Application Of Cooking Class Activities In Increasing Healthy Behavior And Cooperation In Kindergarten

Sri Handayani
Universitas Negeri Semarang, Indonesia

Abstract. Habits of children in the school who always consume food and drink without selection, not washing hands before eating, littering is a very worrying behavior. Dangerous substances contained in foods and beverages such as flavorings, dyes, preservatives, artificial sweeteners and chemicals, many negative impacts are caused, such as cancer, convulsions, impaired heart function, brain, vomiting, depression, neurological disorders. In order for this habit to be unsustainable it is designed activities aimed at improving children's knowledge of healthy behaviors through healthy eating and drinking, maintaining personal hygiene and the environment in playful situations. This research method uses literature study and literature review. The results obtained from the study of literature is an interesting method and learning technique is the activity of cooking class. Cooking class activities to gain concept and knowledge directly, increase knowledge about food and drink, learn about the importance of food and beverage to health, improve healthy behavior and other skills such as cooperation with his friends. Based on these results can be concluded that the implementation of cooking class activities is very appropriate to improve healthy behavior and cooperation in Kindergarten.

Keywords: Cooking Class Activity, Healthy Behavior, Cooperation

1. Introduction

The thing that we often see is a fact about the bad habits done by children of the early age as well as the parents themselves. The habit is that children always consume snacks and drinks without selection, littering, before eating do not wash hands, throw garbage carelessly. On the parent side always give pocket money to the children at school time as pocket money without giving control over the use of money. The parents never thought of the side effects arising from indiscriminate snack, but we already know most of the snacks are sold in the schools are snacks and drinks containing harmful substances such as flavorings, dyes, preservatives or artificial sweetener or chemical. Lots of negative effects caused by chemicals used as food additives include: such as cancer, convulsions, impaired heart function, brain, vomiting, depression, neurological disorders (rimayaz.bloksport.co.id).

Seeing from the impact of food and drink as mentioned above of course as educators are very concerned. From the results of interviews with parents parents note that children prefer snacks either in the form of food or beverage manufacturer than home cooking while parents are powerless to face the child's attitude. Schools are also trying to find a way to solve by making rules about the prohibition of bringing snack money to school, throw garbage in place, wash hands before eating, but this rule does not build awareness in children. This is evidenced when the children come home and picked up by their parents they whine for snack, throw the wrapper carelessly.

From this situation arises a desire to design a learning activity aimed at improving children's knowledge about food and beverages and the importance of healthy behavior through personal hygiene and environment in playful situations with various methods and interesting learning techniques. Activity cooking class is one of the learning activities in an effort to obtain the concept and knowledge directly. Children can add knowledge about healthy foods and drinks through what they hear, see and feel. They engage in true experience, learn about the importance of food to health and how it affects long-term health. This also fits with the theory of Bandura modeling (Alwisol 2009: 292) which states that children learn from how adults treat them.

Cooking class activities provide natural learning to improve knowledge of healthy behavior and help children to improve life skills that is cooperation with their friends, communicate actively, help each other and learn to understand the rules in the game so that it can train child psychology in terms of habituation.

That education in Kindergarten as part of early childhood education is to assist the child through

* Corresponding author: abelhandayani@gmail.com
stimulation to assist physical and spiritual growth and development in order for the child to have readiness in entering further education as contained in Law no. 20 of 2003 on National Education System. From here we can conclude that the success of children's education in kindergarten not only provide education Moral and religious values, language, cognitive and art but also must be developed physical health of children which includes the habituation of healthy behavior.

The first four years of a child are very important because of the formation of networks and rapid development (Gardner, 2003: 52-56). One of them is in the process of forming the brain and impacting the level of intelligence. The human brain is one of the most rapid growth capital (Abdorachman, 2005: 388-389). So that can be said early childhood is an investment nation, because they are the next generation of nation. The quality of the nation in the future is determined the quality of children of early age today. This means that a healthy early childhood is required to have normal and reasonable physical growth in accordance with the standard of physical growth of the child in general and have the ability to meet the standard of ability of his age.

Efforts to improve the quality of human resources must be done from an early on in a systematic and sustainable. Growing development of optimal early childhood depends on three pillars of service, namely nutritional intake, health care and psychosocial stimulation. So that parents, caregivers and educators of early childhood should have knowledge and understanding about health services, nutrition, and psychosocial stimulation in order to provide appropriate services and quality in accordance with the needs of growth and development of early childhood.

The ability of Early Childhood Cooperation is very important. According to Plato (in Nugraha, et al 2008) potentially humans are born as a social creature (zoon politicon). Syamsudin (in Nugraha, et al. 2008) suggests that "socialization is the process of learning to become a social being," whereas according to Loree (in Nugraha, et al 2008) "socialization is a process in which the individual (especially) the child trains his sensitivity to stimuli social, especially the pressures and demands of life (group) and associate with behavior, like others in the social environment.

Healthy foods and beverages are very important for the child because the food given to the child will affect growth and physical health. Therefore it is necessary to do efforts and strategies to build awareness of the children about the importance of healthy foods and beverages, maintaining personal hygiene and the environment. The strategy offered is the cooking class activity.

1. Healthy Behavior

According Syahreni (2011: 3) behavior is an activity undertaken by an individual (someone), both of which can be observed (seen) directly or indirectly. Healthy is a condition or a good state, including physical, mental and social, so not only free from disease alone. So that healthy behavior is a person's actions or activities undertaken by a person, either directly or indirectly, to maintain and improve health and prevent the risk of disease.

According to Notoatmodjo (2010: 23) health behavior (healthy behavior) is defined as a response to a stimulus or object associated with healthy-sickness, disease, and factors that affect health such as environment, food, beverages, and health services. In other words, health behavior is all activity or activity of a person, both observable and unobservable, related to maintenance and improvement of health. This health care includes preventing or protecting yourself from illnesses and other health problems, improving health, and seeking healing when ill or affected by health problems.

Health under the Law of the Republic of Indonesia on Health (No. 36 of 2009) is a healthy, physical, mental, spiritual and social condition that enables everyone to live socially and economically productive. In harmony with the healthy definition law put forward by the World Health Organization (WHO) to declare healthy is a state of physical wellness, soul and social is perfect and not just a state without disease. So, overall health involves physical, mental and social factors.

Based on the above understanding is concluded under the healthy behavior is a person's attitude towards health care system, illness and illness, food and beverages and the environment, so one must get the appropriate nutrients to their needs, exercise regularly, have time to sleep or rest enough, perform dental and oral care, maintain personal hygiene and environment, to avoid a variety of accidents.

Dimensions of Healthy Behavior

The dimensions of health behavior are divided into two (Soekidjo Notoatmodjo, 2010: 24), namely:

a. Healthy Behavior is the behavior of healthy people to prevent disease and improve health. Behavior in preventing or avoiding illness and other health problems: accident or preventive and promotive behavior (Acts or activities to maintain and improve health). Example: Eat with balanced nutrition, exercise / physical activity on a regular basis, do not consume food / beverages containing addictive substances, adequate rest, recreation / stress control.

b. Health Seeking Behavior is the behavior of sick people to get healing and health restoration. Also called curative and rehabilitative behavior that includes activities: 1) Recognizing symptoms of illness, 2) Efforts to get healing and recovery that is by self-treatment or seeking services both traditionally and professionally, 3) Compliant to the process of healing and recovery (compliance).

Factors Affecting Healthy Behavior

According to Soekidjo Notoatmojo (2010: 25) the factors that influence the healthy life behavior include:

a) Food and beverage factors consist of breakfast habits, selection of food intake, amount of food and beverages and food hygiene. b) Behavioral factors of personal hygiene consist of bathing, cleaning the mouth and teeth, hands and feet and cleaning clothes. c) Behavioral factors towards environmental hygiene consisting of
clean room, house, school environment. d) Behavioral factors for illness and illness consist of health care, disease prevention, treatment plan and health restoration. e) The balance factor between rest and sports activities consists of the number of rest periods, activities at home or outside the home and regular exercise. Based on the factors of environmental hygiene, personal hygiene, nutritional needs, and the need for sleep and activity, then developed an indicator to make a questionnaire of healthy behavior studies of early childhood in kindergarten Dharma Wanita, Batursari Village, Kec. The bars are like in table 1.

Table 1. Healthy Behavior Indicators

<table>
<thead>
<tr>
<th>N</th>
<th>ASPECT</th>
<th>INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Environmental hygiene</td>
<td>a. Take out the garbage in its place</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. Spruce up toys</td>
</tr>
<tr>
<td></td>
<td></td>
<td>c. Tidy plates &amp; glasses</td>
</tr>
<tr>
<td></td>
<td></td>
<td>d. Put shoes on the shelf</td>
</tr>
<tr>
<td></td>
<td></td>
<td>e. BAB &amp; BAK in place</td>
</tr>
<tr>
<td></td>
<td></td>
<td>f. Clean the environment. school</td>
</tr>
<tr>
<td>2.</td>
<td>Personal Hygiene</td>
<td>a. Wash hands &amp; feet before bed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. Shower 2x a day</td>
</tr>
<tr>
<td></td>
<td></td>
<td>c. Shampoo every two days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>d. 2x toothbrush with toothpaste</td>
</tr>
<tr>
<td></td>
<td></td>
<td>e. Cleaning the ears</td>
</tr>
<tr>
<td>3.</td>
<td>Eating Behavior and drink</td>
<td>a. Accustomed to breakfast</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. Drink milk every day</td>
</tr>
<tr>
<td></td>
<td></td>
<td>c. Healthy foods and drinks</td>
</tr>
<tr>
<td></td>
<td></td>
<td>d. Want to eat vegetables</td>
</tr>
<tr>
<td></td>
<td></td>
<td>e. Wash hands before eating</td>
</tr>
<tr>
<td>4.</td>
<td>Behavior of a disease</td>
<td>a. Cutting nails</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. Want to take medicine if ill</td>
</tr>
<tr>
<td></td>
<td></td>
<td>c. Ask to be sent to the doctor when ill</td>
</tr>
<tr>
<td></td>
<td></td>
<td>d. Change clothes</td>
</tr>
<tr>
<td>5.</td>
<td>Balancing Behavior</td>
<td>a. When school is not sleepy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. Wake up before 5 am</td>
</tr>
<tr>
<td></td>
<td></td>
<td>c. Sleep no later than 21:00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>d. Sport at least 1x a week</td>
</tr>
<tr>
<td></td>
<td></td>
<td>e. Leave the school on foot</td>
</tr>
</tbody>
</table>

2. Cooperation

In social development one aspect that is developed is cooperation. Cooperation is one of human nature as a social creature. The more modern person then he will more and more cooperate with others, even as if without being limited by space and time of course with a modern device as well.

The aspects of cooperation are:

1. Familiarize the child mingle / make friends with peers in doing the task.
2. Familiarize children to appreciate the opinions or abilities of others.
3. Realize that cooperation or help is very important and fun.
4. Develop a sense of empathy in the child

Cooperation or cooperation is a symptom of approaching each other to take care of common interests and common goals. Cooperation and opposition are two traits that can be found in all social processes / societies, among people with others, groups with groups, and groups with someone (Saputra et al, 2005).

According to Johnson et al (in Saputra 2005) that cooperative learning can be defined as a structured group work or learning system including within the structure are the five key elements of positive interdependence of individual responsibility, personal interaction, cooperative skills, and group processes.
3. Cooking Class Activity

Cooking is a process of creating a food by sequencing the existing concept of cooking, which means cooking is also the creation of a work that we can enjoy and also others. Processed foods become something that has its own taste depending on the way of processing.

Over time, variations of cooking also become more advanced with the emergence and development of ways of farming. In these times, humans also learn to cultivate plants for food supplements, especially grains, which then become a source of carbohydrates at the dinner table.

Foodstuffs

Foodstuffs or also called staple foods derived from animals and plants consumed by living things to provide energy and nutrients.

Food and Drinks are good for consumption

1. Fresh fruits and vegetables

Fresh fruits and vegetables are good for health because they contain many of the vitamins A, B, C, E and G that are needed for the renewal process of the body. In order to give maximum results, make it into the juice because it can be quickly digested and absorbed by the body.

2. Low-fat yoghurt and skim milk. This product also provides carbohydrates, protein and potassium

3. Low-fat red meat, skinless poultry meat, fish, tempeh and tofu. These foods can be a choice of low-fat protein source. Keju, krim, mentega, mayones.

4. Consumption of cheese, cream, butter and mayonnaise is fine with not excessive notes.

5. Pure natural honey

6. Nuts products (walnuts, coconut, cashew, pistachios, walnuts, almonds, hazelnuts) and legumes (bean bogor, green beans, black beans, red beans, soybeans, peas, lentils). This group of foodstuffs is a source of vegetable protein.

7. Sunflower seed oil, corn oil, peanut oil, sesame oil, olive oil. This type of oil is better than oil from coconut or oil from animal flesh.

Food and Beverages should be avoided

1. Sweetener saccharin, or aspartame). Should not give children drinks with sugar sweeteners and processed, especially with artificial sweeteners. Instead, choose pure natural honey, pure maple sugar, stevia sugar.

2. Canned, instant, or preserved food and drink (shredded, jerky, sardines, etc.). Avoid such foods because almost all food industries use synthetic chemicals to preserve, commercialize, and color their products to be practical and economical. Aroma sintesis dan penyedap rasa buatan atau monosodium glutamate (MSG).

3. Consumption of aroma synthesis and flavor synthesis if excessive can cause disruption to the nervous system, kidneys and liver. The reason most manufacturers of these products use a certain chemical mixture to get the original aroma of food. Instead, use traditional spices such as pandan leaves, turmeric, garlic, ginger and so on.

4. Coffee, tea, and chocolate

Consumption of coffee, the and chocolate should be reduced because the caffeine content can give the effect of dependence and can lead to increased heart rate, acid release stomach, kidney disorders and other disorders. In addition to not nutritious, caffeine also inhibits the absorption of various types of vitamins and minerals, especially calcium and iron.

5. Soft drink

Soft drinks or carbonated beverages contain carbon dioxide gas and large amounts of phosphoric acid that can interfere with calcium and bone metabolism.

6. Saturated oil

Oil that is more saturated acid generally comes from animal fat, except from coconut oil and palm oil. Better artificial replacement (cyclamate).

7. alone with corn oil, olive oil, sesame oil, or sunflower oil. Besides oil for frying should also not be used many times. High temperatures can alter the chemical makeup of fats that will stimulate free radicals in the body. Fast food

8. Avoid foods like hotdogs, pizza, french-fries due to high-calorie, fatty, and insufficient vitamins, iron, and lack of fiber.

Class Definition

The general sense of the class, that is, a group of students at the same time receives the same lesson from the same teacher. Meanwhile, the class according to the general sense can be distinguished from two views, namely the view of the physical aspect and the view in terms of students. Nawawi views the class from two angles, (a) Classes in the narrow sense ie, a room bounded by four walls, where a number of students gather to follow the learning process. The class in this sense, contains static properties because it simply refers to the grouping of students according to their level of development, based on their chronological age limit. (b) Class in the broad sense that is a small community that is part of the school community, which as a whole is organized into a work unit that dynamically organizes creative learning activities to achieve a goal.
"Cognitive growth is defined as an increase in the child's basic store of knowledge (Lunzer 1959), it occurs as a result of experiences with object and people (Piaget 1952b)" (Brewer, 2007: 149) Playing contributes to the improvement of children's knowledge, they learn to find solutions to the problems they find, and find cause and effect so that children's basic knowledge can flourish. Such knowledge is formed as a result of experience through interaction with specific people and objects.

Cooking activity is one of learning in the effort of acquiring concept and experience. Children can gain knowledge about healthy foods through what they hear, see, and feel. Dodge and Colker stated that, “Cooking enables children to experience the world of food firsthand. They learn not only how food is prepared but how it contributes to their health and well being. Cooking offers children opportunities to experiment with food, to be creative, and to prepare nutritional snack. It could be considered a ‘survival skill’ that is basic to the education of all boys and girls” (Dodge and Colker, 2001: 271).

Cooking activities invite children to engage in true experience, children learn about the importance of food to health and how it impacts long-term health. Children get information about healthy foods through what they feel, see, hear, and experience so they experiment directly. Cooking activities, providing natural learning to increase knowledge and train children to improve life skills or life skills.

Cooking class play activities are one of the learning that aims to improve children's knowledge about healthy food designed in play situations by combining various methods and interesting learning techniques in which there are cooking activities.

METHOD

This research includes the type of literature study research by finding reference theory relevant to the case or problems found. Reference theory obtained by way of research literature study serve as the basic foundation and the main tool for research practice in the field.

Participants

This research is done in TK Dharma Wanita Batusari While the writing of scientific work done in PPs UNNES. The research was conducted from September 11, 2017 to September 25, 2017.

The type of data used by the authors in this study is primary data by observation and secondary data that is data obtained from journals, documentation books, and internet.

1. Documentation

Documentation is a method to search for documents or data that are considered important through newspaper articles / magazines, journals, libraries, brochures, documentation books as well as through electronic media ie the internet, which is related to the implementation of this research.

2. Literature Studies

The study of literature is the way used to collect data or sources related to the topics raised in a study. Literary studies can be obtained from various sources, journals, documentary books, internet and library.

3. Observation

The collection of data by direct observation or by direct observation is a means of data retrieval using the eyes without any other standard tool aid for that purpose. we made observations in Dharma Wanita Batusari kindergarten

DISCUSSION

From the results of processing existing data from the internet, journals, and book documentation has become an input for TK Dharma Wanita Batusari to evaluate activities or programs related to healthy behavior of early childhood. Suggested evaluation by looking at healthy behaviors that are in less or enough criteria. Among them are eating and drinking behavior, environmental hygiene behavior, and personal hygiene behavior.

Introducing healthy foods for young children can be done in various ways that are interesting and impressive for children by choosing the methods and the most appropriate way in learning. "Healthy foods are foods that have adequate and balanced nutrients and do not contain (polluted) elements that can be harmful or harmful to health." (Nuraini, 2007: 52) In choosing food products consumers should be good at selecting the product in accordance with the nutritional aspects and food security. In the 50's a very thick slogan four healthy five perfect, it continues to be socialized to the people of Indonesia so as not affected by malnutrition. Four healthy five perfect consists of (1) staple food, (2) side dishes, (3) vegetables, (4) fruits, and (5) milk. The concept developed today is the concept of balanced nutrition, "The healthy menu for children in principle should consist of foods that have a balanced nutritional content and adjusted for age, activity, weight, and height of children" (Secret, Redaction Health, 2013: 19). Parents should be aware of food consumed by children. These foods include unhealthy foods, namely in the form of less nutritious snacks and snack foods sold in schools. The food is mostly less hygienic and contains harmful substances such as non-food coloring agents or preservatives such as borax or formalin. "(Damayanti, 2013: 11)

In order to continue to achieve a good level of health humans must live healthy on a regular basis. Healthy living required clean and healthy environment conditions. Wherever humans will always be together with the environment, whether at the time of study, work, eat-drink and rest human remains united with the environment. Therefore, the condition of the
environment needs to be paid attention so as not to damage the health as prevention efforts that can be done starting from the early, both from the family environment and school environment.

Playing a cooking class can improve knowledge about healthy behaviors. Students who were initially lackluster and bored with the less varied learning methods are now enthusiastic and happy to follow the lessons if done with the activities of playing especially the cooking class play activities. Dharma Wanita Baturasi kindergarten students showed a positive response to the knowledge about healthy behaviors facilitated by cooking class activities. This can be seen from the increasing knowledge of students from not knowing the concept of healthy food to be able to show, mention, explain, or do something things which is related to healthy foods such as factual knowledge that shows the types of nutritious foods, shows the characteristics of foods containing additives, Conceptual Knowledge students can tell what is meant by healthy food, can tell the benefits of healthy food.

Cooking class is a cooking activity done in groups in a place to process and cook in a more conceptualized manner correctly. It can be concluded that the activity of cooking class is an activity of processing a raw material into a material ready to be eaten and served, and done in groups in a place more conceptual and requires a creative and fun design in it, cooking is also important because opportunities for children to concentrate and children also experiment in cooking activities, children can discover new things from cooking activities by experimenting and can develop children's social skills to work together.

Benefits that can be gained by cooking together, such as can increase creativity, dexterity, ability to socialize children, cooperation, self-confidence increased children that they can contribute in serving menus. Cooking activities can strengthen parent-child, teacher-child, and child relationships with friends.

Through the activities of social class cooking children can develop, perkembangannya especially in cooperation, for example in making food in groups, through the introduction of how to make meals and beverages can be made in groups, in addition to children trained life skills, increase confidence of children, increase sense of responsibility in the child and positively interact with the child.

**Conclusion**

Based on observation of healthy behavior of early child in environment of kindergarten Dharma Wanita Baturasi not well executed by learners. This is indicated by the behaviors that are in the criteria of less eating behavior and drinking behavior of environmental hygiene, behavior towards personal hygiene. So that early childhood institutions should continue to be guidance and mentoring so that healthy behavior can be an early childhood lifestyle.

Knowledge of healthy behavior one of them is information obtained by children in the form of learning materials about healthy foods and drinks which includes the concept of balanced nutrition, foods and beverages that do not contain substances additive harm to the body by knowing the food from physical form without packaging and through packaging, the knowledge is realized in the form of student learning outcomes after following the learning activities.

The process of social development of children through cooking class activities are done in stages to develop the attitude of cooperation that has been done by the child was very pleasant. In this class cooking activity the children make various kinds of food and drink, even at the time of carrying out the activity enthusiasm of children to follow activity very good, children can communicate, play with group buddies and help each other with group friend.

**Suggestion**

Based on the conclusions and implications that have been proposed, the researchers tried to give suggestions as follows:

a. **Institute**

The need for cooperation between the school and parents is more because the forming of early childhood behavior can not be done by one party only. Healthy behavior must be done in a systematic and continuous in order to create the next generation of a quality nation because of the growth of early childhood optimal depending on healthy behaviors performed.

Institutions are expected to pay more attention to the use of media and learning methods used in learning so that more varied and fun.

b. **Teacher**

Teachers are expected to play this cooking class can be applied in learning about healthy behaviors as well as in other relevant learning by taking into account the applicable procedures and guidelines.

c. **Parents**

For parents, this research is expected to be a reference to make the introduction of healthy food and beverages, to habituate by serving healthy foods and drinks in the daily menu, and can bring children with healthy food to school.

d. **Other Researchers**

For other researchers, it is hoped that this research can be used as a comparison material to enrich other research studies related to healthy foods by using various media variations and games that are appropriate to the stages of child development. Furthermore, the development of this research can be further research for other researchers to develop and apply different methods.
Children are expected to apply this knowledge in daily life, selecting the right food or snacks and scrutinizing the food before it is consumed with attention to the characteristics already learned in this lesson.

**References**


Holly Kihm and Kay Singleton,*Creative Cooking with Preschoolers : A Service Learning Experience for FCS Students*, (Journal of Family and Consumer Sciences Education, 30(1), Spring/Summer 2012)


Law no. 20 of 2003 on National Education System.

Internet

http://www.ejournal.com/2014/02/kemampuan-kerjasama-anak-usia-dini.html