

SESSION 2

Topic: Nutrients for Growth

Objective: Children will understand the relationship of physical activity and eating fruits and vegetables to their growth and development.

Key Concepts: Just as plants need water and sunshine to grow healthfully (big, strong and capable of producing vegetables or fruits), children need to do physical activity and eat fruits and vegetables in order to grow big, healthy and strong. Physical activity and eating fruits and vegetables are essential to human growth and development.

Materials Needed

- “Seedling Song” lyrics
- Session 2 discussion card
- “Plant Race” game instructions
- Tummy Mindfulness and Experiential Eating protocol
- Fruit, vegetables, and napkins for tasting
- Tummy dolls
- Watering cans
- “Fitness Foods” game instructions
- Large pictures of fruits and vegetables
- Large pictures of unhealthy foods
- Measuring tape

Physical Activity or Nutrition Guideline or Recommendation

Dietary Guidelines for Americans, 2010 (USDA): <http://www.cnpp.usda.gov/DGAs2010-PolicyDocument.htm>

Early Childhood Obesity Prevention Policies (IOM): Recommendation 3-1, Recommendation 3-2, Recommendation 3-4, Recommendation 4-2, Recommendation 4-4, Recommendation 4-6
<http://bit.ly/2l5K6aD>

NAEYC Recommendations Satisfied

Curriculum 2.A.03, Curriculum 2.A.08, Curriculum 2.A.10, Curriculum 2.A.11, Curriculum 2.A.12, Curriculum 2.B.05, Curriculum 2.C.03, Curriculum 2.C.04, Curriculum 2.D.02, Curriculum 2.D.03, Curriculum 2.D.07, Curriculum 2.G.02, Curriculum 2.G.06, Curriculum 2.G.08, Curriculum 2.K.01, Health Standard 5.A.06

Review [5 minutes—song]

- **Song:** Review the “Seedling Song” with the children in order to review their understanding of the life cycle of a seedling.

Classroom Activity [15 minutes—discussion, game]

- **Discussion 2a:** The teacher leads the children into today’s session by asking the children what seeds need in order to grow healthy and strong. The teacher leads the children to identify water and sunlight as important nutrients to the health and growth of a seed.
- **Game:** To reinforce what is needed to plant a plant, we will play “Plant Race.”
 - For this game, we need a larger space for the children to stand in a circle and run around. They are assigned to pretend play as the sun, water, soil, or seed.
 - The teacher stands in the middle of the circle with her hands out at her sides, palms up. The teacher calls out two of the four categories (sun, water, soil, or seed). For example, she calls out “SUN and SEED race!”
 - All of the children who are named the sun and seed leave their place in the circle, run around the outside of the circle, and when they arrive at their spot again they run through to hit the teacher’s hand.
 - The teacher calls out the remaining categories, two at a time, having the children follow the same instructions.
 - If desired, the teacher can call out all four categories as a rousing ending before moving on to the next activity.

Mindful Eating [15 minutes—tummy mindfulness, experiential eating]

- **Tummy Mindfulness and Experiential Eating Protocol:**
 - Direct children to wash their hands before their taste testing.
 - Food should be served to the children with gloved hands.
 - After washing their hands, the children are presented with fruits and vegetables from the garden (or grocery store if needed) to sample. Images of a body with an empty belly, full belly, and half full belly will be available for the children to compare. The teacher describes the feelings of hunger and fullness to the children to increase their understanding of these concepts.
 - Before sampling the fruits and vegetables, the teacher asks the children if they are too full, just right, or hungry by asking them to point to the appropriate images.
 - The teacher then calls on a few children and asks them to describe what hunger or fullness feels like. The teacher tells the children that if they are not hungry then they should only take a small taste and a bigger taste if they are hungry.
 - After sampling the fruits and vegetables, the teacher asks the children if they are too full, just right, or hungry (point to the images).

***While the children are tasting, encourage positive conversation by making statements and asking questions that prompt the children to identify the color, smell, taste, and texture of the fruit or vegetable they are tasting, the sounds they make when they bite and chew, and what do they feel happening inside their mouths while they are chewing. Avoid statements that are coercive, like “just take a polite taste,” or “everyone has to try it.”**

For example:

“What **sound** was made when you chewed the celery? What do you feel happening inside your mouth while you chew? [*That celery was really crunchy and juicy.*]”

“How does the tomato **taste**?”

“What does the bell pepper **smell** like?”

“What does the cucumber feel like in your **hand**? [*It’s nice and cool.*]”

“What **color** are the strawberries that we are tasting?”

Garden Activity [20 minutes—garden maintenance, song, garden exploration, game]

- **Garden Maintenance and Song:** The teacher leads the children outdoors to water the garden. Once finished, the students set their water cans down. Encourage students to sing the “Seedling Song” while they water.
- **Garden Exploration:** Using real fruits and vegetables, the teacher brings the children around the garden and shows the children the fruits and vegetables that are growing in the garden. Children are encouraged to identify the fruit or vegetable, its color, its shape, how it feels (i.e. smooth, fuzzy, etc.), what stage of the life cycle, what it needs to grow, and whether it is ready for harvesting.
- **Game:** The teacher tells the children that nutrients and physical activity are important for their health and growth. To reinforce the nutrients needed for growth, we are going to play “Fitness Foods.”
 - The teacher shows the children pictures of fruits, vegetables, and unhealthy foods.
 - With each picture, the teacher asks the children if the item on the picture will help them grow strong and healthy.
 - If the picture is of something that will help grow strong and healthy, the children are invited to do a goofy dance.
 - If the picture is of something not beneficial to them, children are invited to do jumping jacks.

Wrap Up/Review [5 minutes—discussion]

- The teacher measures the lima bean so that we can continue to chart its growth.
- **Discussion 2b:** In order to further review concepts covered in this session, the teacher gathers the children around the lima bean that was planted in the last session. The teacher can ask the children questions about what stage of the lifecycle the lima bean is in, what it needs to grow (soil, water, sunshine), and relate it to what the children need to grow (water, physical activity, fruits, and vegetables).