Grade: Kindergarten – Nutrition Lesson 5: My Favorite Vegetables

Objectives:

- ✓ Students will identify vegetables as part of a healthy diet.
- ✓ Students will sample vegetables.
- ✓ Students will select favorite vegetables.
- ✓ Students will report vegetables eaten during a day.

Materials:

- A selection of vegetables in season
- Paper plates
- Napkins
- Damp paper towels
- Bowl with water for washing vegetables
- Towel for drying vegetables

Suggested Reading:

The American Dietetic Association Guide to Healthy Eating for Kids: How Your Children Can Eat Smart from Five to Twelve

Activity Summary:

In this lesson students will select and sample vegetables.

Vegetables

Vegetables are part of a healthful diet, supplying essential vitamins and minerals that we all need. Vegetables are typically annual plants that only live for one year or a growing season. Various parts of the plant can be used for food. The bulbs, flowers, fruits, leaves, roots, seeds, stems and tubers all provide food for us. Many vegetables can be eaten raw, in salads, or as a snack. This lesson will focus on vegetables that can be eaten raw as snacks, or in lunches.

There is often confusion as to what exactly constitutes a fruit or a vegetable. This is because the botanical, or scientific, distinction is different than the horticultural, or agricultural, distinction.

In plant botany, a fruit is the product of a flowering plant that contains its seeds. That would include such "fruits" as tomatoes, cucumbers, or peppers. However, for the horticulturist who is involved in food production, a fruit is the product of a flowering plant that is a perennial. A **perennial** is a plant that lives for more than two years such as a bush or a tree. Plants such as tomatoes, cucumbers, and peppers are **annuals**, only lasting for one year, so they are not treated as fruits by horticulturists. Instead they are classified as vegetables. Since we are dealing with fruits and vegetables as food, we will accept the horticultural definition. However, if you have a student who insists that a tomato or cucumber is a fruit, be aware that from a botanical perspective a tomato or a cucumber is the "fruit" of that plant.

Vegetables contain valuable fiber, vitamins and minerals. Some of the nutrients provided by vegetables include vitamin C, vitamin A, B vitamins such as niacin, thiamin, and riboflavin, and minerals such as calcium and iron. Vegetables are low in sugar and usually low in calories.

Vegetables come from various parts of the plant. Below is a list of various vegetables and the part of the plant that produces them:

Bulbs: garlic, onions, leeks Flowers: broccoli, cauliflower Fruits: tomatoes, cucumbers, peppers Leaves: lettuce, spinach, cabbage, kale, collards, celery* Roots: carrots, sweet potatoes, beets, parsnips, turnips, radishes Seeds: peas, beans, corn Stems: asparagus, kohlrabi Tubers: potatoes, Jerusalem artichokes

*Note: celery is actually a "leafstalk" and not classified as a stem.

Vegetables are an essential part of a healthy diet and everyone should have from three to five servings of vegetables daily. It is preferable to include whole vegetables rather than juices, as the fiber of the whole vegetable is good for the **Digestive System**. Vegetables make a quick and healthy snack.

This lesson includes washing and sampling actual vegetables. Which vegetables these are will depend on what is in season and/or available in the supermarket. Common and available vegetables that might be covered in this lesson include:

Celery	Zucchini
Carrots	Broccoli
Tomatoes	Cauliflower
Cucumbers	Lettuce
Peppers	Cabbages

Please include whatever vegetables are available in your area, and adapt the lesson accordingly. You may also include canned or frozen vegetables if there are limited fresh vegetables available or if you want to expand the number of vegetables covered. \Rightarrow (*NOTE: Be sure to check with student for any food allergies before serving any vegetables.*)

Vocabulary:

Names of any vegetables you want to include

Engage (5 -7 minutes):

First, have the students wash their hands. Ask: **"Why do we need to wash our hands?"** (Using clean hands when we eat and fix food is important for good health.)

Ask: **"What might be on our hands that we don't want in our food?"** *(Germs.)* Remind students about concepts previously learned in the Hygiene Lesson and Fruits Lesson.

Organize the class into four or five teams. Have the teams sit together at tables or on the floor. Arrange the class so they can see you easily from where they are sitting, as you demonstrate washing and cutting vegetables, and then hand out samples. Each group should have a supply of napkins and damp paper towels.

Vegetables:

Ask students if they have a favorite vegetable. List the foods on the board. Say, **"Today the class will be sampling vegetables."**

Ask the class what other vegetables they know. List these on the board.

Explore (10 minutes):

Have students work with their teams to answer the following questions:

- **"Why should we eat vegetables?** (think of two reasons why it is important to eat vegetables EVERY day.)
- "How many SERVINGS of vegetables should we eat each day?" (Three to five servings a day.)
- **"How much is a serving?"** (One cup of raw leafy vegetables, ³/₄ cup of vegetable juice, or ¹/₂ cup of other vegetables, raw or cooked. Example: one or two small cooked broccoli spears, five to seven baby carrots.)

Ask each team to share their answers.

Explain (10-12 minutes):

- 1. Have a bowl of water, a towel, vegetables, a knife, and a stack of paper plates ready.
- 2. Demonstrate cutting the vegetables: Tell the class they will be sampling vegetables and some of them may come away with new favorites.
- 3. Demonstrate washing and cutting two or three vegetables. Have the others already prepared.
- 4. Ask: "Why do we need to carefully wash vegetables before eating them?" (To remove any dirt, harmful germs or pesticides.) Point out that

ALL vegetables should be washed before they are eaten, even if they are going to be peeled (like cucumbers) BUT you have to be especially careful about washing vegetables with edible peels. (NOTE: Although washing and rinsing fresh produce may help reduce pesticide residue, it will not eliminate the risk entirely. Removing the peel may reduce risk of exposure, but important nutrients are lost along with the peel. Whenever possible, choose organically grown produce and wash as thoroughly as possible.)

- 5. Tell students that vegetables come from different parts of the plant. As you wash and cut the vegetables, discuss which part of the plant it is from *(see the background section above).*
- 6. <u>Tasting the vegetables</u>: As you finish cutting a vegetable, give each team samples. Have team captains come to the front and collect a paper plate with pieces for their team. (*Note: In order to save time, be sure to have several vegetables pre-cut and ready to be served.*) Repeat procedure for several other vegetables. Have students taste each piece of vegetable and think about HOW it tastes. Take a vote of how many students like the vegetable and how many do not. Record this data by charting it on the board.

Optional challenge activity:

Ask students for words that describe the vegetable. Record those words under the name of the vegetable on the board. Help students be as descriptive as possible. (Examples of descriptive words: sweet, sour, salty, crunchy, juicy, hard, soft, dry, stringy, slimy, tangy.)

Extend (15 minutes):

Give a stack of 3x5 index cards to each team.

Have each student draw his or her favorite vegetable on a card.

Have the team captain collect the cards and deliver them to the front.

Sort the cards to see which vegetable had the most votes. Construct a simple bar graph by taping the pictures of vegetables in columns on the board or on a piece of chart paper. Label each column with the name of the vegetable. Count how many votes each vegetable received.

Draw conclusions: Which vegetable got the most votes? Which vegetable got the least votes? How many more votes did carrots get than broccoli?

Vegetable salad:

Have students make a "vegetable salad" by cutting pictures of vegetables out of magazines and pasting them into a large bowl drawn on a piece of paper. You

may wish to have students work in the same teams they did for the previous activity, and post the "vegetable salads" in the classroom.

Or make a real salad! Send a note home with the students asking parents to provide a small Ziploc bag of cut up vegetables, preferably their child's favorite. Have the students help make the salad, telling what their vegetable is and why they like it.

Evaluate:

Vocabulary Picture Book: (NOTE: This lesson builds on the Vocabulary Book begun in the Body Systems lesson.)

- 1. Give each child a page for the vocabulary word "vegetable."
- 2. Have each child draw as many types of vegetables on the page as they can.
- 3. Each page should be three-hole punched. When the Vocabulary Book is completed for all the unit lessons, it can be assembled by tying yarn or colored ribbon through the holes.

And/Or:

Draw a **Digestive System**, showing what happens to the vegetable when we eat it. Have students draw a face with a "tube" going to a stomach. Inside the stomach draw or paint the vegetable.

Optional Enrichment Activities:

1. Have students report on what vegetables they eat, using 3x5 index cards, have students make pictures of the vegetables they ate the day before. Keep a class record by having students add these pictures to a class bar graph. See how many different vegetables have been eaten.

2. Have children bring a book from home that features vegetables (send a letter home to parents in advance.) Students can share the book with the class or the teacher can read it aloud during a reading time.

3. Have the class design a poster to place near the cafeteria lunch line. Have the students decide what to use as a title ("Ms. Johnson's Class Loves Vegetables!" "Choose Vegetables!" "Our Favorite Vegetables Are . . .") then have each student draw a picture of their favorite.

Additional Web Resources:

(www.choosemyplate.gov)

Standards:

Science: Grade Level Expectations

- 1. Science understanding is developed through the use of science process skills, scientific knowledge, investigation, reasoning, and critical thinking.
 - B. Scientific inquiry relies upon gathering evidence from qualitative and quantitative observations.
 - a. Make qualitative observations using the five senses.

Strand 8: Impact of Science, Technology and Human Activity

- 3. Science and technology affect, and are affected by, society.
 - A. People, alone or in groups, are always making discoveries about nature and inventing new ways to solve problems and get work done.
 - b. Work with a group to solve a problem, giving due credit to the ideas and contributions of each group member (assess locally.)

Health and Physical Education: Frameworks

II. Health Maintenance and Enhancement

- B. Nutrition Principles and Practices What all students should know:
- 2. Balance, variety, and moderation in the diet will enhance and promote health.
- 3. Food provides energy for the human body to work, grow and perform daily routines.