life. Of course, we hope that parents also play an important role in providing a good diet and nutrition for the child. Such as determining meal times, preparing healthy and nutritious food for the child to be healthy and regenerating good for the homeland and nation.

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