



## Animated Video Media on Breakfast Behavior Analysis of Nutritional Education Effect through

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### ABSTRACT

A preliminary study of 10 Alue Buloh students showed that 8 of them did not know the benefits of breakfast and the impact of not having breakfast and overall they had mistaken perceptions about proper nutritional intake for their morning activities. The purpose of this study was to investigate the effect of nutritional education through animated video media on breakfast behavior in elementary school children. The research design used was quasi experiment, with a pre-test and post-test design applying one group with a total sample size of 50 students. The sampling technique was purposive sampling. The criteria were: willing to be the sample, never received counseling about breakfast, and were in good health condition. Interventions were carried out at 6 times with a span of 2 months. The data analysis used was univariate analysis and bivariate analysis using the Dependent t test. The results showed that there was an effect of nutritional education using animated video media on knowledge with p value  $p(\text{sig}) = 0.000$ , there is an effect of nutritional education using animated video media on student attitudes, there is an effect of nutritional education using animated video media on student actions. Therefore, it is suggested that socialization and education is absolutely needed to be applied in other elementary schools through animated video media since it is very interesting and motivates good behavior change on the importance of breakfast.

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### Kata kunci:

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### ABSTRAK

Berdasar sebuah studi pendahuluan terhadap 10 siswa di Alue Buloh menunjukkan bahwa 8 orang diantaranya tidak mengetahui manfaat sarapan dan dampak dari tidak sarapan dan secara keseluruhan mereka memiliki persepsi yang salah tentang asupan nutrisi yang tepat untuk aktivitas pagi mereka. Tujuan dari penelitian ini adalah untuk mengetahui pengaruh pendidikan gizi melalui media video animasi terhadap perilaku sarapan pagi pada anak sekolah dasar. Rancangan penelitian yang digunakan adalah eksperimen semu, dengan desain pre-test dan post-test apply one group dengan jumlah sampel sebanyak 50 siswa. Teknik pengambilan sampel adalah purposive sampling. Kriterianya adalah: bersedia menjadi sampel, tidak pernah mendapat penyuluhan tentang sarapan pagi, dan dalam keadaan sehat. Intervensi dilakukan sebanyak 6 kali dengan rentang waktu 2 bulan. Analisis data yang digunakan adalah analisis univariat dan analisis bivariat dengan menggunakan uji Dependent t. Hasil penelitian menunjukkan bahwa ada pengaruh pendidikan gizi menggunakan media video animasi terhadap pengetahuan dengan p value  $p(\text{sig}) = 0,000$ , ada pengaruh pendidikan gizi menggunakan media video animasi terhadap sikap siswa, ada pengaruh pendidikan gizi menggunakan media video animasi media video animasi tentang aksi siswa. Oleh karena itu disarankan sosialisasi dan edukasi mutlak

perlu diterapkan di sekolah dasar lainnya melalui media video animasi karena sangat menarik dan memotivasi perubahan perilaku yang baik tentang pentingnya sarapan pagi.

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## INTRODUCTION

Nutritional problems are one of the health problems that require treatment. Nutritional problems can occur in school age children, namely 7-12 years. The low nutritional status will have a negative impact on improving the quality of human resources for the future (Maan & Truswell, 2014). *World Health Organization (WHO)* states that children with nutritional problems are at risk of death 48.3% greater than children with good nutrition (Rukajat, 2018). Fulfilment of nutrition through food intake for children during their growth and development cannot always be implemented properly. The problem related to the consumption of food for elementary school children that is often encountered is that children do not eating breakfast. Low breakfast habits will affect concentration and intelligence in accepting and absorbing any knowledge gained in the school. One of the causes of low breakfast habits is the lack of knowledge about the importance of breakfast; besides that, children cannot choose foods according to their needs (Briawan, 2013)

Food for school age children must consider the socioeconomic, cultural, religious, level of need and development of the child. The total energy needed by children aged 7-9 years is around 1,800 kcal and children aged 10-12 are around 2,050 kcal. The portion of breakfast should be sufficient for 25% of the number of energy needs and other nutrients (Damayanti, 2013). Basic Health Research (Rikesdas) in 2018 shows that around 70% of school-age children are low on energy consumption and 80% lack the consumption of protein needed, 26.8% of school-age children only have breakfast with drinking water and 44.6% get enough intake. energy is less than 15% of the nutritional requirement per day (Andarmoyo & Sulisty, 2012).

Breakfast can be used regularly with support from the environment, both the family and school environment and the presence of knowledge that can increase awareness and willingness in these children. Research by Ratu through the Information Communication and Nutrition Education intervention found that there was an increase in the average score of students' knowledges and behaviour towards breakfast habits with p value <0.050 (Kholid, 2012). Nutritional education needs to be provided for elementary school children, so that it can increase children's knowledge. With the increase in nutritional knowledge, it is hoped that there will be changes in behaviour to be better, especially regarding nutrition and health. Providing nutritional education or nutrition education will help children get to know a variety of healthy foods, choose foods that are good for consumption and those that are not good for consumption, and help children get used to eating healthy foods on time, such as breakfast before going to school (Indah, 2014)

Alue Buloh Elementary School (SD) is located at a rural area, with poor breakfast behavior. According to interviews with 10 students of SD Alue Buloh showed that 8 of them never had breakfast before leaving for school even though their parents had prepared it at home because they thought

breakfast was not that important, and they could have snack at school. This condition will have an impact on their nutritional status and learning achievement at school. Various studies prove that adequate nutrition from breakfast equips the body to think, do physical activities optimally after waking up in the morning. For school children, breakfast is proven to improve learning ability and stamina (AGibson & Gunn, 2011) A 20-year longitudinal study of children in Australia showed that skipping breakfast increased waist circumference, total blood cholesterol levels, and bad cholesterol or LDL levels. Unbalanced nutrition and activity intake and excessive activity can lead to impaired physical growth, physical endurance and learning ability of school children. (Smith et al., 2010) This phenomenon shows a lack of understanding of the benefits of breakfast so that it influences their attitudes and actions not to eat breakfast every morning.

The habit of eating breakfast in the morning needs to be planted since childhood because it will shape attitudes and actions in fulfilling their nutrition in the future, so it is very important to give special attention from sharing parties to foster and guide health problems with a variety of educational approaches (Indraswari, 2019). Providing breakfast education for children Elementary school requires appropriate methods, techniques, media so that the information conveyed is easily understood by them (Notoadmojo, 2012). One of the media that is easily accepted by school children is video media. Video media provides information by activating the eyes and ears of participants during the teaching and learning process (Azhar, 2005). The ability of this media is considered better and more interesting because it contains both elements, namely vision and hearing, so that it will provide a great opportunity for the adoption of increased knowledge, attitudes and actions in choosing the right media (Sanjaya, 2011). The results of research by Siswi et al (2014), which suggest that there is an effect of counseling with audiovisual methods, because the messages conveyed can be received well by participants. (Siwi et al., 2014)

A preliminary study of 10 Alue Buloh students showed that 8 of them did not know the benefits of breakfast and the impact of not eating breakfast and overall they had wrong perceptions about the right nutritional intake for their morning activities. Based on these problems, the authors are interested in scientifically examining the effect of animated video media education on changes in breakfast behavior among students of SD AlueBuloh, Nagan Raya Regency.

## METHODS

The research methodology used in this study is quantitative research method, with quasi experimental research design applying pre-test and post-test design with one group (Adriani, 2012). The research was conducted in January-February 2019. The research was conducted at

AlueBuloh Elementary School, Nagan Raya Regency. The population in this study are all Buloh Elementary School students. The sampling technique was probability sampling with a purposive sampling method, with a sample size of 50 students.

The research methodology used in this study is quantitative research method, with a quasi-experimental research design using pre-test and post test design with one group (Niswah et al., 2014). The research was conducted in January-February 2019 at Buloh Elementary School, Nagan Raya Regency. Samples were selected by purposive sampling with inclusion and exclusion criteria. Samples in this study were 5th grade elementary school students who were willing to be samples, had never received counseling and the samples were in good health. The minimum sample size needed was 30 people but to avoid dropouts, 50 students were taken. Data collection techniques were carried out by interviewing students.

Data were analyzed using univariate and bivariate analysis with dependent t test. This study was conducted in three stages, including: (1) Providing pre-test of knowledge, attitudes and actions (practices) of breakfast for respondents, (2) Providing intervention through animated media about breakfast which contains understanding of breakfast, types of

healthy and nutritious breakfast, the benefits of breakfast, the impact of not having breakfast which is done 6 times with a span of 2 months. Animation videos and content are self-concepted and made by professionals editor, and (3) Giving post test of knowledge, attitude, and action (practice) of breakfast to students.

## RESULTS AND DISCUSSION

The distribution of the frequency of knowledge, attitudes, and actions of Elementary School Alue Buloh students before and after education using animated audio media is presented in tables 1, 2, and 3 as follows:

### Univariate Analysis

The indicator used to see the respondent's knowledge, attitudes, and actions is by looking at the results of the overall knowledge about breakfast listed on the questionnaire given to respondents before and after treatment. The distribution of respondents' answers based on questions can be seen in the table as follows:

**Table 1**  
**Distribution of students' knowledge, attitudes, and actions about breakfast before and after using animated video media**

No	Questions	Pre-test		Post-test	
		n	%	n	%
A	Knowledge				
1	Definition of breakfast	20	40	41	82
2	Benefits of breakfast	15	30	47	94
3	The impact of not eating breakfast	15	30	45	90
4	Breakfast time	5	10	39	78
5	Breakfast menu	2	4	39	78
6	Function of carbohydrates	5	10	40	80
7	Consequences of not eating fruit	7	14	41	82
8	Sources of protein are	9	18	42	84
9	Breakfast is done every morning	5	10	41	82
10	Breakfast portion	15	30	42	84
B	Attitude				
1	I will have breakfast before school	7	14	39	78
2	If I eat breakfast, I will be strong	8	16	37	74
3	I prefer breakfast	8	16	36	72
4	I will wake up early for breakfast	7	14	34	68
5	If I don't have time for breakfast, I go straight to school.	8	16	31	62
6	I think breakfast menu is important	10	20	34	68
7	I will tell my mom to prepare breakfast	11	22	32	64
8	I think protein sources are good for morning activities	10	20	35	70
9	I often forget about breakfast	39	78	10	20
10	Breakfast can make me	25	50	8	16
C	Actions				
1	I wake up early every morning because of breakfast	10	20	41	82
2	My breakfast time is between 06-09 am	8	16	39	78
3	If I don't have time, I will bring lunch to school.	7	14	46	92
4	My breakfast consists of protein, carbohydrates, vitamins, fats and minerals.	8	16	40	80
5	I choose breakfast over snacks	11	22	44	88
6	I will have breakfast with only my favorite menu	34	68	7	14
7	I only eat a small portion of breakfast	11	22	30	60

Table 1. shows that the knowledge of students who used animated videos before the intervention had the most correct answers to the questions "the definition of breakfast and breakfast portions", namely 20 students (40%), while the most incorrectly answered statement was "the benefits of breakfast the impact of not having breakfast" as many as 15 students

(30%). In the posttest results of each question item there was an increase of >50% in the correct answers. The most correct answers were on the question "The benefits of breakfast" at the time of the pretest 15 (30%) students who were able to answer correctly there was an increase in correct answers, namely 47 students (94%).

Furthermore, it is known that the attitude value before nutrition education using animated video media on the majority of students has not all questions answered correctly including positive and negative statements. The pretest question that was answered most correctly was "I will tell my mother to prepare breakfast" with 11 students (22%). For the most questions answered incorrectly are negative questions namely "I often forget breakfast" totaling 39 (78%) and breakfast makes me sleepy with a total of 25 students (50%). And then, based on the results of the questionnaire answers during the posttest after using animated video media about breakfast, it is known that there is a difference in the number of respondents who answered correctly during the pretest. The number of respondents who answered correctly increased for all questions, such as on questions regarding the attitude of breakfast before going to school there were 22 students (14%) who answered correctly at the time of the pretest to 39 students (78%) answered correctly at the time of the posttest. Negative questions after the posttest there was a change in answers such as the question "I often forget about breakfast" with the number of students who agreed 39 (78%) there was a change to disagree after the posttest which was 10 (20%) as well as the negative question "breakfast can make me sleepy" at the time of the pretest students chose to agree 25 (50%) and there was a change in the selection of disagreeing 8 students (16%).

The latter one, it is known that the value of action before nutrition education using animated video media on the majority of students has not all questions answered correctly including positive and negative statements. The pretest

question that was answered most correctly was "I choose breakfast over snacks" with the number of students who answered 11 (22%). For negative questions, the most answered incorrectly was "I will have breakfast with a menu that I like" with a total of 34 students (68%). Meanwhile, based on the results of the questionnaire answers during the posttest after using animated video media about breakfast actions, it is known that there is a difference in the number of respondents who answered correctly during the pretest. The number of respondents who answered correctly increased for all questions. The question with the highest correct answer about "If I don't have time I will bring lunch to school" was 46 students (92%). For negative questions after the posttest there was a change, namely students who answered incorrectly with the question "I will have breakfast with a menu that I like" decreased in number from 34 (68%) to 7 (14%).

The level of knowledge, attitudes, actions before and after intervention using animated video media can be measured by summing up the total knowledge score which will then be categorized into 3 levels, namely good, enough and less. For more complete information can be seen in the table 2.

Based on the table 2, it shows that of the 50 students based on the category of knowledge after the animation video media intervention, the majority have good knowledge of 43 students (86%). And then, 50 students based on the category of attitude as do the intervention with the media video animation majority to be good for 41 people (82%). Meanwhile, based on the category of action after performed intervention with the media video animation majority has an action good for 44 persons (88 %).

**Table 2**  
Student Frequency Distribution based on knowledge scores, attitudes, and actions before intervention (pre-test) and after intervention (post-test) with animation video media

Variable	Pre-test Before the Intervention of Animated Video Media		Post-test After Interview Media Video Animation	
	n	%	n	%
Knowledge				
Good	5	10	43	86
Enough	15	30	5	10
Less	30	60	2	4
Attitude				
Good	6	12	41	82
Enough	4	8	7	14
Less	40	80	2	4
Actions				
Good	5	10	44	88
Enough	10	20	4	8
Less	35	70	2	4
Total	50	100	50	100

**Table 3**  
Difference in knowledge of breakfast before and after intervention

Variable	Median	Mean ± SD	P-Value
Knowledge			
Pre test	5.75	2,019	0,001
Post test	13.17	1,763	
Attitude			
Pre test	5.83	2,019	0,001
Post test	13.18	1,763	
Action			
Pre test	5.83	2,019	0,001
Post test	12.17	1,763	

## Bivariate Analysis

Bivariate analysis was carried out to investigate the effect of animated video media education on changes in knowledge, attitudes and actions of students before and after education about breakfast with the help of animated video media, which is presented in the table 3.

Table 3. shows the pre-test and post-test values of knowledge about breakfast are said to be meaningful because they have a value of  $p = 0.001$ , where the results are  $<0.05$ , which means there is an effect of education through animated video media on students' breakfast knowledge. Pre- test and post-test breakfast knowledge have increased with an average value of 5.75 increasing to 13.19. After being given education, the increase in knowledge scores was 7.44.

And then, the value of the pre-test and post-test attitudes about breakfast is said to be meaningful because it has a value of  $p = 0.001$ , where the result is  $<0.05$ , which means there is an effect of education through animated video media on students' attitudes towards students' breakfast. Ready for pre-test and post-test breakfast has increased with an average value of 5.83 increasing to 13.18. After being given education, the attitude score increase was 7.35.

The latter one shows the value of the pre-test and post-test action about breakfast is said to be meaningful because it has a value of  $p = 0.001$ , where the result is  $<0.05$ , which means that there is an effect of education through animated video media on students' breakfast action. The pre-test and post-test breakfast action has increased with an average value of 5.83 increasing to 12.17. After being given education the increase in action score was 6.34.

In the following are some points of discussion that are important to highlight the results found in this study regarding the effect of education through animated video media on students' knowledge about breakfast. The points are as mentioned below.

Based on the results of statistical tests it is known that the knowledge of respondents, namely Buloh Elementary School students about breakfast before using animated video media, it is known that many respondents have poor category knowledge, namely 30 students (60%), this is due to the low knowledge of students about breakfast with the most questions answered incorrectly are questions about the definition of breakfast, the benefits and impacts of not having breakfast. Bivariate analysis between pre- and post-intervention knowledge about breakfast has a meaningful relationship because the  $p$  value = 0.000, where the results are  $<0.05$ , which means there is an effect of education through animated video media on students' knowledge of breakfast Pre test and post test. Students' knowledge about breakfast with an average value of 5.75 increased to 13.19, so the increase was 7.44.

The results showed that there was a significant change in knowledge, breakfast of SD Buloh students after education through animated video media. The selection of animated video media in delivering the material really attracted the attention of students so that they were very enthusiastic about paying attention to every education given. Providing education through animated media videos which is one way to increase knowledge about breakfast. Education with the help of media provides interesting messages, introduces and provides information to children that can increase and increase knowledge, besides repeated learning in children to be an effective way of learning because it is recorded longer in memory (Kemenkes RI, 2014). Research experts also says that approximately 75-87% of human knowledge acquired through the eye so that it can be concluded that the visual

media tools simplify the delivery and receipt of messages or information. Q: What Knowledge is the result of know and occurs after a person perform sensing, against a particular object. Sensing that occurs through the five senses including sight and hearing (Notoadmojo, 2012). Increased knowledge occurs because the provision of education using animated video media affects students' senses of sight and hearing so that most students can understand the material presented.

This research is in line with Siregar's research (2014) regarding the factors that influence health counselling, namely in the aspects of selecting methods, tools/media, and the number of target groups, meaning that obtaining outreach results with a maximum of these three factors are very influencing. The media used is determined by the intensity of the media in providing learning experiences to students, posters are full of visual images, so that they involve the senses more when receiving counselling material, so the level of students in capturing messages or extension material will be more effective (Kholid, 2012; Maan & Truswell, 2014; Mustikaningsih et al., 2019). Other research that is in line is nutrition education with nutrition posters and cards that influence increasing children's knowledge and attitudes about balanced nutrition (Sartika, 2012a). Several other studies have shown the same results, namely an increase in students' knowledge after educating them about the importance of breakfast before starting activities in the morning. The knowledge possessed by every human being can be received or captured through the five senses so that the more the five senses are used, the more lots and lots of clear knowledge obtained.

Students' knowledge is lacking because it is influenced by internal, external factors, and different learning techniques or methods that each child has. Internal factors that influence consist of physical and psychological subjects. Physical aspects include the state of the sensory organs, physical health, and the condition of the limbs. Psychic aspects include the level of intelligence, innate, emotional state, willpower, fantasy power, and logic. External factors that can affect the subject include sounds, situations or room conditions (light, temperature, odor), as well as people or objects around the subject (Irnani & Sinaga, 2017). School children still have a primary education (SD), but it needs to be emphasized that a person with a low education does not mean that he/she has low knowledge. Increased knowledge is not absolutely obtained in formal education, but can also be obtained in non-formal education, exposure to information, media, environment and social culture. Increased knowledge is not absolutely obtained in formal education, but can also be obtained in non-formal education, exposure to information, media, environment and socio-culture will shape their character into better behavior (Indah, 2014).

### The effect of education through animated video media on student attitudes about breakfast

Based on the results of statistical tests, it is known that the attitude of respondents, namely Buloh Elementary School students about breakfast before using animated video media, is known to have a lot of attitudes in the poor category, namely 40 students (80%). This situation is caused because students often forget breakfast and have the perception that having breakfast will make them sleepy at school. Bivariate analysis between pre- and post-intervention attitudes about breakfast has a meaningful relationship because the  $p$  value = 0.000, where the results are  $<0.05$ , which means there is an effect of education through animated video media on attitudes about student breakfast during the pre-test and

post-test. Students' knowledge about breakfast with an average value of 5.83 increased to 13.18, so the increase was 7.35.

Attitude is a reaction or response that is still closed from someone to a stimulus. Manifestation attitudes cannot be interpreted in advance of behavioural closed. Attitude clearly shows the connotation of a suitability reaction to certain stimuli which in everyday life is an emotional reaction to social stimuli (Siregar, 2014). Based on the results of the study, there is an effect of education through animated video media on attitudes about breakfast. Attitude is the readiness to react to objects in a certain environment as an appreciation of the object. Attitude change is the result of a change in the communicant's opinion (opinion) through strengthening attention, comprehension, and acceptance. Students who receive breakfast education get a positive stimulus for attitude change through animated video media. In this study, knowledge and attitudes have changed, meaning that students have understood what was conveyed in this counselling, causing good retention so that attitudes have increased.

This study is in line with the research of Briawan et al. (2013) with the general results, there is an increase in the average attitude score after the healthy breakfast campaign intervention. The increase in the highest average score was in the use of picture card media of 10.86 (before the healthy breakfast campaign intervention  $80.98 \pm 1.16$  to  $91.84 \pm 1.09$ ) the results of the paired t-test showed that there was a significant difference between the total means. Attitude scores before and after the healthy breakfast campaign intervention. (Syah, 2019) Another similar study conducted by Amanah, et al (2019) proved that educational methods using media games were able to increase students' knowledge and attitudes about nutrition (Indah, 2014). Similar research conducted by Marisa and Nuryanto (2014) also showed that the use of comic media was able to increase students' knowledge and attitudes towards nutrition (Indraswari, 2019). Nutrition attitude is a person's tendency to agree or disagree with a statement submitted related to food and nutrition. Nutrition education provided is expected to foster a better attitude towards nutrition. Improved children's attitudes about nutrition may also be caused by increased children's knowledge.

Attitudes determine a person's eating and nutrition behaviors, such as our attitudes towards breastfeeding or certain food safety practices. In addition, our identity in relation to food can also influence our behavior (Adolphus et al., 2013). The role of media in health promotion is as a means of building an atmosphere conducive to positive behavioral changes towards health. Health promotion is carried out with various methods and media tailored to the target such as leaflets, posters, and videos (Bertalina, 2015). One of the advantages of video is its ability to increase awareness of health and stimulate beliefs, attitudes and behaviors as a whole from the human senses (Rozanah et al., 2017). Factors that influence attitude formation include personal experience, the influence of others, cultural influences, mass media, emotional factors, and educational institutions. These factors include students' daily habits where from the data collected students expressed a negative attitude towards the benefits of breakfast which can affect learning concentration, cause drowsiness, and feel fine even if they don't have breakfast. Human attitudes towards food are formed from childhood and are influenced by experiences and responses shown by others towards food. The experience gained is either pleasant or the opposite, so that everyone has a like or dislike attitude towards food (Sartika, 2012).

Increasing knowledge of nutrition in children through nutrition education will help children's attitudes and will influence children's habits in choosing healthy foods and snacks. Attitude is not yet an action or activity, but a predisposition to a behaviour. In determining this attitude, knowledge, beliefs and beliefs have a major influence on a person's attitude, including in terms of addressing the nutrition education provided.

### **The effect of education through animated video media on students' actions about breakfast**

Based on the results of statistical tests, it is known that the actions of Buloh Elementary School students about breakfast before using animated video media are known to be not good, totaling 35 people (70%). Bivariate analysis between actions before and after intervention about breakfast has a meaningful relationship because the value of  $p = 0.000$ , where the results are  $<0.05$  which means there is an effect of education through animated video media on students' breakfast actions before the pre-test and after the post-test. Students' actions about breakfast with an average value of 5.83 increased to 12.17, so the increase was 6.34.

The results showed that there was a significant change in the breakfast actions of Buloh Elementary School students after education through animated video media. This is because students have received repeated education using the right media. Actions based on knowledge will last longer than actions based on knowledge. Therefore, before acting, someone must first know what the meaning or benefit of behaviour (Notoadmojo, 2012).

The results of this study are in line with the research of Sania et al. After conducting nutrition counselling using video 3 times, the behaviour of the sample increased, this was evidenced by the fact that all samples had breakfast before leaving for school. This is also in line with Dina's research which shows a significant difference in student actions between before and after counselling, with a probability value ( $p$ ) = 0.001 ( $p < 0.05$ ) (Sartika, 2012b).

According to Notoadmojo (2012) after a person knows a health stimulus or object then assesses what is known, the next process is expected to carry out what he knows or acts on. This is what is called a health measure. School children's actions against the food reflected from the habit eating. Breakfast habit elementary school students needs special attention, especially when the habit of eating snacks less good may result in a decrease in the nutritional status. The influence of education through animation media on action shows that the material provided is truly understood so that it adds to the knowledge and attitudes supported by student actions in applying morning habits (Notoadmojo, 2012). Other supporting research conducted by Dina. et al (2016) shows that there is a change in the average value of students' actions regarding breakfast before and after counselling is carried out. The role of schools is important in promoting breakfast habits because it can improve cognitive performance, reduce disciplinary problems and psychologically, reduce the level of tardiness and absenteeism, increase children's attention and improve the learning atmosphere.

Changes in a person's practice or action are formed after changes in a person's knowledge and attitude. Providing nutrition education that is carried out with a good approach can increase knowledge and attitudes which are then followed by changes in practice. This is further in line with Smith et al. (2010) Syah (2019) and Waldani et al. (2018) stating that new practices will be formed if a person knows in advance about the existing stimulus, namely new material, so

that new knowledge appears which can then lead to a response in the form of a person's attitude which is expected from the results of a good attitude will arise new good practices/actions.

### LIMITATION OF THE STUDY

Despite some strengths, this research also has some limitations that are experienced during the process, and this can be a number of factors that can be paid more attention to future researchers. Some of the limitations in this study include, first, the number of respondents tends to be small, so it is recommended for further research to plan a more detailed engineering by involving more respondents in a longer period of time; second, the scope of the research area can be expanded so as to be able to provide a variety of information related to the topic of breakfast; and last, there is limited information because the research subject only involves children, the research target can involve parents and teachers because they have a role in supporting school children's breakfast.

### CONCLUSIONS AND SUGGESTIONS

The The results showed that there pe been influenced nutrition education through the medium of video animation on knowledge, attitude, and practice about breakfast at the self SD Buloh. Suggestions from this research are very important for education in other elementary schools through animated video media because it is very interesting and motivates good behaviour change on the importance of breakfast.

### ETHICAL CONSIDERATIONS

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#### Conflict of Interest Statement

The authors declare that there is no conflict of interest.

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