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Increasing Nutrition Awareness Among Preschoolers

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Capstone Paper: Increasing Nutrition Awareness Among Preschoolers

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Introduction

There is a lack of nutrition education in preschool curriculum. A lack of knowledge about nutrition and poor nutrition contribute to lasting negative health conditions and impede children's ability to learn. To address this lack of nutritional knowledge in preschool, I will conduct a three-day, interactive lesson on the importance of good nutrition for preschoolers at the Monterey Peninsula College Early Childhood Education Lab School in Monterey, California.

Need Statement

Many preschool programs neglect to include curriculum on a proper, balanced nutrition for students. Although good nutrition is expected in most preschool programs, many children have not yet learned about healthy or unhealthy foods and what a balanced meal is. In a preschool program, more discussions and activities should be done around identifying healthy foods, what it means to have a balanced meal, and understanding and identifying the difference between healthy and unhealthy food in a way that is fun and engaging in order to fill in the lack of nutrition curriculum.

One of the best ways to incorporate nutrition-based curriculum in a preschool classroom is to make them into developmentally-appropriate games or other interactive activities. Hong, Bale, and Wallinga (2017) explained how early childhood education teachers can help children learn about healthy nutrition and eating habits by adding activities to the curriculum that are developmentally appropriate. According to the researchers, teachers can add discussions around a specific book to their circle time routine, and games can be created that get the children excited and interested in learning and talking about different types of foods (Mier, Piziak, & Valdez, 2005). Preschool children learn better through repeated exposure to different foods in a social

context which is why starting in a preschool setting is a good place to start talking about nutrition. In a preschool program, more discussions and activities should be done around the importance of eating healthy food in a way that is fun and engaging in order to fill in the lack of nutrition curriculum.

On top of identifying healthy foods, it's important to also understand the impact food choices have on each person. Senechal (2015) expresses the need for school programs to create a sense of "food literacy" in its nutrition curriculum. Food literacy is defined in many ways but Senechal (2015, p. #) used the Food Literacy Center definition as "understanding the impact of your food choices on your health, environment, and our community." When teaching young children, the idea of how food affects the community and environment may be too broad of a topic. However, teaching children how to grow their own vegetables and using those vegetables to make salads can create a solid foundation for the idea of "food literacy." When more vocabulary is regularly added to the conversations at mealtimes, circle times, or small group activities, young children's overall understanding of a healthy and balanced meal will start to increase. Food literacy doesn't have to just mean fruits and vegetables, it can also include other important foods such as grains, protein, and dairy. That way, young children can start to visually see and experience a balanced meal through activities such as creating their own balance plate of food or packing a healthy and balanced picnic basket.

Young children tend to eat whatever food is offered to them at home or at school, so being able to identify healthy foods from unhealthy foods may not be a simple task for them if it is not openly talked about and modeled for them. Baxter (1998) explained how preschool children are known to be scared to try new foods, but with more exposure, their individual food

preferences start to increase given time. Young children are social creatures, and they learn a lot from watching others, especially their peers, so it is a logical connection to make when adding nutrition curriculum into preschools. When mealtimes at school include healthy foods while being supported with books and activities, their ability to identify which foods are considered healthy will slowly start to increase.

Having nutrition education in preschools is important because it helps set up better eating habits and feelings towards different types of foods as they enter future stages of life. Anton-Păduraru, et. al (2018) explains how proper nutrition education in preschool can even help reduce the chances of developing eating disorders if young children are supported in building a good relationship with food and mealtimes experiences. According to Anton-Păduraru, et. al (2018), the preschool period is the time when children begin to understand that nutrition and the food they put into their bodies plays an important role in their development and lives. This age period is when a sense of independence during meals start to manifest, so it is important to support children in creating a healthy foundation by providing proper nutrition education in preschools. It is believed that eating habits that a child acquires during their first five years will resurface in future stages of their lives (Anton-Păduraru, et. al, 2018). Young children learn quickly by observing and modeling, so it is beneficial to include nutrition education in all preschool programs and it should even be encouraged in the home to ensure that they develop a sense of good nutrition and a healthy foundation of eating habits and behaviors. .

Given that many preschoolers do not have immediate control over what they eat, it is still important to teach them about nutrition and to be able to vocalize at home about their nutrition. I

will conduct a three-day, interactive lesson on the importance of good nutrition for preschoolers at the MPC Early Childhood Education Lab School

Theory

Social Learning Theory

Albert Bandura, in his Social Learning Theory, discussed the way people learn from one another through observation, imitation, and modeling. This theory explains human behavior in terms of the interactions between cognitive, behavioral, and environmental influences that are continuous and reciprocal. Since Social Learning Theory focuses on observational learning, it is fitting to use it as reference with preschool aged children in teaching them better eating habits and increasing their knowledge of better nutrition.

The first principle of this theory, in relation to observational learning, includes adults modeling behavior for the children. For preschool-aged children, the best way to teach them better eating habits and better nutritional choices is through modeling desired behavior for them because young children learn the most through observation, according to Albert Bandura's Social Learning Theory. According to the theory, people are more likely to adopt the modeled behavior if they feel the model is similar to them and if the model is someone to admire. Specifically in a preschool setting, the children look up to their teachers and other peers. Therefore, teachers and peers who model better eating habits and other behaviors related to good nutritional choices will likely result in the children wanting to adopt or imitate those same behaviors. The second principle of this theory relates to adopting or imitating modeled behaviors if the behaviors result in valued or desired outcomes. For young children, they are more likely to adopt modeled behaviors if they believe they will get praised for them or get some other form of

reward for the behavior. For example, if a teacher praises a child in front of his/her peers for trying the healthy vegetables or fruits served for lunch, that child will be more likely to try more or other foods and his/her peers will be more inclined to want to try those healthy foods to receive the same praise from their teacher. The Social Learning Theory works best for the age I am focusing on because observation, modeling, and imitation are key factors to how preschool aged children learn well.

Consideration of Diversity

My project will take place among preschool aged children ranging between four and five years old at the Monterey Peninsula College, Early Childhood Education Lab School. Many parents of the children in the preschool are interacial and multilingual which results in having children who are of mixed ethnicities and who speak more than one language attending the preschool. There are immigrant families, military families, and different levels of socioeconomic statuses included in the preschool which makes for a very diverse group of children and families involved in this preschool program (MPC ECE Lab School, personal communication, March 11, 2020). This preschool offers financial assistance to qualifying families through the California State Subsidized Program depending on income level and family size. The preschool offers this program but there it is unknown how many families are subsidized.

Since my project about teaching children about nutrition and healthy foods is not using culturally diverse foods, I am unable to address more issues on diversity through the inclusion of cultural foods depending on the different cultures within the sample. By including different cultural foods, it can help other children understand that not everyone eats the same foods but

that they can all make better choices on the foods they eat. The project could also help introduce other cultures to the children who may have only ever known American foods, or Italian foods, or Mexican foods. Some changes that can be added to my project to address a more diverse audience could be presenting the activities and books in different languages for those children who speak more than just English in the home and also including the younger children of the preschool program into some of the activities to get a broader age range and different end results. If I were to add more specific and detailed content into the curriculum of my project, I would also be able to include slightly older children ranging from kindergarten to early elementary aged children. If I were to include older children, I would be able to go into more detail about portion sizes, the food pyramid, all the food groups, and other concepts that are more academic for preschool aged children. There are also other ways to include parents in the activities through take home activities related to nutrition and healthy eating that the children can do with their children.

Learning Outcomes

I plan to conduct three, 20-minute circle times with connected activities to preschool children attending Monterey Peninsula College, Early Childhood Education Lab School.

By the end of the project, participants will be able to:

1. Identify four healthy foods and four unhealthy foods (i.e. fruits or vegetables).
2. Create a mixed, balanced meal to pack in a picnic.
3. Identify healthy food from unhealthy food.

Method

Day1

After the children woke up from nap and had their snack, it was time to gather them for circle time. I started off by introducing what I will be talking about in the next couple of days, which is proper nutrition and eating healthy. Next, I asked the children what they think it means to "eat healthy" or "eat well" and why it is important. Once they had a general idea of the concept of eating healthy or well and why they feel it's important, I read *Why Should I Eat Well?* (Llewellyn, 2001). Throughout the book, I checked for understanding by asking the children questions related to healthy food choices, how much sweets are okay to eat, and outcomes of eating too much unhealthy foods. After reading the book, I engaged in a short 5 to 7 minute discussion and had each child list a healthy food and an unhealthy food which I then wrote down on a small whiteboard. Before I was able to transition them into the small group activity, the power went out and I had to stop the activity and call the parents to come pick up their child(ren).

Day 2

Again, after nap and snack time, I gathered the children for circle time and reminded them about the discussion from the day before about healthy foods and the importance of eating well. I went on to ask if any of them remember some of the healthier food choices and bad side effects of too much unhealthy foods from yesterday's book. Next, I went on to explain that healthy foods like fruits and vegetables can be grown in gardens like the one at the school. I asked if any of the children have planted any fruits or vegetables at their homes before and which foods have they grown. After that short discussion, I read *Lola Plants A Garden* (McQuinn, 2014) and emphasized how Lola and her friends ate fresh peas and strawberries from her mother's garden. At the end of the book, I stressed the fact that Lola went on a picnic with her

friends just like they have done in the past, and I asked them what foods they saw that she brought and what healthier foods could she have brought in her picnic basket. After another short five minute discussion, I transitioned them into an activity where they get to "pack their own picnic baskets" using blank paper food cutouts they get to choose and paste on their blank picnic basket. See Appendix A.

Day 3

On the final day during circle time, I reminded them that they have been learning about healthy foods and eating well and asked them if they remembered what they did yesterday with their paper picnic baskets. Next, I briefly read through *Good Enough To Eat* (Rockwell, 1999) and started a discussion about what they think the difference is between healthy and unhealthy foods. After, I transitioned them into the next activity with a sorting type of game. I placed different types of pictures of food, healthy and unhealthy, on the floor and they got to decide where two different foods belonged by sticking them on two different white boards. Then, I handed them a blank worksheet consisting of uncolored foods, some healthy and some unhealthy. See Appendix B. After giving them instructions to circle the unhealthy foods and color the healthy foods, they were able to begin.

Results

Learning outcome 1 was that the participants would be able to identify four healthy foods and four unhealthy foods. I believe this learning outcome was met. After reading *Why Should I Eat Well?* and having a short discussion about healthy and unhealthy foods, the participants were able to list more than four healthy and unhealthy foods as a group. In total, they named seven

healthy foods and six unhealthy foods which was expected given that there were fewer than ten children present during the discussion. See Table 1. See Figure 1 for the lists they created.

Learning outcome 2 was that the participants would create a mixed, balanced meal to pack in a picnic basket. The participants were able to choose four different types of food to "pack" in their basket and four out of eight participants chose food items that were healthy and balanced. The other four chose some unhealthy choices mixed with some healthy choices to put in their basket. See Table 2. With that, I feel that this learning outcome was only partially met.

Learning outcome 3 was that the participants would identify healthy foods from unhealthy foods. This concept went a little over their heads because they weren't able to clearly explain the difference. However, when asked, they were able to give me examples of both healthy and unhealthy foods. That was not represented well in the sorting activity because a couple participants were unsure where to put items like chocolate or cupcakes because they understood that "eating a little isn't bad". See Figure 2 for the results of what the two white boards looked like when the participants were all done sorting the food items. Two participants put an unhealthy food (i.e. ice cream and hamburger) under healthy food. When given the worksheet where they were supposed to circle the unhealthy foods and color the healthy foods, most of the children were unable to complete the task. The participants were able to verbally point out the unhealthy foods, but when it came to the worksheet, they began circling the foods they personally didn't like and coloring the foods they did like. Only two out of the eight children were able to circle three to five of the six unhealthy items on the worksheet. See Table 3. I feel that this learning outcome was minimally met.

Discussion

I believe this project was successful in the sense that the participants were engaged, interested, and learned new things from this experience. Not all of the learning outcomes were fully met which I believe has to do with the lack of real life modeling and observing included in the activities. Given that I was using Albert Bandura's Social Learning Theory as a reference, which focuses on observation, imitation, and modeling, the lesson plans did not include the level of modeling necessary for the participants to fully observe and imitate back the information provided to them. However, I think the project helped the participants understand more about the idea of "everything in moderation" because many participants explained that cupcakes or ice cream aren't bad if they only have one and not a lot. Given that, as a class, the children do celebrate birthdays by making cake or cupcakes and are given one piece of cake or one cupcake, it seemed to cement their belief that unhealthy food isn't bad if it's only a little. That belief was evident when creating their picnic baskets when a couple of participants grabbed an unhealthy food item. Although, when I had the participants list healthy foods and unhealthy foods, they were able to create two lists that met the learning outcomes of identifying four healthy foods and identifying healthy from unhealthy foods.

With regard to diversity, I believe my project was inclusive to all participants. However, I did assume all participants ate the same variety of foods I included in the activities, excluding any culturally different foods. Since the participants have varying cultural backgrounds and healthy and unhealthy foods in their cultures may be different than the common foods I included during the activities, it may have not specifically applied to those participants and their eating habits at home.

If I were to do this project again, I would have the project last longer than three days, perhaps a week to two weeks long. That way, I could go more into depth with specifics and I would only do them with the same small group of participants to make things more consistent. I would have enjoyed being able to have the proper supplies for the children to actually create their own picnic lunch and take them on a picnic with the food they packed for themselves. I believe children do learn better through modeling and observing, so I would have liked to be able to make the food with them and include other activities like creating a fruit salad and vegetable salad with them. With that being said, I would have had them bring in a fruit and vegetable they enjoy eating to add to the salads to make it more personal for each child. However, I still feel the participants learned new things from this project, but there is always room to learn more.

References

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Table 1

List of healthy and unhealthy foods participants listed with the count and totals

Healthy Food Answers of Participants	**Count**	**Unhealthy Food Answers of Participants**	**Count**
Rice	1	Candy	3
Broccoli	2	Chocolate	2
Carrots	2	Donuts	1
Pineapple	2	Cookies	1
Lemon	1	Cupcakes	1
Broccolini	2	Cake	1
Celery	1		
Total Amount of Healthy Foods	**7**	**Total Amount of Unhealthy Foods**	**6**

Table 2

List of foods chosen for their picnic basket activity

Participant	Foods Chosen	How Many Are Healthy
1	Grapes, bottle of water, apple juice, milk and cheese	4 out of 4
2	Chicken, cherries, strawberries, soda	3 out of 4
3	Chocolate, cupcake, soda, cherries	1 out of 4
4	Corn, broccoli, lettuce, carrots	4 out of 4
5	Apple juice, orange, apple, chicken	4 out of 4
6	Soda, milk and cheese, strawberries, carrot	3 out of 4
7	Chocolate, cupcake, grapes, milk and cheese	2 out of 4
8	Bottle of water, sandwich, chocolate, banana	3 out of 4
9	Cupcake, banana, cherries, strawberries	3 out of 4

Table 3

List of healthy and unhealthy items circled from the worksheet in Appendix B

Participants	**Healthy Food Items Circled**	**Unhealthy Food Items Circled**
1	0 out of 7	3 out of 6
2	5 out of 7	5 out of 6
3	0 out of 7	5 out of 6
4	3 out of 7	2 out of 6
5	4 out of 7	4 out of 6
6	1 out of 7	4 out of 6
7	0 out of 7	3 out of 6
8	2 out of 7	2 out of 6

Figure 1

Results of the discussion on healthy and unhealthy foods

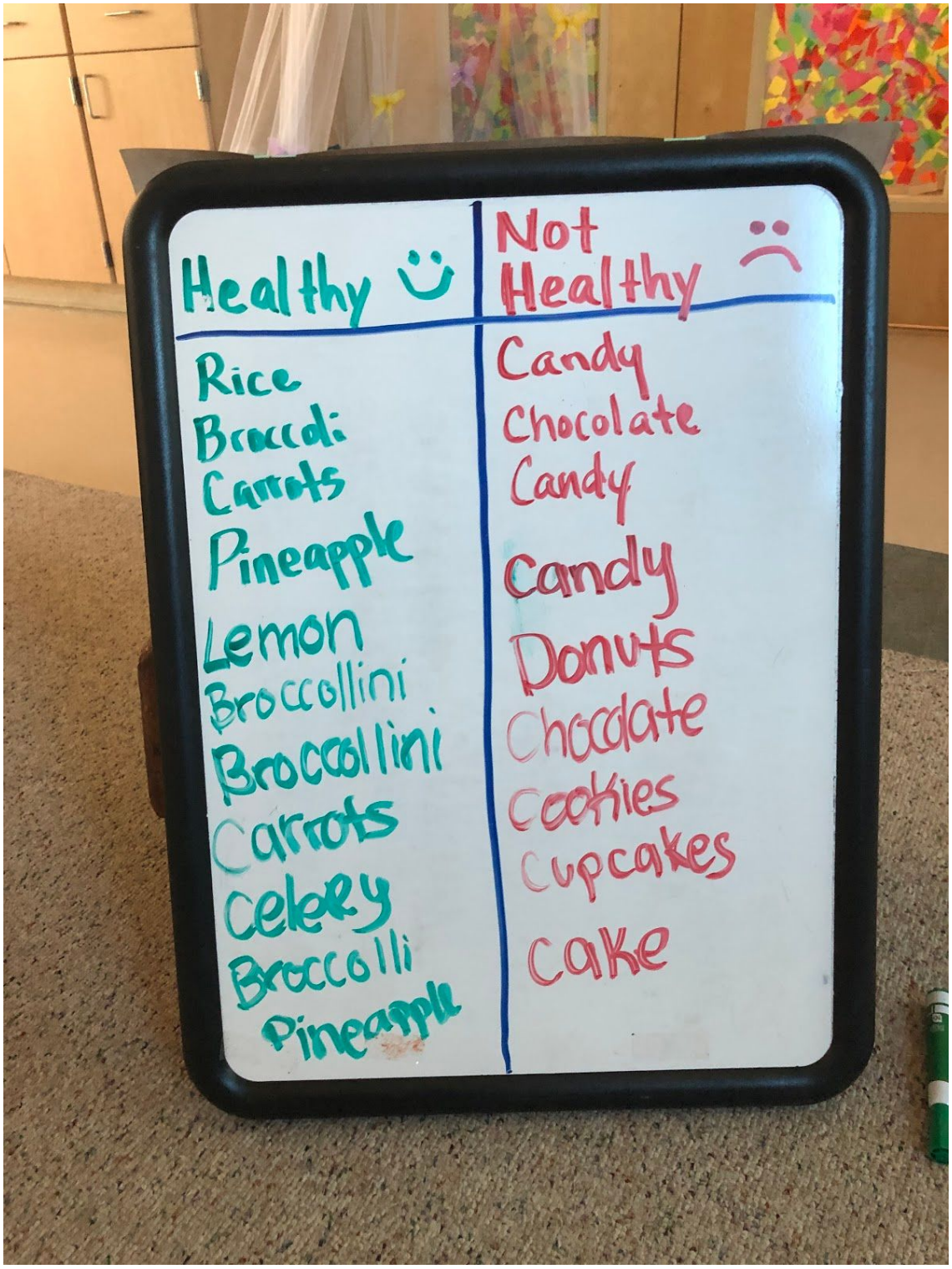
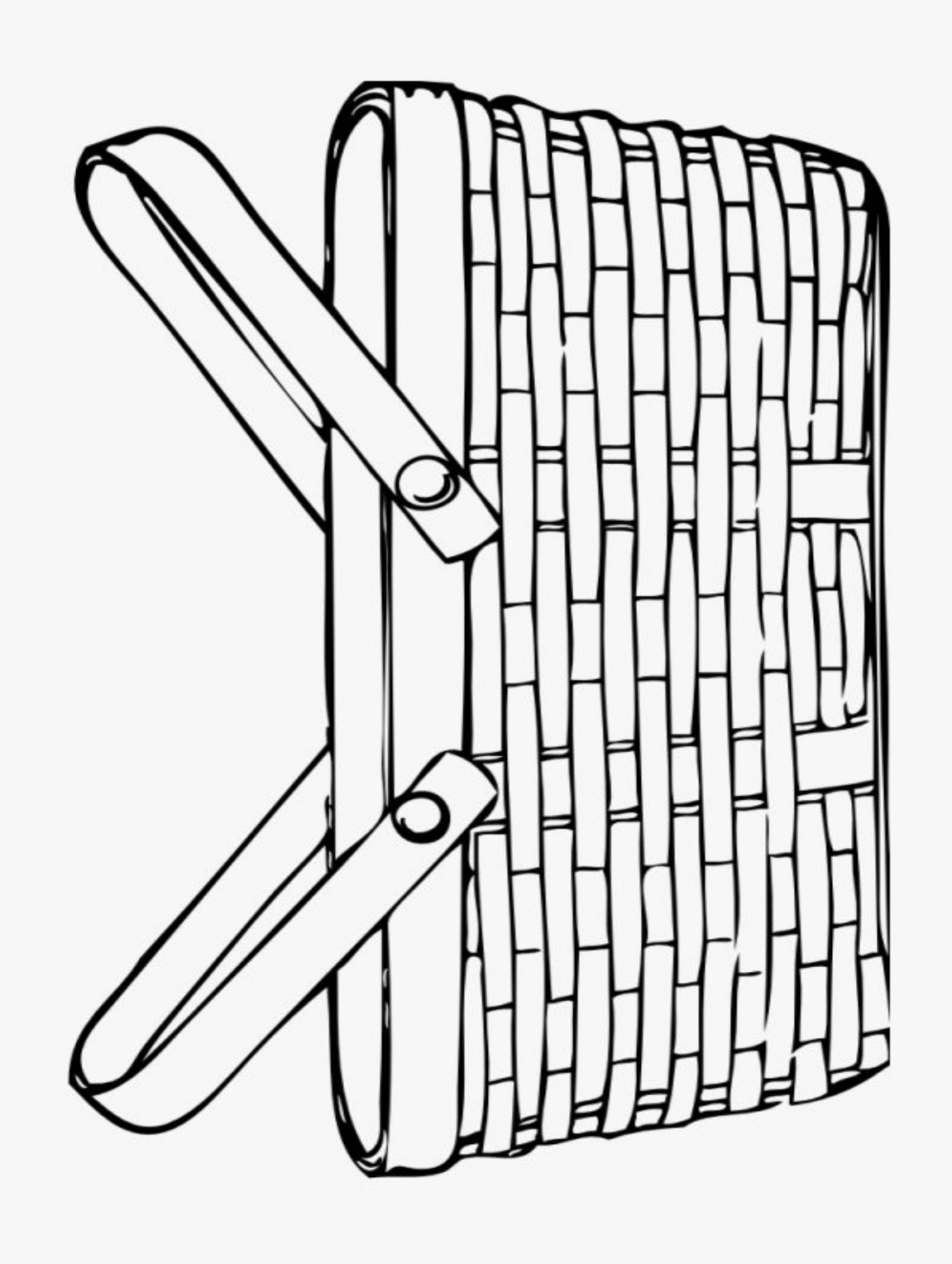


Figure 2

Results of the sorting of healthy and unhealthy foods

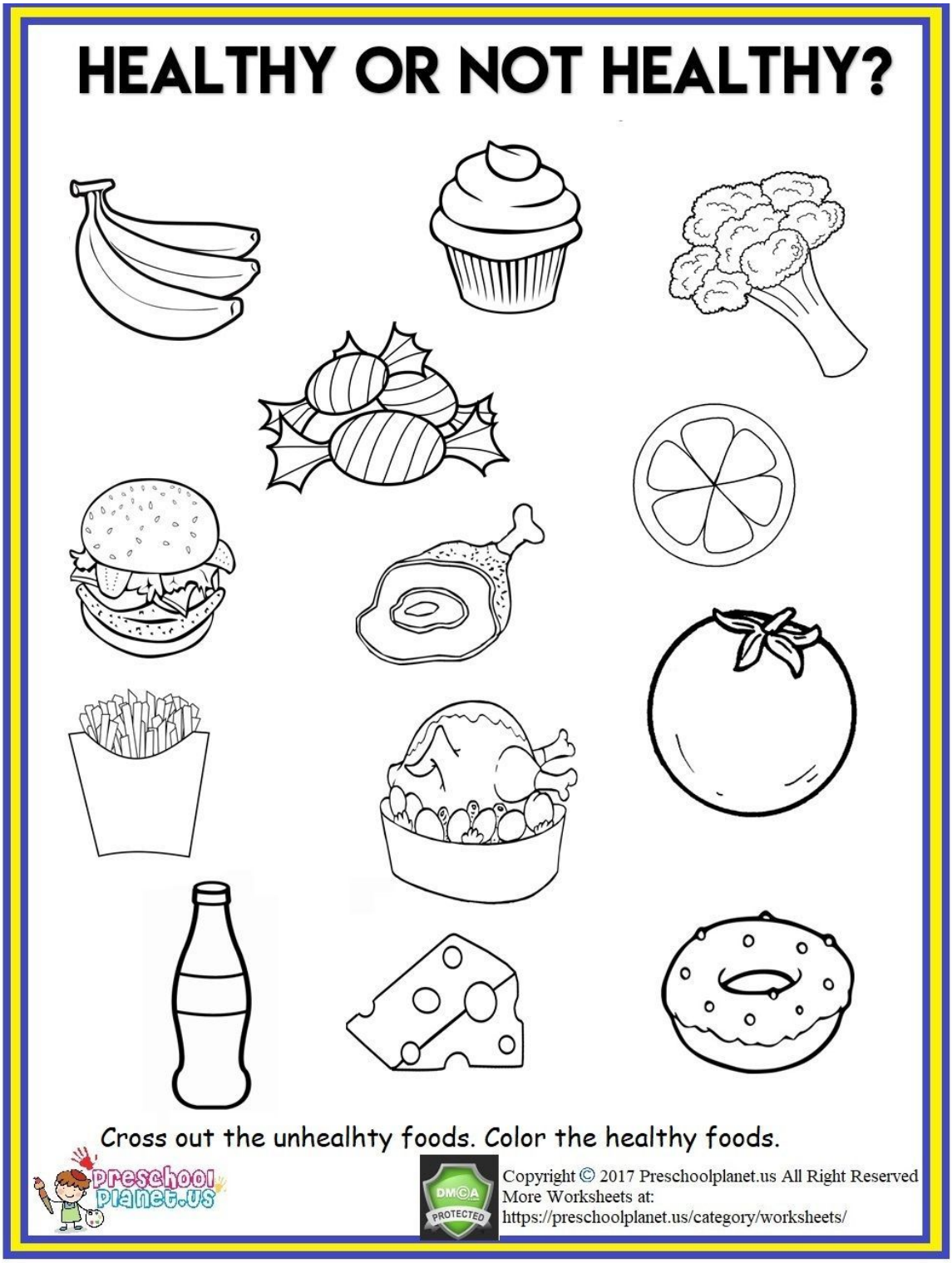
Appendix A

Picnic basket template from Learning Outcome 2



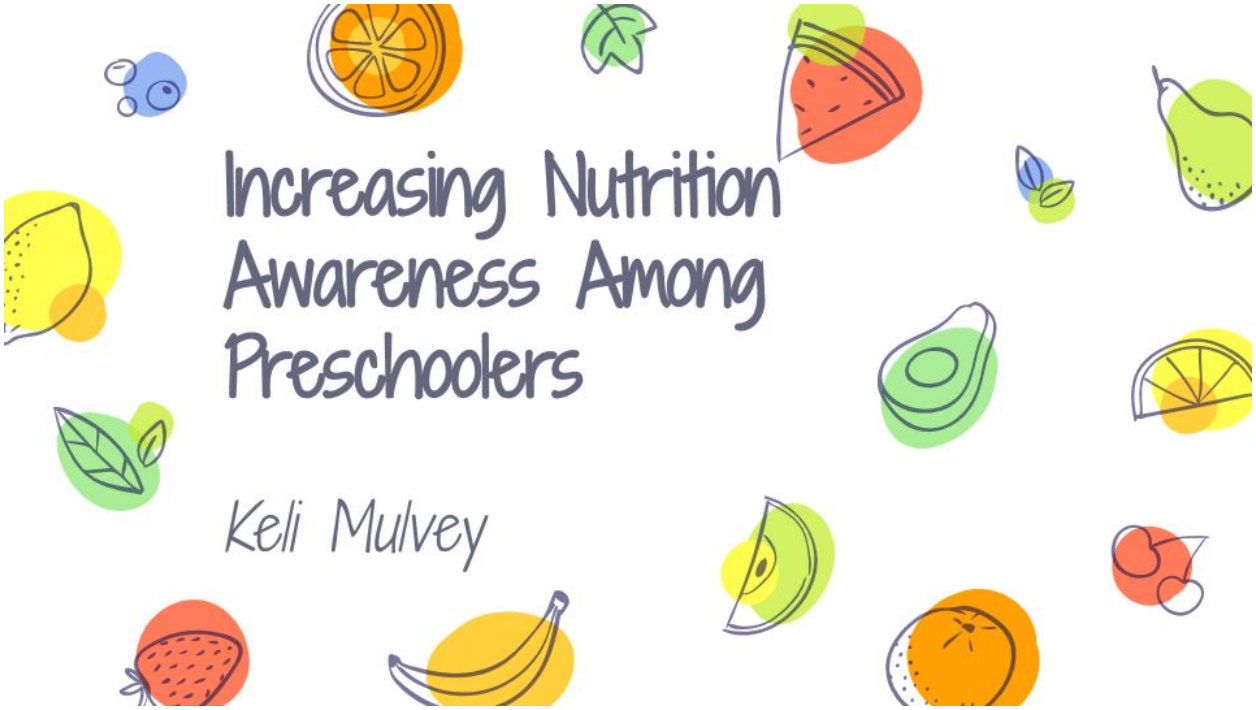
Appendix B

Worksheet from Learning Outcome 3



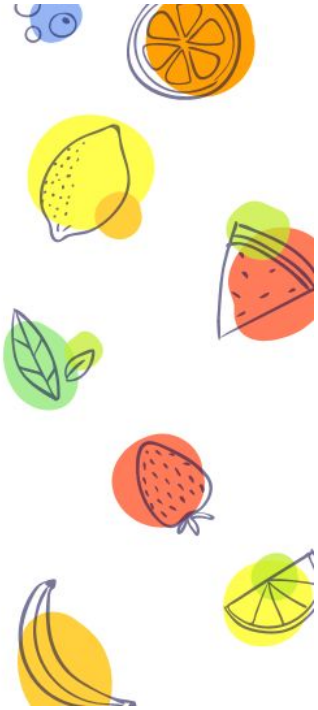
Appendix C

Capstone Project Google Slides Presentation



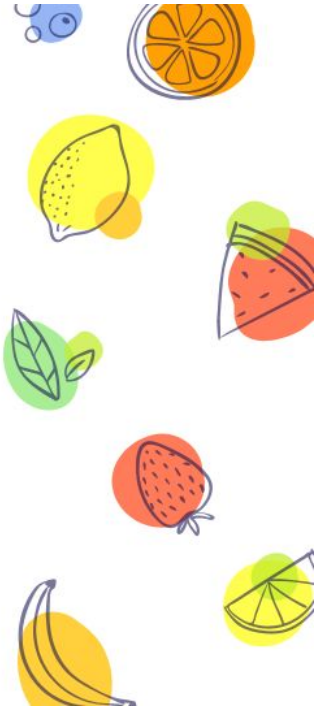
Theory: Albert Bandura's Social Learning Theory

- Observational learning
- Children learn by observing the modeled behaviors of peers and adults
- Children practice behaviors, habits, and attitudes through imitation



Methods: What? Whom? Where?

- 3 day, interactive lesson on the importance of good nutrition
- 8 to 12 preschoolers, ages 4 to 5 years-old in the Garden Room Classroom
- MPC Early Childhood Education Lab School in Monterey, CA.



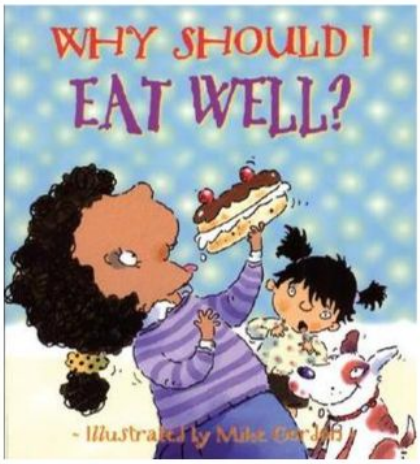
Learning Outcomes:

1. Identify four healthy foods and four unhealthy foods.
2. Create a mixed balanced meal to pack in a picnic.
3. Identify healthy food from unhealthy food.

Learning Outcome 1: Identify four healthy foods and four unhealthy foods

Book: Why Should I Eat Well? (Llewellyn, 2001)

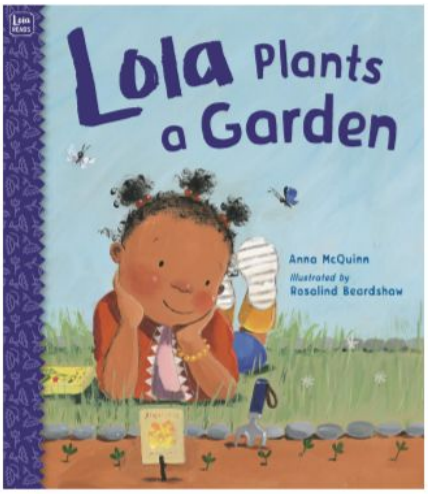
Discusses importance of eating well and negative effects of poor nutrition



Learning Outcome 2: Create a mixed balanced meal to pack in a picnic.

Book: Lola Plants A Garden (McQuinn, 2014)

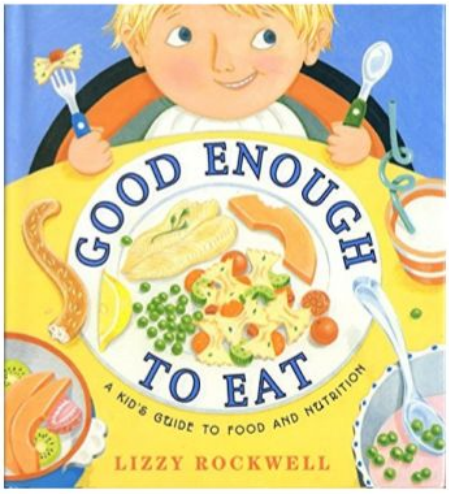
References going on a picnic and fruits and vegetables that can be planted in a garden.



Learning Outcome 3: Identify healthy food from unhealthy food.

Book: Good Enough To Eat (Rockwell, 1999)

Explains the purposes of different types of food and why the body needs them



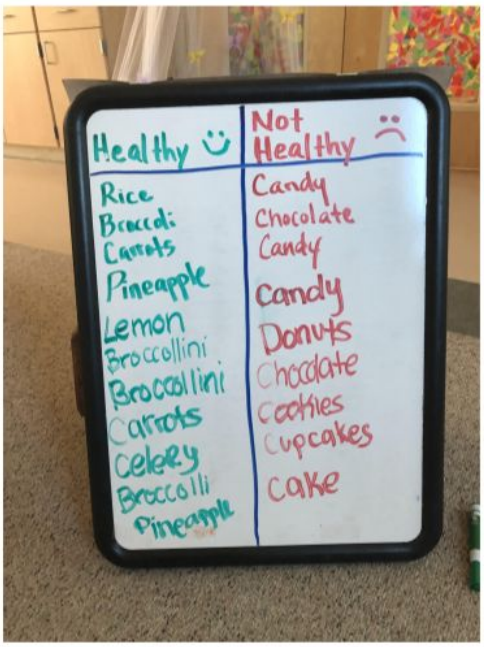
Activities & Results

Day One Activities:

Reading and asking questions about the book.

LO #1 Results:
Identify 4 Healthy
& Unhealthy Foods

Learning Outcome: MET



LO #1: Results

Healthy Food Answers of Participants	**Count**	**Unhealthy Food Answers of Participants**	**Count**
Rice	1	Candy	3
Broccoli	2	Chocolate	2
Carrots	2	Donuts	1
Pineapple	2	Cookies	1
Lemon	1	Cupcakes	1
Broccolini	2	Cake	1
Celery	1		
Total Amount of Healthy Foods	**7**	**Total Amount of Unhealthy Foods**	**6**

Day Two Activities: Reading the book then choosing their picnic foods

LO #2 Results:
Create a mixed, balanced meal to pack in a picnic

Learning Outcome:
PARTIALLY MET

LO #2 Results:

Participant	Foods Chosen	How Many Are Healthy
1	Grapes, bottle of water, apple juice, milk and cheese	4 out of 4
2	Chicken, cherries, strawberries, soda	3 out of 4
3	Chocolate, cupcake, soda, cherries	1 out of 4
4	Corn, broccoli, lettuce, carrots	4 out of 4
5	Apple juice, orange, apple, chicken	4 out of 4
6	Soda, milk and cheese, strawberries, carrot	3 out of 4
7	Chocolate, cupcake, grapes, milk and cheese	2 out of 4
8	Bottle of water, sandwich, chocolate, banana	3 out of 4
9	Cupcake, banana, cherries, strawberries	3 out of 4


MILK
MILK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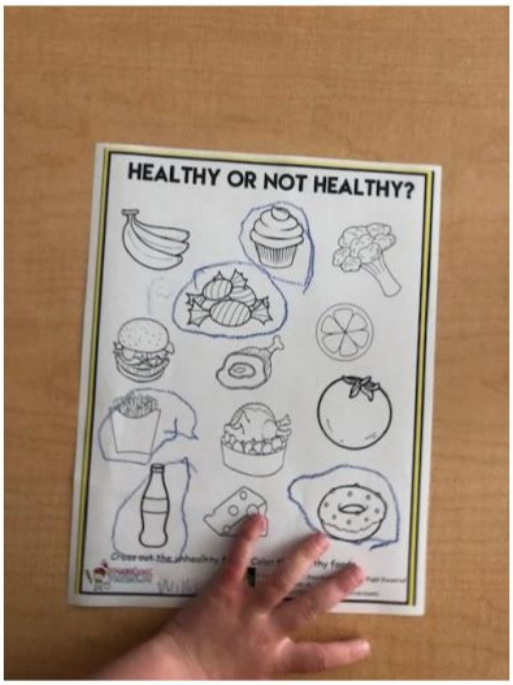
Day Three Activities:

Sorting images of healthy and unhealthy foods

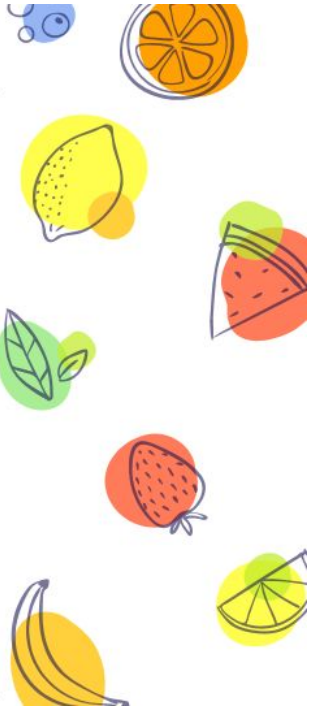
LO #3 Results: Identify Healthy Foods from Unhealthy Foods

Learning Outcome: MINIMALLY MET



LO #3 Results:

Participants	Healthy Food Items Circled	Unhealthy Food Items Circled
1	0 out of 7	3 out of 6
2	5 out of 7	5 out of 6
3	0 out of 7	5 out of 6
4	3 out of 7	2 out of 6
5	4 out of 7	4 out of 6
6	1 out of 7	4 out of 6
7	0 out of 7	3 out of 6
8	2 out of 7	2 out of 6



DISCUSSION:

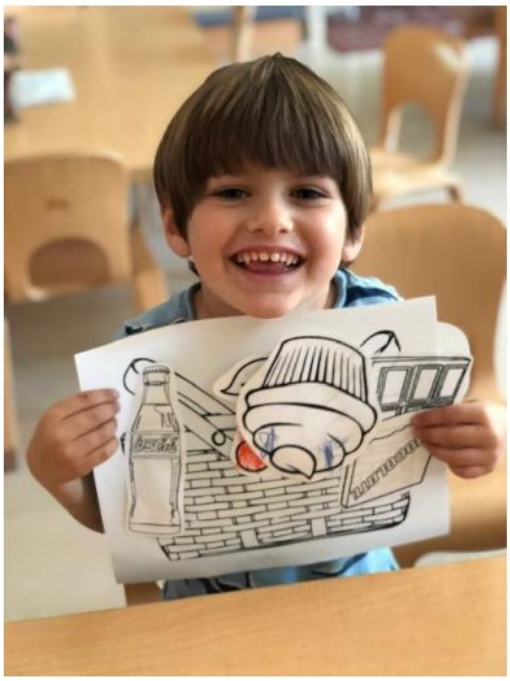
The project, as a whole, was mostly successful.

What Worked?

- Children showed interest in reading material.
- All children participated in each activity.
- The children were able to make real life connections to experiences
- They were able to learn the difference between healthy and unhealthy foods

What Would I Do Differently?

I would have the project last for at least a week.




Thank You!
Any questions?
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