SESSION 6

Topic: Hungry Humans, Hungry Plants

Objective: Children will gain an understanding of nutrients needed to fuel their bodies and what they need to grow healthy and strong.

Key Concepts: Plants that do not receive adequate sunlight, water, or nutrients from their soil can become "hungry or thirsty" and may appear wilted and dry. Hunger is the body's way of saying that it needs nutritious fuel. Without proper nutrients our bodies will have little energy and we may begin to feel sleepy.

Materials Needed

- "Head, Shoulders, Knees, and Toes!" lyrics
- "Awesome Appetites" game instructions
- Small pictures of fruits, vegetables, whole grains, low fat dairy
- Picture of empty body
- Tummy Mindfulness and Experiential Eating protocol
- Fruit, vegetables, and napkins for tasting
- Tummy dolls
- Watering cans
- "Seedling Song" lyrics
- "Plant Race" game instructions
- Measuring tape
- Session 6 discussion card

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:** In order to review concepts about eating healthy and being physically active in order to grow big and strong, the teacher leads the students in "Head, Shoulders, Knees, and Toes!"

Classroom Activity [15 minutes—game]

- **Game:** In order to further emphasize this concept, the children participate in the "Awesome Appetites" game.
 - Hang the picture of the empty body where is can be viewed by the class.
 - Give a small picture of a fruit, vegetable, whole grain, or low fat dairy foods to each child.

- One at a time, have the children place their picture on or near the part of the body that the food benefits. Then ask all the children to demonstrate a physical activity to target that part of the body. For example, if the student has the picture of an avocado, the teacher tells the child that avocado helps keep our hearts healthy and has the child put the avocado picture on the heart. Then the teacher asks all children to run in place and explains how this activity can help strengthen the heart.
- Every child takes a turn.

Avocado: Protects your heart, keeps skin soft and healthy, helps with digestion (Run in place)

Watermelon: Maintains strong heart, helps sore muscles, keeps you hydrated (Push-ups)

Pineapple: Keeps the heart healthy, hair shiny, and skin healthy (Jumping jacks)

Eggplant: Protects the heart, good for brain and memory, helps with digestion (Run in place)

Broccoli: Good for bone health, helps with digestion, and keeps skin healthy and soft (Silly dance)

Lemon: Protects heart, helps immune system (Jumping jacks)

Orange: Protects heart, keeps skin and hair healthy (Run in place)

Mango: Good for eyes and bones (Silly dance)
Grapes: Protects heart and brain (Push-ups)

Pear: Helps with digestion and protects pancreas (High knees)

Apple: Keeps teeth and gums healthy, protects brain and pancreas (Make a circle with your hips)

Cherries: Keeps heart and bones healthy (Sit-ups)

Radish: Protects the urinary bladder, keeps skin and body hydrated (Make a circle with your hips)

Carrot: Good for eyes, boosts immune system, and regulates blood sugar (pancreas) (High knees)

Tomato: Protects heart, good for eyes (Jumping jacks)

Onion: Helps ears during earache, boosts immune system (Wiggle your ears and run in place)

Potato: Helps the brain work better, improves digestion (Jumping jacks)

Cucumber: Protects urinary bladder and kidneys (Make a circle with your hips)

Oatmeal: Good for heart, improves digestion (Make a circle with your hips)

Whole wheat bread: Good for heart and digestion (High knees)

Yogurt: Good for bones, heart, and digestion (Silly dance)

Milk: Good for bones and heart (Push-ups)

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

Tummy Mindfulness and Experiential Eating Protocol:

- o 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 ask 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.]"

"What does the bell pepper smell like?"

"How does the tomato taste?"

"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:** To reinforce what is needed to plant a plant, we play "Plant Race." The teacher reminds the children that the sun, water, and soil all provide nutrients for the hungry plants.

Wrap Up/Review [10 minutes—garden maintenance, discussion]

- **Garden Maintenance:** The teacher removes the lima bean from the window and leads the class in planting the lima bean in the garden.
- **Discussion 6a:** While transplanting the lima bean in the garden, the teacher asks the children questions about the lima bean and relate the concepts back to the children. For example:
 - "What stage of the life cycle is the lima bean?



- "What does the lima bean need to grow healthy and strong, and to start producing lima beans?" (Prompt the children to answer nutrients from soil, sun, and water.)
- "What different foods can help provide different nutrients to help you grow healthy and strong?"
- The teacher measures the lima bean so that we can continue to chart its growth.