

5-2020

## The Importance of Nutrition Education in Kinder

Guadalupe Bravo-Estrada  
*California State University, Monterey Bay*

Follow this and additional works at: [https://digitalcommons.csumb.edu/caps\\_thes\\_all](https://digitalcommons.csumb.edu/caps_thes_all)

---

### Recommended Citation

Bravo-Estrada, Guadalupe, "The Importance of Nutrition Education in Kinder" (2020). *Capstone Projects and Master's Theses*. 817.

[https://digitalcommons.csumb.edu/caps\\_thes\\_all/817](https://digitalcommons.csumb.edu/caps_thes_all/817)

This Capstone Project (Open Access) is brought to you for free and open access by the Capstone Projects and Master's Theses at Digital Commons @ CSUMB. It has been accepted for inclusion in Capstone Projects and Master's Theses by an authorized administrator of Digital Commons @ CSUMB. For more information, please contact [digitalcommons@csumb.edu](mailto:digitalcommons@csumb.edu).

The Importance of Nutrition Education in Kinder

Guadalupe Bravo-Estrada

A Capstone Project for the Bachelor of Arts in Human Development and Family Studies

Spring 2020

## Introduction

There is a lack of nutrition education in the elementary school curriculum. Insufficient nutrition education can lead to poor behavior health choices in children. According to the Center for Disease Control and Prevention (CDC) (2014), US students are receiving less than eight hours of nutrition education in schools which is not sufficient to impact the effect of behavior change. Unhealthy eating behaviors can lead to improper nutrition that can prevent children from having a healthy lifestyle in the future. Therefore, I am creating a three-day nutrition lesson for a Kindergarten class at Alisal Community Elementary School in Salinas, California.

## Needs Statement

Nutrition education is important in children's development since it provides awareness for adopting a healthier eating lifestyle. According to the Department of Social and Health Services (2019), nutrition education is defined as a set of experiences that influence eating behavior habits that are beneficial for health and well being. Insufficient nutrition education in children can lead to poor health choices and develop health problems or obesity in the future. According to the Centers for Disease Control and Prevention (CDC) (2014), the percentage of US schools required to instruct nutrition education decreased from 84.6% to 74.1% between 2000 and 2014. Because of this, it is clear that there has been a decline in the importance of providing nutrition education in schools. Due to the lack of nutrition education in schools, this can lead to having malnourished students in classrooms and have an impact on their learning performance. According to Georgieff (2007) and Williams (2008), undernourished children are more likely to perform lower scores, low school attendance, and have health problems. Thus, it is important to teach children at an early age what are healthy foods and why they are so important.

Also, Georgieff (2007), states that malnutrition can have a significant effect on the developing brain of a child. The brain needs of particular nutrients from certain foods to develop strong and healthy. Improper eating habits can lead to severe health issues in the long run.

According to Fish, Brown, and Quandt (2013) stated that fruit and vegetable consumption falls well below recommendations in much of the US particularly among low-income populations. This as a negative impact in low-income communities since they are not consuming sufficient nutrients and are not providing the best food resources for their children. This might be due to the lack of education and economic issues. Pechey and Monsivais (2016), mentioned that the link between socioeconomic status and healthy diet is the cost of foods and accessibility, however, foods that have fewer nutrients are at an affordable cost. This effects low-income populations which are more likely to buy less nutritious food sources since they are affordable and faster. Schools can provide knowledge for students so that they would be able to understand the difference between healthy foods and unhealthy. With the goal to encourage healthy eating in children. The importance of teaching children to maintain a healthy diet can help form a desirable nutritional concept. According to Baskale, Bahar, Baser, and Ari (2009) suggest that children should be provided with nutrition education in schools based on Piaget's theory, which starts at an early age so that it could have a long-lasting effect on their eating behavior.

Even though the school's nutrition programs have been developed to provide nutrition services, it has not been effective. Since nutrition education is not part of the school curriculum because it is not a subject in the standardized state test which affects how much material is presented to children. According to Bevans, Sanchez, Generally, and Forrest state that about 94% of public and private schools in the United States participate in the National School Lunch

Program which promotes healthy eating habits (2011). The National School Lunch Program provides balanced and nutritious school meals which as an impact on the consumption of grains, vegetables, fruits, and milk. However, the studies conducted by Bevans et. al mentioned in the discussion that the access to purchasing unhealthy foods in schools undermines the purpose of the National School Lunch program to implement a healthy meal for the students (2011). While this shows that children are more likely to consume unhealthy foods when given the opportunity to choose between healthy and unhealthy food options. By providing knowledge about nutrition to students at an early age can encourage them to have a healthier diet option when giving the opportunity to choose. Increasing access to early nutrition education to children will provide sightful information that children could use in their behavior habits. Students will learn to differentiate foods and learn more about nutrition. They would later be able to adapt and balance what they have learned and incorporate it into their life.

Through my project, I plan to teach nutrition lessons through a variety of activities that would engage the appropriate age group. I have created a three-day interactive lesson on nutrition for the Kindergarten students in Alisal Community School, Salinas, California.

### Theory

According to Jean Piaget's theory of cognitive development, children from 2 to 7 years old are in the preoperational stage of cognitive development. Piaget mentions that cognitive development is an important aspect of children's understanding and learning about the world. The preoperational stage is divided into two levels. The first level is between ages 2 to 4 years old in which children are able to engage in symbolic representation. Children at this level are more likely to depend on perception and have difficulty understanding concrete logic. According

to Arredondo, Castaneda, Elder, Slymen, and Dozier (2009), stated that children who are overweight experience a high recognition of fast food restaurant logos than other logos. This shows that the visual representations of food advertisements have an impact on children's attraction to unhealthy food options rather than healthy food. This clearly shows that children can be easily manipulated by fast food logos. This limitation of thinking may have an effect on their food behavior choices.

During this stage of development, Piaget also states that children experience egocentrism, where children are unable to understand or see another person's perspective and are only interested in things that impact them directly. Egocentrism is an important topic to take into consideration when introducing nutrition to children. Since when introducing the concept of nutrition it is likely that it should be taken with precaution and making it clear on how it has an impact on their well being. During this stage, children find it difficult to concentrate on more than two objects, which can become a challenge when introducing how a healthy plate should look like. Thus, introducing nutrition education to children will be a challenge but can help stimulate the second level of the preoperational stage. Children will be able to stimulate the development of logical thought to solve problems rather than depending on perception. The second level of this stage is when children ages 5 to 7 years old are more likely to think intuitively and conceptually which will be also challenged. Nutrition education is a way to help develop children's autonomy and provide support for decision making and control over their food choices (Drapeau, Savard, Gallant, Nadeau, & Gagnon, 2016).

Consideration of Diversity

## Running Head: THE IMPORTANCE OF NUTRITION EDUCATION IN KINDER

My project will be conducted in a Kindergarten class at Alisal Community Elementary school in Salinas, California. I anticipate that the school summary data based will reflect the ethnicity of the school. According to the Alisal Community Elementary School Summary, the school enrollment was 667 students with 656 Hispanic, 3 Filipinos, 3 White and 5 non-reported (2018-19). I would expect that the demographics of the majority ethnicity presented would show less exposure to nutrition education. Since socioeconomic disadvantage students are more likely to not have consumption of an unhealthy diet. A contributor to this aspect is that less nutritious food options are cheaper than the higher diet quality foods which are at a higher cost (Pechey, Monsivais, 2016).

According to Eliason and Wilson (2007), it is ideal for nutrition education to be presented to students in an all-inclusive, integrated curriculum across all grades and part of children's education experience. Thus, it is important for students who are from low-income families or socially disadvantaged groups to be able to receive nutritional education in their community. The best way schools can promote living an active, healthy lifestyle can be by providing knowledge about nutrition (CDC, 2014). Also, when taking into consideration the diversity in my project I would be excluding non-English speakers. Since my project will be delivered in English proficiency to the participants. This aspect could be a language barrier and cause an intervention for those students who are English learners. According to the Alisal Community Elementary School Summary, in 2017-2018, there was an enrollment of 627 English learners (2018-19). Having this many English language learners tells me that the participants will have difficulty understanding complex topics from the lessons. I will have to elaborate more by providing definitions in a matter that will be easier for them to follow along with the lesson and not fall

behind in the concept that would be introduced. Making modifications to the project to pursue other populations would be necessary to deliver the project. Such as making substantial changes in delivering the project in the Spanish language. If providing the lesson to other group populations there would have to be made modifications so that the purpose of the lessons would be delivered correctly and efficiently. However, this specific project is designed for kinder age children and therefore it might not apply to adults or older children.

### Learning Outcomes

I intend to provide a three day lesson to kinder students at Alisal Community Elementary School in Salinas, California during their school hours.

By the end of the project, participants will:

1. Identify two healthy snacks.
2. Create their own mock healthy meals and identify certain foods in the correct group category.
3. Distinguish four foods as healthy and unhealthy.

### Method

#### Day 1

First I will introduce myself to the classroom and explain why I am there. I will ask the students if they know what healthy eating means, and I will record their answers by writing them down on the whiteboard. I will mention that healthy foods give you the energy to learn and play and that it is important to eat certain portions of food. Then, I will lead them to the carpet area where I will read the book, *Fuel the Body: Eating Well* (Tourville, 2008), to them about healthy foods. After reading to them, we will discuss as a class the healthy foods seen in the book. I



will write down the students' answers while they share what healthy food options they were able to see in the book. When the lesson is over I will distribute healthy food stickers to them.

### **Day 2**

On the second day, I will start off by asking the students what they learned from the previous day, and I will record their responses on a whiteboard. I will explain to them what a healthy plate should look like and that it is very important that the plate includes fruits, vegetables, grains, protein, and dairy. I will have a display of a “My Plate” colorful picture drawn by me and will present it to the students and discuss each aspect of the categories with them (see Appendix A). For example, I will address and discuss what food options would be considered appropriate to be in each category. I will write down their responses on the board as they go along with the lesson. Then after they discuss each food group, then I will tell the students that they will have the chance to make their own healthy plate. I will distribute a handout (see Appendix B) where the students will have an empty plate divided into four sections that would represent each food category. Each student individually will then receive two healthy food option stickers from each food group and will place it in the correct food group. After they have finished with creating their own healthy plate, I would collect all of the children’s work. To conclude this lesson, I would tell the students that they did an awesome job by trying their best to create a healthy meal. I will then end by giving each student a “ChooseMyPlate.gov” sticker.

### **Day 3**

On the third day, I will start off by summarizing what the previous day was about and ask what is something new they learned from the previous day. I will keep a record of their responses in a paper. Then, I will introduce that physical activity is an important aspect of living a healthy life. Which then I will introduce a physical activity where they will go outside the classroom. I

will have three different paper-wrapped boxes displayed. One box will be introduced to the kids as the mysterious box. The other two boxes will be introduced as a healthy box and the other will be the unhealthy box. The healthy box will have a display of a happy face and the unhealthy box will have a sad face outside. This depiction will be easier for students so that they are able to distinguish the difference between the healthy and unhealthy box. I will have students make a line and one by one will then insert their hand in the mysterious box and pull out a food option and will run to the appropriate box categorizing it healthy or unhealthy. After this activity is over, then students will go inside the classroom and receive a handout (see Appendix C) with different food options, and they would need to circle any healthy foods and put an “X” on the unhealthy foods. After the students are finished, I will collect their work done and conclude the lesson by giving away stickers and thanking them for their hard work.

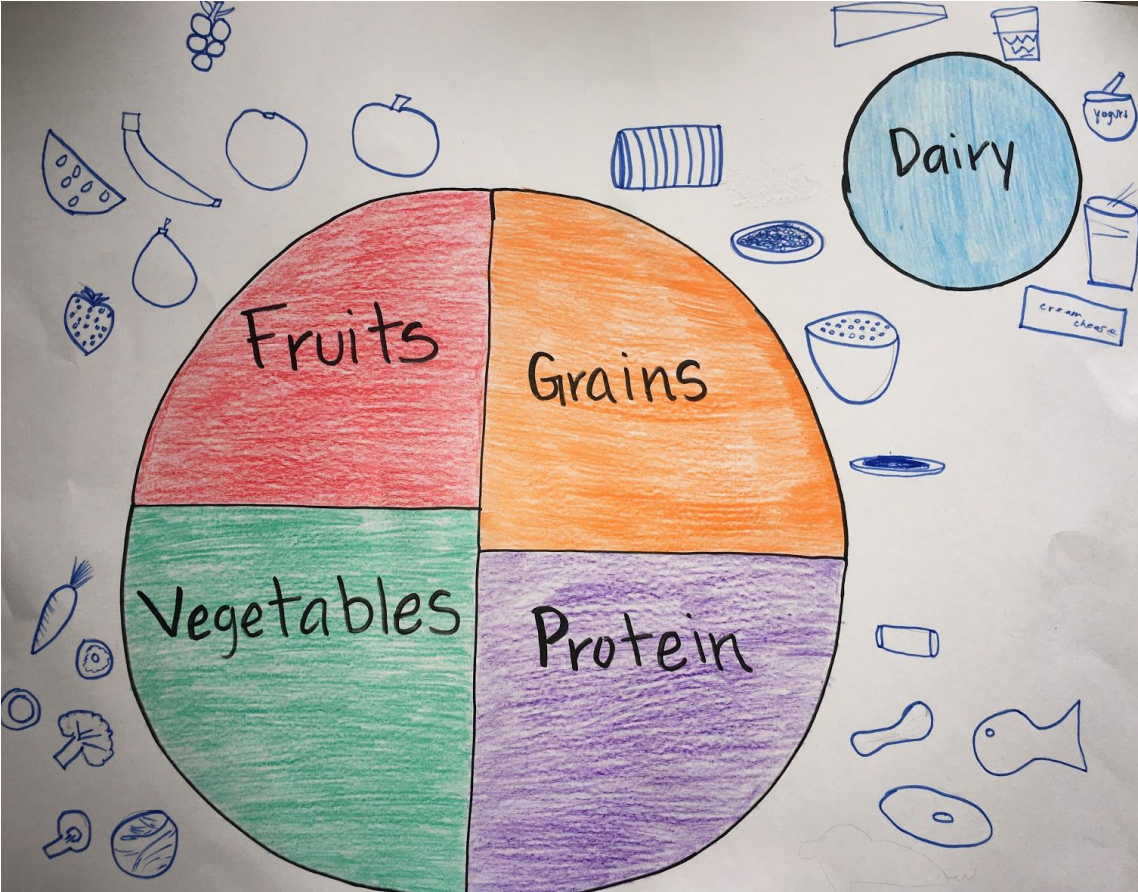
#### Results

Not completed due to COVID-19

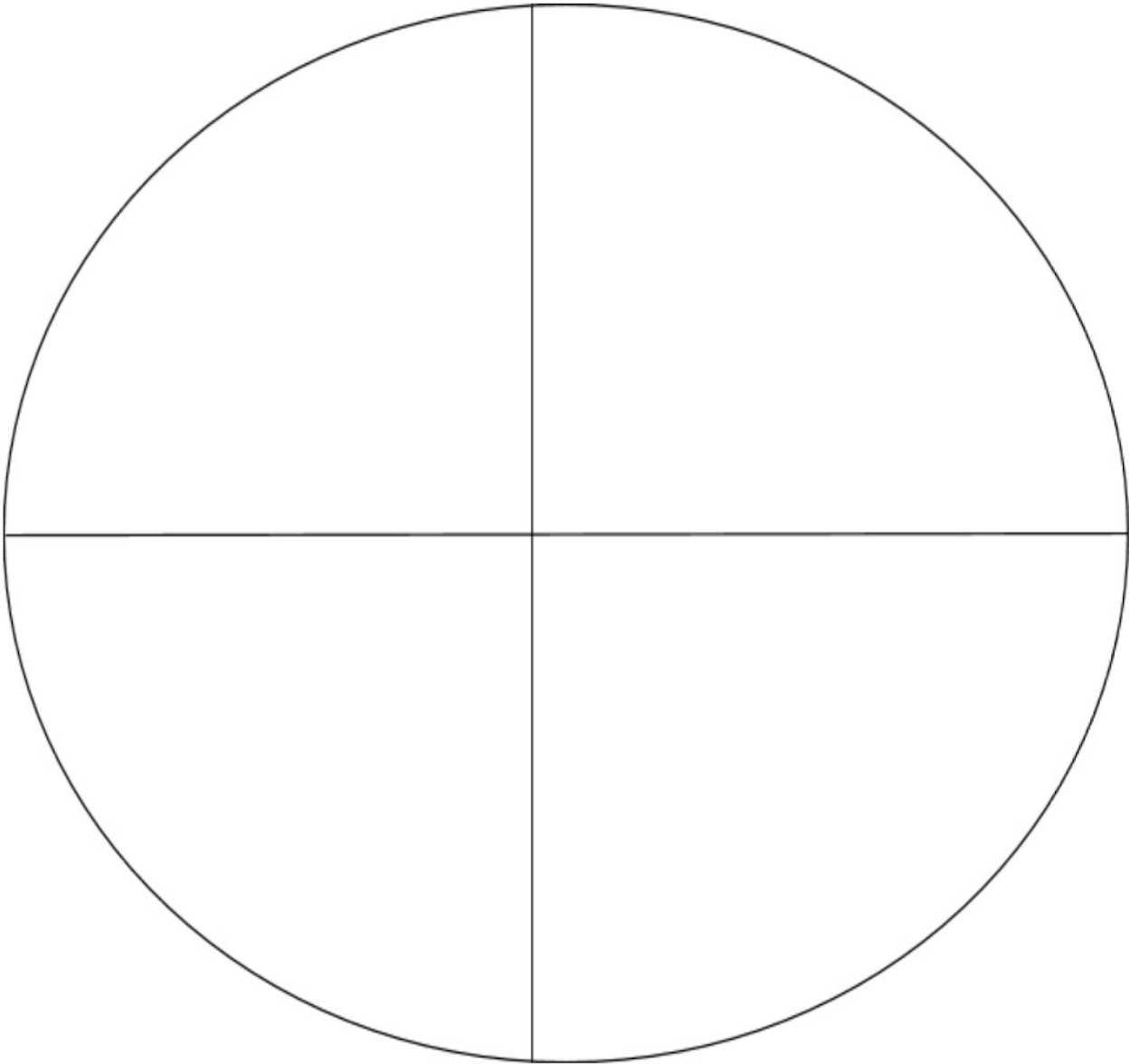
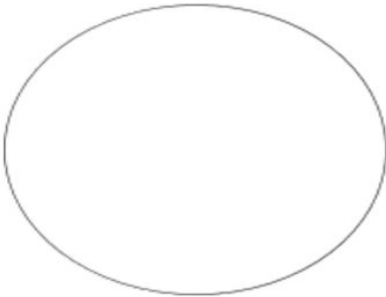
#### Discussion

Not completed due to COVID-19

Appendix A

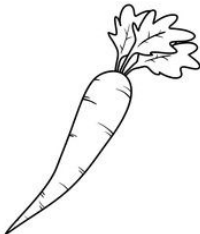
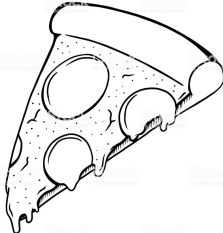
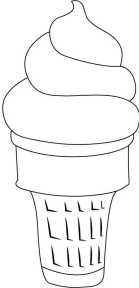


Appendix B



Appendix C

Name \_\_\_\_\_



References

Alisal Community Elementary School Summary (2018-19)

Retrieved

from:<http://www.ed-data.org/school/Monterey/Alisal-Union/Alisal-Community>

Arredondo, E., Castaneda, D., Elder, J. P., Slymen, D., & Dozier, D. (2008). Brand Name Logo

Recognition of Fast Food and Healthy Food Among Children. *Journal of Community*

*Health*, 34, 73–78. doi: 10.1007/s10900-008-9119-3

Başkale, H., Bahar, Z., Başer, G., & Ari, M. (2009). Use of Piagets Theory in Preschool

Nutrition Education. *Revista De Nutrição*, 22, 905–917.

doi:10.1590/s1415-52732009000600012

Bevans, K. B., Sanchez, B., Teneralli, R., & Forrest, C. B. (2011). Children’s Eating Behavior:

The Importance of Nutrition Standards for Foods in Schools. *Journal of School Health*,

81, 424–429. doi: 10.1111/j.1746-1561.2011.00611.x

Centers for Disease Control and Prevention. (2014). Childhood obesity facts. Retrieved from

<https://www.cdc.gov/obesity/childhood/causes.html>

Doering, A. F., & Rooney, R. (2008). *Fuel the Body: Eating Well*. Minneapolis, MN: Picture

Window Books

Drapeau, V., Savard, M., Gallant, A., Nadeau, L., & Gagnon, J. (2016). The Effectiveness of A

School-Based Nutrition Intervention on Children’s Fruit, Vegetables, and Dairy Product

Intake. *Journal of School Health*, 86, 353–362. doi: 10.1111/josh.12385

Elder, J. P., Arredondo, E. M., Campbell, N., Baquero, B., Duerksen, S., Ayala, G., ...

Mckenzie,

- T. (2010). Individual, Family, and Community Environmental Correlates of Obesity in Latino Elementary School Children. *Journal of School Health, 80*, 53–55.  
doi: 10.1111/j.1746-1561.2009.00465.x
- Eliassen, E. K., & Wilson, M. W. (2007). Selecting Appropriate Elementary School Nutrition Education Resources. *American Journal of Health Studies, 22*, 224–227.
- Fish, C. A., Brown, J. R., & Quandt, S. A. (2013). African American and Latino Low Income Families' Food Shopping Behaviors: Promoting Fruit and Vegetable Consumption and Use of Alternative Healthy Food Options. *Journal of Immigrant and Minority Health, 17*, 498–505. doi: 10.1007/s10903-013-9956-8
- Georgieff, M. K. (2007). Nutrition and the developing brain: Nutrient priorities and measurement. *The American Journal of Clinical Nutrition, 85*, 614S-620S. Retrived from <https://academic.oup.com/ajcn/article/85/2/614S/4649636>
- National Healthcare Quality and Disparities Reports. (2019) Data Query: Table 7\_2\_1\_8\_1.1.  
Retrived from: [NHQDR Web Site - Data Query](#)
- Pechey, R., & Monsivais, P. (2016). Socioeconomic Inequalities in the healthiness of food choices: Exploring the contributions of food expenditures. *Preventive Medicine, 88*, 203–209. doi: 10.1016/j.ypmed.2016.04.012
- Talking My Plate (2018). Retrieved from:  
<http://www.nourishinteractive.com/kids/healthygames/24-my-plate-usda-five-food-group>
- Thomas, R. M. (1999). *Human Development Theories: Windows on Culture*. (29-30). Thousand Oaks, Ca: Sage.

