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## The Implementation of Eating Healthy Program in Early Childhood

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**ABSTRACT:** Eating habits develop during the first years of a child's life, children learn what, when, and how much to eat through direct experience with food and by observing the eating habits of others. The aim of this study is to get a clear picture of the Eating program Healthy, starting from the planning, implementation, supervision, and evaluation as a case study of nutrition education; to get information about the advantages, disadvantages and effects of implementing a healthy eating program for children. This research was conducted through a case study with qualitative data analysed using Miles and Huberman techniques. Sample of children in Ananda Islāmic School Kindergarten. The results showed the Healthy Eating program could be implemented well, the diet was quite varied and could be considered a healthy and nutritious food. The visible impact is the emotion of pleasure experienced by children, children become fond of eating vegetables, and make children disciplined and responsible. Inadequate results were found due to the limitations of an adequate kitchen for cooking healthy food, such as cooking activities still carried out by the cook himself at the Foundation's house which is located not far from the school place; use of melamine and plastic cutlery for food; the spoon and fork used already uses aluminium material but still does not match its size; does not involve nutritionists.

**Keywords:** Early Childhood, Eating Healthy Program

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## 1 INTRODUCTION

Throughout the ages, malnutrition and food scarcity have been a major threat to children, healthy survival, and parental feeding practices have developed in response to these threats. Eating practices, including behaviors such as providing good food and in large portions, encourage children's habits to eat healthy, are still not effective in most cultures, despite the fact that in many areas the balance has shifted from food scarcity to excess food and excessive consumption. According to Birch, Savage, and Ventura (2007) healthy eating behavior needs to be taught and strengthened in the family, school and community environment throughout childhood and adolescence, because this context continuously has influence and interaction with the characteristics and behavior of parents and children. Early intervention alone is not enough; Effective prevention requires strategies that are consistent, sustainable and age appropriate.

Research related to the dietary habits of children in Indonesia carried out by Sekiyama, Roosita, and Ohtsuka (2012) to assess the impact of snack consumption on 154 children aged 1-12 years in rural villages in West Java, a 3-hour food withdrawal survey for all food and snacks consumed in seven consecutive days for each subject. Their overall prevalence is inhibited and less severe is 69.5% and 35.7%. There are 221 foods consumed by the subject, of whom 68 foods are categorized as snacks. Half the number of subjects who snacked more than the average amount consumed less carbohydrates and vitamin C than the remaining half. In addition, more and more groups are consuming snacks, low z scores for height (HAZ) among school children. To improve this nutritionally vulnerable situation, consumption of snacks must be replaced with non-snack foods that contain a much higher nutrient density. In addition, given the high consumption of snacks  $\geq 7$  In the school age group, an appropriate school nutrition program should be promoted.

Research on healthy habits of mothers in southern Tangerang, Indonesia by Usfar, Iswarawanti, Davelyna, and Dillon (2010). Most mothers associate the importance of food hygiene with the prevention of disease, pollutants, and health. Mothers assume that the importance of personal hygiene is to maintain health and hygiene. However, the majority of mothers wash their hands without soap after doing housework and cooking. Increasing mother's knowledge while incorporating existing perceptions can cause positive changes. Including mothers' knowledge about healthy eating programs in order to help the same program at school. Eating habits affect all systems in the human body directly or indirectly (Mitsopoulou et al., 2019) because optimal development and bodily functions depend on proper nutrition (Flynn, 2015). Developing healthy eating habits programs for the development of children's general health is very useful.

Another problem in children's eating habits is the temptation of fast food for children through online exposure and social media. Parents must take responsibility by considering their important role as gatekeepers of nutrition. Fast food consumption is positively influenced by broadcast media exposure among metropolitan children, and by online and social media exposure among suburban children. Mediation of active parents is very important in preventing the consumption of fast food. The media plays a key role in influencing fast food consumption, and hence, literacy education is important to reduce the adverse effects of exposure to junk food marketing (Lwin, Malik, Ridwan, & Sum Au, 2017). Many related parties need to have effective actions in overcoming this problem. In addition to parents, schools have a big role in improving children's eating habits through health programs at school.

Children who are picky about food can be associated with a higher risk of underweight and poor growth over time or vice versa, being overweight, this is another matter of eating habit. Taylor, Steer, Hays, and Emmett, (2019) study investigated whether children identified as food pickers showed differences in height, weight and body composition from their friends who were not picky. The results show the main effects on the choosy child are height and weight. More than two-thirds of food sellers are not skinny at any age. However, being a picky eater is predictive of being thin at some point in age.

Food picking is a common behavior in early childhood. There is no universally accepted definition of picky eating, nor is there agreement on the best tool to identify it. Causes for picky eating include difficulty eating early, late introduction of thick food when weaning, pressure to eat and be picky early, especially if the mother is worried about this; protection factors include providing fresh food and eating the same food as children. Consequences for children's diets including poor food variations and possible distortion of nutrient intake, with low iron and zinc intake (related to low intake of meat, and fruits and vegetables) should be of particular concern. Low-fiber food intake, as a result of low fruit and vegetable intake, is associated with constipation in food pickers. There may be developmental difficulties in some children with persistent picky eating. These children need to be identified at an early age to allow support, monitoring and advice to be offered

to parents. Strategies for avoiding or improving picky eating include repeated exposure to foreign foods, modeling parents eating fruits and vegetables and foreign foods, and creating positive social experiences around mealtime (Taylor & Emmett, 2019).

Based on the background issues of children's eating habits as well as some related research, not only at home, but also every school, especially the Early Childhood Education Institute, has an important role in stimulating children from physical to spiritual needs, including stimulation of healthy food. Stimulation of eating healthy food habits can also minimize the occurrence of eating disorders in young children, especially food pickers. If from an early age, healthy eating habits have been done and are used to it, it will form children to be more aware of their health. For this reason, Ananda Islamic School Kindergarten provides the Eating Healthy (EHP) program once a week.

The purpose of this study is to get a clear picture of the implementation of the Healthy Eating program (EHP), starting from planning, implementing, monitoring, and evaluating as a case study of nutrition education from a sample of children in kindergarten Ananda Islamic School; to obtain information on the benefits and limitations of the program from implementing healthy eating patterns and the impact of the Healthy Eating program for children.

## 2 THEORITICAL STUDY

School nutrition education programs that produce positive behavioral changes have used teaching strategies based on social cognitive theory (A Bandura, 1977). Social cognitive theories determine the mechanism in which they work, and optimal ways of translating this knowledge into effective health practices (Albert Bandura, 2004). Core determinants include self-efficacy (i.e. people's belief in their ability to successfully conduct behavior), expected outcomes (i.e. positive and negative consequences of behavior), knowledge of health risks and benefits of different health practices, and facilitator perceptions and social and structural barriers to the change they seek (Albert Bandura, 2004).

School education efforts to improve children's health usually produce weak results because teachers only provide factual information about healthy eating and exercise, while they usually do little to equip children with efficacy skills and beliefs that motivate healthy behavior and manage social and emotional impact on desirable health behaviors (Connell, Turner, and Mason 1985). School-based health promotion must operate together with the home, community, and community at large (Perry et al. 1992).

### 2.1 *Nutrition Education for Early Childhood*

Schmitt et al., (2019) research develops and evaluates nutrition education curricula to improve children's dietary behavior and nutritional and health knowledge. Children in the intervention condition showed higher scores on nutrition and health surveys and showed greater preference for fruits and vegetables in the post-test than in the control group. The findings show that short 6-week interventions that are in line with educational standards have the ability to significantly improve children's outcomes and thus can be a more viable option for teachers to include homework in their classrooms. The results achieved by the intervention program implemented in the Franciscato et al., (2019) study conclude an increase in knowledge about food and nutrition, which can lead to better food choices in the future.

Jung, Huang, Eagan, and Oldenburg (2019) examined the effectiveness of school-based healthy eating intervention programs to increase knowledge of healthy eating and healthy food choice behavior among elementary school students. Adopting social cognitive theory into the promotion of healthy eating strategies at school, this program helps children improve good health and nutrition knowledge, recognize the benefits of adopting healthy eating patterns, develop practical skills for reading food labels and make healthy food choices through direct observation and experience. The effect of positive interventions continues to be found on the behavior of school lunch choices. Positive findings from this study can be attributed to effective program design and curriculum content for teachers to implement the Healthy eating Program into their classroom curriculum.

The nutrition education program was developed and focused on changing beliefs, increasing nutritional knowledge and consumption of vegetables & fruits and dairy foods. Oh, Yu, Choi, and Kim (2012) study revealed that nutrition education for preschoolers is effective in increasing nutritional knowledge and perceived benefits regarding consumption of vegetables and fruits and certain eating behaviors. This study shows that more intensive education is needed to encourage changes in eating behavior. This program can be used in children's nutrition education at childcare centers or kindergartens.

Barriers and support for nutrition education in early childhood classes often occur in teachers in schools. There has not been much research to understand the perceptions of obstacles and early childhood educator support before entering the classroom. Resor, Hegde, and Stage (2020) resort identified barriers felt by pre-service teachers and support for nutrition education for pre-school children. Respondents' perceptions about how they will experience obstacles and support in practice vary, but teachers are generally positive about their ability to overcome potential obstacles and get the support they need. Relevant teacher and pre-service teacher training, integrating nutrition education into the curriculum, and developing teacher self-efficacy are needed to prepare teachers to overcome obstacles and support in early childhood nutrition education.

In addition to the family environment, early childhood teachers have the opportunity to act as role models and develop healthy eating habits in their students. Teachers can encourage the development of healthy behaviors in children's learning programs (Eliassen, 2011). For nutrition education to be successful in early childhood classrooms, it is important for teachers to understand how to deliver effective nutrition education lessons. Limited barriers and support for providing nutrition education in their classrooms may often arise. Previous research has shown specific factors that affect the behavior of teacher nutrition education in the classroom including time, availability and awareness of resources (human and material), community support, and professional development opportunities (Jones & Zidenberg-Cherr, 2015). While early childhood educators have the opportunity to interact fairly freely with children and parents to influence nutritional habits, it is unfortunate that teachers often do not have adequate educational backgrounds and / or exposure to professional development opportunities that will prepare teachers to effectively teach education nutrition to children in their class (Shor & Friedman, 2009).

Education staff or teachers can improve the quality of nutrition in childcare centers or kindergartens. Myszkowska-Ryciak and Harton (2019) study evaluates the effectiveness of multicomponent education programs to improve the nutritional value of preschool menus in Poland as measured by changes in nutrient content before (baseline) and 3-6 months after education (post-baseline). Samples of 10 daily menus and inventory reports that reflect food and drink served at 231 government-sponsored kindergartens. The ratio of nutrients to energy for vitamins A, B1, B2, B6, C, folate and minerals Calcium, copper, iron, magnesium, phosphorus, potassium and zinc increase significantly. The percentage of preschool children who applied recommendations for energy, fat, saturated fatty acids and sucrose as well as calcium, iron and potassium increased significantly. This study shows the beneficial effect of education in optimizing the quality of menus in preschool.

Children's attitudes and preferences towards different food tastes are formed at an early age, making early stimulation important (Sepp & Ho, 2016). Nutrition education is successful in the early years of life because children who are good, sensitive, and easily adaptable form habits (Unusan, 2007). Children are most easily influenced by the people closest to them, their parents and teachers. Childcare centers are ideal stimulation sites to explore children's health behaviors (Froehlich Chow & Humbert, 2014). The home environment, childcare facilities and educational institutions have continuous contact with children for almost the first 20 years of a child's life than any other arrangement. As a result, teachers have valuable opportunities to achieve and influence children's nutritional habits from a young age (Shor & Friedman, 2009). Educators have a unique opportunity to include and provide nutrition education into the classroom, which has a positive impact on children's basic knowledge for healthy eating behavior (Derscheid, Umoren, Kim, Henry, & Zittel, 2010).

## 2.2 *The Implementation of Eating Healthy Program in Kindergarten*

Nutrition education is effective when using social learning strategies (Unusan, 2007). Role modeling and self-efficacy are important in the learning and teaching of nutrition education. Social learning theory provides support for the idea that educators can influence nutritional knowledge and behavior. Utilizing Albert Bandura's social learning theory to understand children's experiences with learning nutrition provides context and reasons for how early childhood educators act as agents of change for children's nutritional habits (Bandura, 2004). Early childhood learning is an ideal place for children to observe and learn from their teachers and other classmates. In Bandura's (1977) social learning theory, observational learning is a powerful tool. Observations allow children to experience the consequences or rewards of a behavior when the child sees what others are doing (Crain, 2005). Parents and teachers often underestimate how much influence they have as a model. Children continually watch the actions of adults and listen to their commands (Crain, 2005). Teachers can influence children by setting an example and encouraging healthy eating in the classroom. Teachers can show positive messages about food through action if they have high self-efficacy. Observational learning contributes to self-efficacy, self-confidence in self ability (Crain, 2005). Self-efficacy is not made up and can be reinforced in teachers who lack faith in their ability to change their own lives and those of their students (Elliott, Isaacs, & Chugani, 2010).

A kindergarten curriculum for children created in 2013 by the University of Nevada Co-active Extension uses traditional Indian American knowledge about food and language to increase fruit and vegetable intake among kindergarten students. Nutrition education programs in schools integrated into overall school health and well-being will increase consumption of healthy food in early childhood (Mc Kenna & L, 2010). The program that can be emulated is the Veggies for Kids program created by the US Department of Health and Human Services & the US Department of Agriculture, in 2015 and the traditional knowledge of Tribes participating in Nevada. The core objectives of the Veggies for Kids program that can be adopted in a healthy eating program for children are: (1) Strengthening the importance and integration of nutrition education in schools, with lesson content related to Nevada education standards; (2) Increase the intake of adequate vegetables and fruits through improved diet in children; (3) Increase the use of water and low-fat milk as a choice of sugary drinks; (4) increase daily physical activity; (5) Strengthening cultural connections to traditional health, improving behavior through the use of traditional foods, food collection; (6) Provide an introduction to gardening through classroom and school garden experiences; (7) Involving parents through homework (Emm, Harris, Halterman, Chvilicek, & Bishop, 2019).

As a key to nutritional quality in preschool, the following are chosen; energy, total fat, saturated fatty acids, sucrose, dietary fiber, calcium, iron, iodine, potassium, vitamin D and folate. In accordance with the recommendations by Rizqie Auliana (2011), the full-board preschool menu must provide at least 70% of the daily energy and nutritional requirements for the children present, this level is adapted for energy, dietary fiber, vitamins and minerals. Because energy deficiency and excess can have adverse health consequences, a 10% error margin of the recommended value is adopted in the case of energy supply. In the case of fats, saturated fatty acids and sucrose, the recommended energy portion of this nutrient is used.

The school environment can positively influence students in areas beyond traditional academic achievement. The innovative program at Davis, Farm to School Connection, seeks to promote the development of lifelong healthy eating habits in children and to create a school environment that connects school parks, cafeterias and classrooms, and connects them with future local farming. This comprehensive program includes a farmer's market salad bar, class education, agricultural tourism and waste management. Graham, Feenstra, Evans, and Zidenberg-Cherr (2002) evaluates the effectiveness of the program through interviews and surveys of program leaders, teachers, and school staff. Participation in the school lunch program increased with the addition of salad bars, and many partnerships were developed between those involved. The Farm to School Connection component provides evidence to support a comprehensive school nutrition program and its positive impact on the school environment.

In implementing a healthy eating program, successful strategies for increasing children's food neophilia (willingness to try new foods), and acceptance of a variety of fruits and vegetables include: initial and repeated exposure, food tasting related to positive food experiences, and good role models (Holley, Farrow, & Haycraft, 2017; Nekitsing, Hetherington, & Blundell-Birtill, 2018). The greatest increase in vegetable intake and intake occurs with repetitive taste stimulation (Nekitsing et al., 2018), but a moderate increase also occurs with stimulation using other senses - touch, vision, hearing, and smell (Helen Coulthard & Sealy, 2017; Holley et al., 2017). Based on these findings, sensory-based food education in research by Gucciardi et al., (2019) has been developed to introduce healthy food to children by enabling them to interact with and explore food through various activities that use their five senses (H. Coulthard, Williamson, Palfreyman, & Lyttle, 2018; Hoppu, Prinz, Ojansivu, Laaksonen, & Sandell, 2015; Witt & Dunn, 2012). Songs, games, stories and other creative activities have been used to make sensory-based food education fun and interesting (Dazeley, Houston-Price, & Hill, 2012). Sensory-based interventions have been found to be most effective with children under six years (Moffitt, 2019); results include reduction of food neophobia, short-term increase in food neophilia (Battjes-Fries, Haveman-Nies, Renes, Meester, & Van'T Veer, 2015; Hoppu et al., 2015; Mustonen & Tuorila, 2010; Park & Cho, 2016) and greater knowledge about and positive attitudes towards unknown foods, vegetables, and healthy foods (Battjes-Fries et al., 2015).

### 3 METHODS

This study uses qualitative research with a case study approach conducted at Ananda Islamic School Kindergarten in 2018. The objective to be achieved in this research is to understand in depth of research on the application of Eating Healthy Program (EHP). Specifically, the purpose of this study is to thoroughly examine the implementation of the application of EHP, the advantage and disadvantage of the application of healthy eating and also impact of healthy eating in Ananda Islamic school kindergarten.

The data collection technique used is observation, interview and documentation, where the sources are from the kindergarten head, teachers, children and the application process of eating at school. Data were analyzed by reducing data, displaying data and verifying data using the Miles and Huberman analysis technique. Data validity test is carried out by extending the observation, increasing perseverance and doing data triangulation, by checking data from various sources, ways, and of existing theories.

### 4 RESULT AND DISCUSSION

Based on the findings, the application of food for children in Ananda Islamic School kindergarten is semi-commercial (only a small profit to cover the need for details). This is because the cost of Healthy Meal includes in annual fee. Furthermore, the Head of Kindergarten receives an amount of budgeting in a year from the management department. The head of kindergarten together with educators then prepares a menu of food that is in line with the budgeting that has been established. In doing so, the menu can change from time to time depending on the availability of food that is found in the market.

The frequency of Healthy Meal at the Ananda Islamic School kindergarten is once a week, which held every Friday at 09.45 with a varied menu on a weekly basis. All parents and students are informed about the program since the first year of school. Parents have got a menu schedule in the new academic year which is called Parents Teachers Meeting at Ananda Islamic School Kindergarten.

The Parents Teachers Meeting is also a place for the head of the school to give a strong understanding of a health for children and the importance of providing healthy food and balanced nutrition for young children. The head of kindergarten and education encourages the parents of students to prepare healthy food for their lunch box and pay attention to balanced and healthy food and not allowing the children to bring snacks. This counseling still needs to be reviewed because schools do not involve people who are authorized by doctors or health care workers as health companions, as stated in the guidelines for the development of health education for children in

the Ministry of Health Republic of Indonesia Regulation No. 66 of 2014 about the monitoring, growth, development and disruption of growth and development of children (ditjenpp.kemenukumham.go.id, 2014, No. 152), which states that the school can incorporate with every aspects of students social life to give information to parents about nutrition education and growth in kindergarten children and parents.

The food provided by the school has fulfilled the criteria of healthy food. Every week healthy diet consists of basic foods such as rice, side dishes (both with non-animal and animal-based foods), vegetable soup or curry. Food menu includes, rice with chicken soup; fried vermicelli with carrot mix; yellow rice, egg and cucumber; rice, spinach and corn soup, tempeh / tahu bacem; pudding; corn-milk-cheese; mung bean porridge; coco crunch with milk; sandwich with eggs, bread, cheese and tomatoes. The menu schedule is given in a continuous manner each week. However, food and drinks such as juice, milk and mung bean porridge are given as a supplement to the main foods.

On its application, from Monday to Thursday before they are doing a meal together, they wash their hands and pray before having the meals. Washing hands before eating whether after doing activities or not, is one of the efforts to habituate healthy living in school and a culture of clean living will prevent a person from being exposed to the source of infection. Next, educators ask the students to take the food that has been prepared and brought from home by their parents. Educators help the students to open children's' rice box in class. When educators find out that the children bring unhealthy snacks, educators give understanding to the child to not eat it and not to bring it as a food at school because it is an unhealthy food and their body doesn't need it by explaining the food content in the package. What teachers do when reading food labels in packaging is in accordance with the general message of the Minister of Health of the Republic of Indonesia in the guidelines for balanced nutrition No 41/2014 (Menkes, 2014). Educators then ask others to share the food they bring with them and then remind the parents by the time they pick them up or contact the parents by phone. When there are children who bring healthy food and eat it up, educators should give reward by giving compliments or stickers so they can put it in the class.

The implementation of eating activities in class, cooked food can be distributed to children by way of suspension, prepared from the kitchen in plates and brought to classroom or food with the container brought to classroom and placed there; children take themselves from food containers in the classroom. This cooking activity is supported by Jarpe-Ratner, Folkens, Sharma, Daro, and Edens's (2016) opinion that to improve healthy behavior can be done as in cooking activities, fruit and vegetable intake, and communication about healthy eating in children with cooking experience and nutrition education courses led by chef instructors. In the context of education, chef instructors are effective in providing nutritional knowledge and bringing about behavioral change. This program has the potential to work together and support school and other community-based strategies, including strategies that combine gardening and physical activities.

Children aged 5-6 years especially in Ananda Islamic School Kindergarten is still applying healthy eating activities every Friday using the way the food containers carried by the classroom staff and assisted by the educators in the classroom. Age 5-6 years is the ideal age to be accustomed to and taught about responsibility to themselves in accordance with Government Regulation No. 137/ 2014 (Pendidikan & Kebudayaan, 2015) concerning the standard level of achievement of the socio-emotional development of children aged 5-6 years which is about a sense of self responsibility; knowing their rights and obligations, regulating themselves and taking responsibility for their behavior for their own good. This is like doing nutrition education to build healthy eating habits in Japan, one of which is introducing soy products to children. Osera, Tsutie, and Kobayashi (2016) study examined the effects of using soy products at home and reducing children's dislike of soy products. Health education involving soy programs can lead to increased thinking about 'respect for food' among kindergarten children and increased knowledge giving to their careers.



Figure 2: The educator distributed the food

Through this activity, the educators can teach the children how to manage in taking the food they need. The children are learnt to take the responsibility for the food they took. So, children do not only get education about healthy eating but also to be familiar to be responsible and is able to regulate themselves for their food needs.

Before educators distribute food that has been prepared in class, the educator explains in advance what food menu is given on that day, what nutrients in it and why our bodies need them. It can also be seen that educators sometimes eat the food, especially when the food menu on Friday is vegetables. This is in accordance with the guide from Health and Nutrition Directorate of Early Childhood Education Directorate General of Early Childhood Education and Community Education Ministry of Education and Culture (Prima et al., 2017), which is to train children to eat fruits and vegetables, teachers can give example of eating the food themselves so the children have the perception that healthy food is delicious to eat.

In the application of healthy eating, Ananda Islamic School kindergarten is very much concerned about hand hygiene, children must wash hands before and after eating, pray before and after eating, sit when they eat, eat simultaneously. The children are also encouraged by educators to finish their food, they are also taught to eat using good cutlery, not scattered outside the plate, cutlery and mouth do not make any sound, sit quietly and do not disturb friends, tidy up the utensils after eating, clean his desk and bring the cutlery to the proper place.



Figure 3: The situation when the children eating



Each activity requires an oversight for each step of the activity. Supervision of the application of healthy eating is carried out by management staff in which the head of the kindergarten and cooks. The head of kindergarten is responsible for the preparation of the menu. To standardize the quality of food and the flavor as well as the efficiency and effectiveness for the use of funds is the responsibility of the cook so that the cost of implementing healthy eating can be reduced as low as possible. In addition, nutrition education for children, caregivers and teachers has been seen with several programs, such as the Child Care Food Program, where a large selection of learning tools and resources are provided to improve health and well-being (Noura, 2018). This includes recipes and cooking techniques. The curriculum structure includes teacher training sessions, teacher guides and children's learning tools, which are very good for general use containing activities, and exercises. This is a great resource to start building a healthy eating curriculum program.

It is also seen from the results of observations, supervision during the implementation of the application of healthy eating in group B Ananda Islamic School Kindergarten was conducted by the head of kindergarten and also educators. The head of the kindergarten supervises the available food menu that day according to the schedule that has been determined beforehand. The head of the kindergarten does not appear to be supervising the process of cooking the food as it is done in the kitchen of the Foundation's house which is located not far from the location of Ananda Islamic School kindergarten

Furthermore, supervision was also carried out by educators in the class regarding the level of cleanliness, the amount of food provided, the discipline in the classroom and of course the child's response to food; whether the child likes it or not, which child has difficulty eating and does not want to eat, oversees the portion of food provided, whether it is in accordance with the needs of the child in the class. Educators are seen to persuade the children by giving clear understanding to children who do not want to eat.

The assessment is also carried out starting from the planning, implementation and supervision stages. The head of kindergarten conducts an assessment from class to class, asking educators in class how is the food menu on Friday?, do the children like the food?, does the method of distribution to children correct?, does the children follow the procedure of eating? and is there a problem while the children are eating?. Then the Kindergarten Head discusses and writes it down in the weekly meeting agenda book which is held every Friday after school hours. It's also seen that the chef or food manager visits each class to assess the food menu that was prepared on Friday.

#### *4.1 The Advantage and Disadvantage of the Implementation of Healthy Eating Program*

Food plays an important role in daily life and the welfare of children. Children's food experiences are important guidelines for eating behavior in adults. Food is full of the qualities we feel with the sense of smell, touch, hearing, sight and taste. We live in a world of individual senses, and our food perception processes are also individual. Children actively investigate food during eating and cooking. By encouraging their journey to the world of food culture and food activities, supporting them in expanding their food preferences (Sandell et al., 2016). The advantage of implementing healthy eating at Ananda Islamic School Kindergarten is that the diet is quite varied and can be regarded as healthy and nutritious food. Even though the implementation is still once a week, it is carried out consistently and continuously, starting from the smallest class like Nursery A (2-3 years), Nursery B (3-4 years), KG A (4-5 years), and KG B (5-6 years). Healthy eating activities are also carried out in each class so that children with small ages can feel comfortable.

The disadvantage of applying healthy eating at Ananda Islamic School Kindergarten is that there is not yet an adequate kitchen available for cooking this healthy food, so that it is still done by the cook themselves at the Foundation's house which is located not far from the school location. The issue happens to be the use of melamine and plastic cutlery for eating. As we know, equipment made of plastic contains cancer-causing chemical compounds. Plastic cutlery is clearly not very safe to use for eating equipment in early childhood. The spoon and fork used are already using aluminum material, but it still does not fit the size, especially for children in the Nursery

class. They were seen having difficulty in scooping and bribing food because of the size of spoons and forks that are used by adults.



Figure 4: Melamine and Plastic Cutlery for Eating.

The preparation of a healthy food menu at Ananda Islamic School Kindergarten is carried out by the head of kindergarten and does not involve nutritionists. The Head of Kindergarten plans a lunch menu based on the "four healthy five perfect" guidelines. The menu is a composition of one-meal dishes that are overall harmonious and complementary to one's dining needs. In terms of health, it is often used the term of adequate menu, which means a menu that contains all the classes of food needed by taking the balance of nutritional elements contained in it. Nutrition is a very important factor diet preparation. The food menu that is served must meet the nutritional needs of children in order to support body growth, maintain health and produce energy needed by early childhood. Nutrients needed by the body are classified as energizers, growth promoters, builders and maintainers of body tissues, as well as regulating metabolism and various balances in the body's cells.

To arrange an adequate menu, a person needs to have knowledge about food ingredients and nutrients, balanced nutritional needs as well as knowledge of dishes and its process. Nutritionists are needed to provide input in the preparation of a healthy lunch menu. The preparation of the lunch menu, in addition to using the guidelines "four healthy five perfect" must pay attention to the energy needs of early childhood. For this reason, the role of the nutritionist is very important so that the food menu that is served is in accordance with the standard of healthy eating for early childhood. According to Eliassen (2011), teachers who understand the importance of their role in the development of children's healthy eating behavior can help improve the health of the children they serve for life. They can offer positive and meaningful experiences about food, including growing, preparing, and eating food with children. Apart from the food offered at home, early childhood educators have the opportunity to choose a model and enjoy a variety of foods. Food in the program must be associated with pleasant opportunities and experiences rather than rules and limits. Tasting activities help children learn about food, behavior, and even other cultures.

#### 4.2 *The Impact of Healthy Eating Program*

Teachers or parents who care for children need to be aware that some healthy eating habits strategies have a negative effect on the development of eating behavior. Food practices that involve pressure and restrictions not only affect children's health but also have long-term implications, such as problematic behavior. Apart from the food offered at home, early childhood teachers have the opportunity to model the selection and enjoyment of various foods (Eliassen, 2011). A supportive and caring early childhood environment offers guidance through adult modeling, serves a variety of nutritious food at meals and snacks, and introduces children to new foods in the classroom. These practices encourage the development of children's healthy eating attitudes and behavior and enhance positive long-term health outcomes.

The program of implementing healthy eating has a positive impact on students. The visible impact is the emotion of pleasure experienced by the child. Children are very susceptible to falling blood sugar levels, which can cause mood swings, irritability, and difficulty concentrating. Holding hunger can cause early childhood emotions erratic. Eating unusual healthy food can cause feelings of pleasure in children. Pleasure is a child's feeling when his wish is fulfilled or being pleasure about something that makes a child happy.

Next is the impact of children becoming fond of eating vegetables. Because the healthy menu provided is mostly vegetables, children who initially do not want to eat vegetables, they like the vegetables at the end. The evidence is taken from the reports received from parents. The students at Ananda Islamic School Kindergarten can also get to know different types of vegetables in their first hands; they can clearly mention the various kinds of vegetables that they often consume. Having a healthy eating program at school can help teachers and parents instill a culture of eating healthy food.

In addition, this healthy eating activity also makes children discipline and responsible. Discipline is an attitude and behavior that is orderly, consistent, and has a certain systematic which is a reflection of a disciplined person. A discipline attitude can be manifested in clear and calm behavior, and all rules can be followed. A discipline attitude can be carried out in daily life by carrying out the tasks and obeying the existing rules or regulations. While responsibility is a behavior that determines how we react to situations every day that require some kind of moral decision. Responsibilities can be instilled and taught from an early age. There are several ways to instill an attitude of responsibility to early childhood, for instance giving trust, apologizing, and giving tolerance.

The children look disciplined starting from waiting in line to wash their hands by lining up. They also appeared to be in an orderly manner, waiting for their turn of getting food that had been prepared. Praying in an orderly manner can also be seen in this program. Even when eating, the children are accustomed to an orderly manner, and not disturb other friends, focus on being responsible to finish the food. If the food taken is not finished, the child will apologize to the educator in class as a form of accountability. Educators will give understanding to children so that next time they take enough food to eat. After eating, the children will immediately bring their cutlery to the table prepared by the educator. Children bring their own equipment that has been used to the place. No dirty eating utensils are left on the classroom table and when food is dropped or spilled, the child is also asked to be responsible for cleaning it aided by the educator in class if there are a lot of them.

Healthy eating programs that have been proven to have a large impact are The Supplemental Nutrition Assistance Program (SNAP) and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), each program is estimated to serve three out of ten young children in the United States each month. These programs provide important additional resources for buying food. Research shows that both programs have important positive impacts on children's health and food security. Direct evidence in the SNAP case, and indirect evidence in the WIC case, that this positive impact continues into adulthood (Schanzenbach & Thorn, 2019). Each of these programs is an important investment in the welfare of children today and in the future. Barriers to accessing WIC, SNAP, or other programs that invest in early health tend to endanger health in the short term and both health and human capital in the long run and may have a greater negative impact on more vulnerable populations. Future research and policy reform must address the health problems of children approaching school age.

## 5 CONCLUSION

Based on the above research results, the conclusion of this research is the application of healthy eating at Ananda Islamic School Kindergarten which is done every Friday every week has been going pretty well as an application of the Ministry of Health Republic of Indonesia Regulation No. 66 of 2014. Menu planning, implementation, supervision, and evaluations had been well implemented. The planning phase starts from planning the budget up to the list of healthy eating

menus for one school year. The planning phase of the menu schedule is prepared directly by the kindergarten head and educators and then disseminated to parents at the beginning of the school year meeting called the Parents Teachers Meeting. At this meeting the school also provides counseling on the provision of healthy and nutritious food as food supplies every Monday-Thursday at school.

Next is the implementation stage, although there is no supervision from the Kindergarten Head in processing food, the cook supervises and cooks it according to the existing rules, that are, washing hands before handling food, washing the food and cooking it with clean water. The class implementation also looks very good. The daily executive assistant provides bowls and other eating utensils in the form of spoons and forks and healthy food that has been cooked to the classes before the “healthy meal” takes place. Educators also make sure all children wash their hands, pray, sit down nicely, eat together and use the provided food equipment, and eat without sound. The educator is also seen giving an explanation of the menu and nutritional content of the food children will eat on that day. Educators also give encouragement or motivation to children who do not want to eat or do not want to finish their food.

The activity of implementing healthy eating is supervised directly by the head of kindergarten, teachers and cooks. They also do not forget to do an assessment as a form of evaluation in the implementation of the next healthy eating such as the menu itself, financing, food preference, and so on. Assessment is written and discussed by the head of kindergarten, educators and cooks. The parents take role to discuss further about this healthy meal program. The advantage of implementing healthy eating at Ananda Islamic School Kindergarten is that the diet is quite varied and can be regarded as healthy and nutritious food. The disadvantage of applying healthy eating at Ananda Islamic School Kindergarten is that there is not yet an adequate kitchen available for cooking this healthy food, so that it is still done by the cook themselves at the Foundation's house which is located not far from the school location.

The issue happens to be the use of melamine and plastic cutlery for eating. The spoon and fork used are already using aluminum material, but it still does not fit the size. The preparation of a healthy food menu at Ananda Islamic School Kindergarten is carried out by the head of kindergarten and does not involve nutritionists. This program of implementing healthy eating has a positive impact on students. The visible impact is the emotion of pleasure experienced by the child. Next is the impact of children becoming fond of eating vegetables. In addition, this healthy eating activity also makes children discipline and responsible.

## 6 RECOMENDATION

Providing more adequate kitchens so that the implementation of food processing activities can be supervised directly by the head of kindergarten. Replacing children's eating utensils with those that are more suitable and safer for early childhood from the ingredients to their size. Making a new pattern by letting children take their own portion of food in eating activities for children aged 4-6 years as a form of children self-responsibility. Involving nutritionists or doctors or health experts for health and nutrition counseling and for determining healthy eating menus. Make a short counseling about health and nutrition for educators at Ananda Islamic School Kindergarten.

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