



## LiveWell Kids Garden and Nutrition Program

### Lesson 1: Harvesting and Mindful Eating

#### OBJECTIVES

By the end of this lesson, students will:

- Learn about warm-season crops. (K-5)
- Harvest fresh produce. (K-5)
- Increase knowledge and practice of mindful eating behaviors. (K-5)
- Identify body signals for hunger and fullness. (1-5)
- Recognize mindless eating behaviors. (4-5)
- Participate in preparing and tasting a healthy dish. (K-5)

#### SUPPLIES

**Supplies to bring from classroom to garden - *arrange with the teacher ahead of time:***

- Paper - one piece per student
- Writing tools - such as crayons, colored pencils, or markers

**Supplies to bring from the shed to the garden** (Those with an asterisk will be referred to in the Set-Up section.)

- Nutrition Activity:
  - Grade K: Laminated – *Mindful Tasting Senses*
  - Grades 1-3: Laminated – *The Hunger Gauge*
  - Grades 4-5: Laminated – *The Hunger Gauge*
  - Optional All Grades: Book – *No Ordinary Apple*
- Harvesting Station:
  - Pruners
  - Basket (or large bowl)
- Washing Station:
  - Wash bin
  - Vegetable scrubber
  - 2 Colanders
  - Paper towels\*
  - Hand soap
- Tasting Station:
  - Folding table (if applicable)\*
- Food handling gloves\*
- 1 medium bowl\*
- Platter\*
- 2 Knives\*
- 2 Cutting boards\*
- Juicer\*
- Small bowl\*
- 1-2 Serving utensils\*
- Clear plastic storage bin\*
- Sanitizing wipes\*
- Paper food trays\*
- Salt & pepper\*
- 1 lemon\*
- Whiteboard (optional)\*
- Dry-erase markers (optional)\*
- Dish soap
- Scrub brush (for dishes)

## PREPARATION

- Refer to the [LiveWell Kids Volunteer Manual](#) on the [LiveWell Kids webpage](#) for details about preparing for the lesson one week prior and the day of. The information can also be found on the inside of the shed door.
- Since this lesson involves a tasting, allow **45 minutes** for set-up.
- Before arriving in the garden, retrieve a lemon from the LiveWell Kids refrigerator. Ask in the front office if you don't know where it is.
- It is important to **check with the teacher ahead of time about students with food or stinging insect allergies**.
  - Suggest that parents send a small amount of their own allergy-free ingredients for their child if they have an allergy to the following: any of the harvested produce from the garden, lemon, olive oil, vinegar, salt, pepper.

## SET-UP INSTRUCTIONS

*Supplies for each station are listed above.*

- HARVESTING STATION:
  - Place a pair of pruners and either a basket or large bowl near the garden bed so they're ready to use for harvesting.
- WASHING STATION:
  - The sink area will be the washing station.
  - Place the hand soap and paper towels at the sink.
  - Fill up a wash bin halfway with water and set it on the ground near the sink with plenty of room for students to walk around it.
  - Place the vegetable scrubber inside the wash bin.
  - Set the 2 colanders next to the wash bin.
- FOOD PREP/TASTING STATION:
  - Set up the folding table (or a section of a picnic table) as the food prep area.
  - Place the items with an \* from the above supply list at this station. (Whiteboard and dry-erase markers are optional.)
  - Place all items (listed above) at one end of a table where you plan to stand and prep.
  - Use wipes to clean the storage bin and pack it with the number of paper food trays, forks and paper towels needed for your students.
  - Set an outdoor trashcan near the tasting area. (If there isn't one present, ask the front office to have the custodian bring one to the garden.) NOT the trashcan from the shed.
  - Wash your hands.
  - Check that the dish soap and scrub brush are in the shed.



## **INTRODUCTION & MINDFUL BREATHING (1 MINUTE)**

- Introduce yourself and other volunteers.
- Guide students through a mindful breathing exercise.
- Explain that in this first lesson they will harvest and prepare a healthy dish while also learning what it means to eat mindfully.

### **Sample Script**

*“Hi everyone, my name is \_\_\_\_\_. Welcome to your school garden! Now that we’re out here, let’s take a moment to do a mindful breathing exercise. You can either close your eyes or look down at the ground. Now let’s slowly take a deep breath in, pause for a moment, and then slowly let it out. Let’s do it one more time, deep breath in, pause, and slowly let it out. Now open your eyes. How do you feel?” (Allow a few students to respond.)*

*Welcome to our first Beach Cities Health District LiveWell Kids lesson of the year! Today we are going to talk about mindful eating as well as mindfully explore the garden crops that grew over the summer before harvesting some produce to make a healthy dish.*

## **HOW TO BEHAVE IN THE GARDEN (1 MINUTE)**

- Point out the “Garden Rules” sign on the inside of the shed door.
- Go over the rules together:
  - Always walk when in the garden.
  - Stay on the paths.
  - Always ask before using any tool or picking any crop.
  - Respect each other and all living things in the garden.

## **SUMMER CROPS (2 MINUTES)**

- Walk the class through the garden while sharing with them what occurred in the garden during the summer. For example:
  - Garden Angels and other volunteers took care of the school gardens by clearing old plants, making repairs, harvesting and donating produce to local food banks and soup kitchens.
  - They also planted seeds so new plants would grow for the students to harvest and taste.



## **NUTRITION: Mindful & Mindless Eating (8 - 14 MINUTES)**

The nutrition section covers the following topics:

1. Kindergarten - The Five Senses & Mindful Eating
2. 1<sup>st</sup> - 3<sup>rd</sup> Grades - Mindful Eating & Hunger Cues
3. 4<sup>th</sup> – 5<sup>th</sup> Grades – Mindful & Mindless Eating (optional Hunger Cues)

<p><b>Grade: K</b></p>	<p><b>Five Senses &amp; Mindful Eating</b></p> <p>Supplies: (1) Laminate – <i>Mindful Tasting Senses</i>, (2) Optional Book – <i>No Ordinary Apple</i></p>
<p>Discussion</p>	<ul style="list-style-type: none"> <li>• Think about the times when you eat. Ask:             <ul style="list-style-type: none"> <li>○ Do you usually eat quickly? Maybe you’re hurrying to school or to your friend’s house so you gulp down your food.</li> <li>○ Do you ever take your time to eat? Perhaps you have a favorite food and you want to enjoy every bit of it so you eat slowly.</li> </ul> </li> <li>• Today we’re going to talk about slowing down - paying attention to how food smells, looks, tastes and feels in your body while you eat.</li> <li>• This is called <b>mindful eating</b>.</li> <li>• Like the mindful breathing we did a few minutes ago, mindful eating is another way to practice mindfulness.</li> <li>• When we eat mindfully, we use our five senses. This can help us appreciate our food and taste all the flavors.</li> <li>• Ask: Can you name the 5 senses?</li> <li>• Show the students the visual aid, <i>Mindful Tasting Senses</i>.             <ul style="list-style-type: none"> <li>○ As you discuss the senses below, point to the corresponding section on the visual aid.</li> <li>○ Ask the students to point to their body part that is associated with the sense.</li> </ul> </li> <li>• <b>See</b> – When we look at our food, we want to pay close attention to the color, the texture and the shape. Is the color the same all over or are there different shades? Does the food look smooth, bumpy, gummy, fluffy?</li> <li>• <b>Smell</b> – Does the smell of the food remind you of anything? Maybe it reminds you of a memory or a place. For example, maybe the smell of cinnamon reminds you of grandma’s kitchen during the holidays. Or maybe it has no smell at all.</li> <li>• <b>Touch</b> – How would you describe the feel if you touched your food? Is it hard, squishy, soft, bumpy? What about its temperature? Is it hot, cold, room temperature?</li> <li>• <b>Taste</b> – How do you use the sense of taste when you eat? When you take a bite, does it taste sweet, sour, salty or bitter? Sometimes the taste of the food can change as you chew it. For example, a piece of fruit may be sour after the first bite but if you continue to chew the flavor may change to sweet.</li> <li>• <b>Hear</b> – How do you use the sense of hearing when you eat? When you take a bite, you may hear a crunch or it may be squishy. Can someone give me an example of a food that has a crunch when you bite into it? How about a food that is squishy when you bite into it?</li> <li>• Today we get to practice mindful eating when we have a delicious tasting made with fresh vegetables from our school garden!</li> <li>• See “Mindful Tasting” section for details.</li> </ul>
<p>Activity</p>	<ul style="list-style-type: none"> <li>• Option to read the book, <i>No Ordinary Apple</i>.</li> </ul>
<p><b>Grades:</b> <b>1<sup>st</sup>-3<sup>rd</sup></b></p>	<p><b>Mindful Eating &amp; Hunger Cues</b></p> <p>Supplies: (1) Laminate – <i>The Hunger Gauge</i>, (2) Optional Book – <i>No Ordinary Apple</i></p>

Discussion	<ul style="list-style-type: none"> <li>• Earlier we did a mindful breathing exercise together. Mindful breathing is one example of mindfulness.</li> <li>• When you are mindful, you focus on what is happening right now.<sup>1</sup> <ul style="list-style-type: none"> <li>○ This includes your thoughts, feelings and anything that is happening around you at this moment in time.</li> <li>○ It's the opposite of rushing or doing too many things at once.</li> </ul> </li> <li>• Another way to practice mindfulness is <b>mindful eating</b>.</li> <li>• When we eat mindfully, we use our five senses. This can help us appreciate our food and taste all the flavors.</li> <li>• Ask: Can someone name our five senses? <ul style="list-style-type: none"> <li>○ See, smell touch, taste, hear</li> </ul> </li> <li>• Using our five senses when we eat allows us to pay attention to what we eat, how we eat and how our bodies feel before, during and after we eat.</li> <li>• Paying attention to your body begins with listening to the signals your body gives you when you are hungry and full.</li> <li>• Ask: What are some ways your body lets you know that it's time to eat? <ul style="list-style-type: none"> <li>○ Possible answers: stomach growling, irritable/ "hangry", low energy, lightheaded<sup>2</sup></li> </ul> </li> <li>• Ask: And how do you feel if you eat too much?</li> </ul>
Hunger Gauge	<ul style="list-style-type: none"> <li>• Here is a tool that can help you figure out when you feel hungry and full.</li> <li>• Show students the Visual Aid, <i>The Hunger Gauge</i>. <ul style="list-style-type: none"> <li>○ Explain to the class what each number on the scale means. <ul style="list-style-type: none"> <li>▪ 0 = I could eat anything in sight!</li> <li>▪ 1 = I'm pretty hungry, my belly is growling.</li> <li>▪ 2 = I could eat something, but not an entire meal.</li> <li>▪ 3 = I'm satisfied.</li> <li>▪ 4 = I feel more than satisfied.</li> <li>▪ 5 = I'm stuffed!</li> </ul> </li> </ul> </li> <li>• On a scale from 0-5, you should eat if you are at a 2 or below. The goal should be a 3, which is a satisfied feeling.</li> <li>• Ask: Can you show your current level of hunger/fullness right now using your fingers to indicate 1, 2, 3, 4 or 5? (Wait for the students to raise their fingers.)</li> <li>• Read the following scenarios and ask the kids to look at <i>The Hunger Gauge</i> and determine the hunger number they think matches the example. Note any similarities or differences with the students' answers. <ul style="list-style-type: none"> <li>○ Scenario A: Julia wakes up in the morning and gets ready for school. She hasn't had breakfast yet and her stomach is growling. Where is she on the hunger gauge from 0-5? For example, 0 is she could eat anything in sight and 5 is feeling stuffed.</li> <li>○ Scenario B: Michael is at his friend's birthday party and they are about to serve cake. He has already had 3 pieces of pizza, fruit and chips and THEN has a piece of cake WITH ice cream! What number is he on the hunger gauge?</li> <li>○ Scenario C: After school, Peter ate an apple, but it didn't fill him up. His mother offers him some peanut butter on crackers, too. Now he feels just right. What number do you think he is on the hunger gauge?</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>It’s not just the amount of food we eat. Sometimes we eat so quickly that we don’t even taste what we’re eating!             <ul style="list-style-type: none"> <li>If we don’t take our time and pay attention to what we eat, then we may not feel satisfied or we may eat too much.</li> <li>Then we don’t feel our best and don’t have the energy for school, sports or play.</li> </ul> </li> <li>Today we’re going to practice mindful eating when we have a tasting made with fresh vegetables from our school garden.</li> </ul>
Activity	<ul style="list-style-type: none"> <li>Option to read the book, <i>No Ordinary Apple</i>.</li> </ul>

<b>Grades:</b> <b>4<sup>th</sup>-5<sup>th</sup></b>	<b>Mindful &amp; Mindless Eating</b> Optional Supplies: (1) Laminate – <i>The Hunger Gauge</i> , (2) Book – <i>No Ordinary Apple</i>
Discussion	<ul style="list-style-type: none"> <li>Earlier we did a mindful breathing exercise together. Mindful breathing is one example of mindfulness.</li> <li>Ask: Can someone explain what it means to be mindful?             <ul style="list-style-type: none"> <li>When you are mindful, you focus on what is happening right now.</li> <li>This includes your thoughts, feelings and anything that is happening around you at this moment in time.</li> <li>It’s the opposite of rushing or doing too many things at once.</li> </ul> </li> <li>Another way to practice mindfulness is <b>mindful eating</b>.</li> <li>Ask: What is mindful eating?             <ul style="list-style-type: none"> <li>When we eat mindfully, we use our five senses - see, smell touch, taste, hear.</li> <li>Using our five senses when we eat allows us to pay attention to what we eat, how we eat and how our bodies feel before, during and after we eat.</li> </ul> </li> <li><u>Important</u>: Mindful eating is NOT about restricting what you eat. It is better described as an eating experience. It invites you to try new foods, enjoy eating and appreciate the present moment. <sup>3</sup></li> <li>Things you can do to help yourself be more mindful when eating include:             <ul style="list-style-type: none"> <li>Remove distractions such as turning off electronics (TV, computer, phone). Try not to talk on the phone or text while eating.</li> <li>Take food out of its original packaging and put it in a bowl/ plate.</li> <li>Sit Down. Try not to eat standing up.</li> <li>Use all of your senses. Pay attention to the flavor and chew slowly.</li> </ul> </li> <li>Another action step is to pay attention to your body, listening to the signals your body gives you when you are hungry and full.             <ul style="list-style-type: none"> <li>Ask: What are some ways your body lets you know that it’s time to eat?                 <ul style="list-style-type: none"> <li>Possible answers: stomach growling, irritable/ “hangry”, low energy, lightheaded</li> </ul> </li> <li>Ask: And how do you feel if you eat too much?</li> </ul> </li> <li>Shortly, we’ll practice mindful eating when have a tasting made with fresh vegetables from our school garden.</li> </ul>
*Optional: Hunger Gauge	*Volunteers - Due to the pandemic and the resulting LiveWell Kids hiatus, the 4 <sup>th</sup> and 5 <sup>th</sup> grades did not learn about the Hunger Gauge. Therefore, you have the option to

	<p>include this in your lesson. If you would like to go into more detail about hunger/fullness cues, please see “Hunger Gauge” section for grades 1-3.</p> <ul style="list-style-type: none"> <li>• Here is a tool that can help you figure out when you feel hungry and full.</li> <li>• Show students the Visual Aid, <i>The Hunger Gauge</i>. <ul style="list-style-type: none"> <li>○ Explain to the class what each number on the scale means. <ul style="list-style-type: none"> <li>▪ 0 = I could eat anything in sight!</li> <li>▪ 1 = I’m pretty hungry, my belly is growling.</li> <li>▪ 2 = I could eat something, but not an entire meal.</li> <li>▪ 3 = I’m satisfied.</li> <li>▪ 4 = I feel more than satisfied.</li> <li>▪ 5 = I’m stuffed!</li> </ul> </li> </ul> </li> <li>• On a scale from 0-5, you should eat if you are at a 2 or below. The goal should be a 3, which is a satisfied feeling.</li> <li>• Ask: Can you show your current level of hunger/fullness using your fingers to indicate 1, 2, 3, 4 or 5?</li> </ul>
Discussion & Activity	<ul style="list-style-type: none"> <li>• <b>Mindless eating</b> is the opposite of mindful eating.</li> <li>• Mindless eating is eating while distracted, too fast or when not hungry.<sup>4</sup></li> <li>• Today we’re going to play charades and take turns acting out behaviors and emotions that can lead to mindless eating.</li> <li>• Depending on group size, invite 1 or more students at a time to come to the front and act out a mindless eating scenario. The remaining students will guess what they are doing.</li> <li>• Reference the following scenarios: <ul style="list-style-type: none"> <li>○ Watching TV</li> <li>○ Talking on the phone</li> <li>○ Playing video games</li> <li>○ Emotions: <ul style="list-style-type: none"> <li>▪ Boredom</li> <li>▪ Stress</li> <li>▪ Anger</li> <li>▪ Loneliness</li> </ul> </li> <li>○ Hanging out with friends and everyone else is eating</li> <li>○ Sight, smell, and sound of food, such as popcorn at a movie theater</li> <li>○ Eating food directly from the package</li> </ul> </li> <li>• Ask: How many of you have eaten mindlessly before? It happens more often than we think!</li> <li>• It’s not possible all the time, but when you can, try to be fully present when you eat and take time to enjoy your food!</li> </ul>



**GARDEN: HARVESTING SUMMER CROPS (14 – 21 MINUTES)**

The garden section has three parts:

1. Harvesting produce from the school garden.
2. Washing harvested produce.
3. Preparing the produce to eat.

**HARVESTING STATION**

<p><b>Grades: K-5<sup>th</sup></b></p>	<p><b>Harvesting Overview</b></p> <p><i>Supplies: You will need the basket or a large bowl and the pruners for harvesting as you walk with the class through the garden.</i></p> <p><i>Not all plants discussed below are present in all school gardens. Adjust to what’s growing in your school’s garden.</i></p>
<p>Discussion</p>	<ul style="list-style-type: none"> <li>• Walk the class through the garden to observe and discuss what grew over the summer.</li> <li>• Use the harvest directions and plant facts below as talking points to teach the students about the plants, how they grow and how they will be harvested when ripe.</li> <li>• Take students to the garden beds and have a couple of students at a time approach the bed to harvest their items.             <ul style="list-style-type: none"> <li>○ Each student will pick 1 item.</li> </ul> </li> <li>• As each student harvests, direct them to the washing station where they will wash their item.</li> </ul>
<p><b>Grades: K-5<sup>th</sup></b></p>	<p><b>Peas</b></p>
<p>Discussion &amp; Activity</p>	<p><b><u>HARVESTING DIRECTIONS:</u></b></p> <ul style="list-style-type: none"> <li>• Bring the students to stand around a pea vine.</li> <li>• Instruct students that when they pick a pea, they take hold of the pea with one hand and use the other hand to “cut” the pea from the stem with their fingernail.             <ul style="list-style-type: none"> <li>○ <b>Do not pull the pea</b> or the whole branch will follow and break!</li> </ul> </li> </ul> <p><b><u>PLANT FACTS:</u></b><sup>5,6,7</sup></p> <ul style="list-style-type: none"> <li>• Peas are eaten fresh or cooked.</li> <li>• Peas have lots of healthy nutrients including protein, fiber, iron, zinc and more!</li> <li>• Pea protein, made from ground/dried peas, is a popular product, often used as a meat substitute.</li> <li>• Pea plant characteristics:             <ul style="list-style-type: none"> <li>○ They are vining, with stems that end in tendrils, which are modified leaves.</li> <li>○ The tendrils are designed to grab onto anything they can reach so they can climb as they grow. For this reason, stakes and twine are used to train them upward.</li> <li>○ The tendrils are <b>thigmotropic</b>, (<i>pronounced “thig-muh-TROP-ick”</i>) which means that they have a growth response to touch. The tendrils grow in a spiral direction, always looking for an object to cling to. When they brush against something, they grab on!</li> <li>○ The flowers can be purple or white.</li> <li>○ Once the pea pod appears, peas begin developing inside.</li> <li>○ All parts of the plant above ground are edible: stems, tendrils, leaves, flowers, pods and peas.</li> <li>○ When the peas are picked, the plant is stimulated to make more.</li> </ul> </li> </ul>



<p><b>Grades: K-5<sup>th</sup></b></p>	<p><b>Cilantro, Basil, (or Leafy Greens)</b></p>
<p>Discussion &amp; Activity</p>	<p><u>HARVESTING DIRECTIONS:</u></p> <ul style="list-style-type: none"> <li>• Bring students to stand around a cilantro or basil plant.</li> <li>• Tell them that when they are harvesting any leafy herb, they will pinch off a leaf or segment of a stem with their fingernail, “cutting” it cleanly to separate it from the plant.</li> <li>• If harvesting, demonstrate first and then have them try it.</li> </ul> <p><u>PLANT FACTS:</u> <sup>8,9,10</sup></p> <ul style="list-style-type: none"> <li>• Pinching off leaves will stimulate the plant to produce more leaves.</li> <li>• Leafy green herbs can be consumed in many ways: fresh in salads or other cold dishes, to flavor water, cooked in dishes, baked into baked goods and more.</li> <li>• Cilantro is also called “Chinese Parsley” and is closely related to parsley but tastes and smells very different.</li> <li>• There are more than 100 different kinds of basil.</li> <li>• If you have a leafy green lettuce plant, harvest larger leaves from the outside and leave at least 5 baby center leaves so the plant can continue to grow.</li> </ul>
<p><b>Grades: K-5<sup>th</sup></b></p>	<p><b>Onion</b></p>
<p>Discussion &amp; Activity</p>	<p><u>HARVESTING DIRECTIONS:</u></p> <ul style="list-style-type: none"> <li>• Bring students to stand around the onions.</li> <li>• Let them know that if they pull an onion out of the ground, the bulb-end of the onion has soil on it, since it was underground, so it will need to be washed off.</li> <li>• If they are harvesting, grab hold of the onion at the very base, as close to the soil as you can and gently rock it to loosen it from the soil.</li> <li>• Once you feel it loosen, continue to wiggle it as you pull it out of the ground.</li> </ul> <p><u>PLANT FACTS:</u> <sup>11,12</sup></p> <ul style="list-style-type: none"> <li>• The green parts above the ground are the onion’s leaves.</li> <li>• The leaves have a milder taste than the more intense bulb-end, which develops underground.</li> <li>• There are different ways to harvest onions depending on your intended use.             <ul style="list-style-type: none"> <li>○ You can either pull it out of the ground and use the entire onion or you can cut some of the green leaves only, leaving just a few inches above ground so the onion can continue to grow.</li> </ul> </li> </ul>
<p><b>Grades: K-5<sup>th</sup></b></p>	<p><b>Tomato</b></p>
<p>Discussion &amp; Activity</p>	<p><u>HARVESTING DIRECTIONS:</u></p> <ul style="list-style-type: none"> <li>• Bring students to stand around the tomatoes.</li> <li>• When it’s time to harvest a tomato, make sure that there is no green color on the fruit that you are choosing.</li> <li>• The stem should be turning brown where the tomato connects to the branch.</li> <li>• If you are harvesting, gently grasp the tomato and give it a twist. If it’s ripe, it should easily fall off in your hand.</li> </ul> <p><u>PLANT FACTS:</u> <sup>13</sup></p> <ul style="list-style-type: none"> <li>• Tomatoes come in all sizes, colors, shapes and flavors.</li> </ul>

	<ul style="list-style-type: none"> <li>○ Most people think of them as round and red, but they come in dark purples, pinks, orange, green striped, white, yellow and more.</li> <li>○ They can be large and lumpy or tiny and round like a pea.</li> </ul>
<p><b>Grades: K-5<sup>th</sup></b></p>	<p><b>Radish</b></p>
<p>Discussion &amp; Activity</p>	<p><u>HARVESTING DIRECTIONS:</u></p> <ul style="list-style-type: none"> <li>● Bring students to stand around the radishes.</li> <li>● To determine if a radish is ready to harvest, take a finger and brush away the soil at the base of the leaves to reveal the crown of the radish.</li> <li>● If it seems like the size you desire, grab hold of all the greens together, as far down the base as you can, with your fingers against the crown of the radish.</li> <li>● If harvesting, wiggle the radish until you feel it loosen. Then wiggle and lift upward at the same time.</li> <li>● If you just pull the leaves, sometimes they break off in your hand and no radish!</li> </ul> <p><u>FACTS:</u><sup>14</sup></p> <ul style="list-style-type: none"> <li>● Radishes grow underground.</li> <li>● They are referred to as “root vegetables.”</li> <li>● A root vegetable is a vegetable that is grown for the sake of eating the swollen taproot.</li> </ul>
<p><b>Grades: K-5<sup>th</sup></b></p>	<p><b>Squash</b></p>
<p>Discussion &amp; Activity</p>	<p><u>HARVESTING DIRECTIONS:</u></p> <ul style="list-style-type: none"> <li>● Bring students to stand around a squash plant.</li> <li>● To determine if a squash is ready to harvest, look to see that the vine is dead or dying and that the stem of the squash is brown and dry, not green.</li> <li>● If it’s ready to harvest, warn the students that squash plants have very fine hair-like spines on their vines and leaves.</li> <li>● Have the student hold the squash for you while you use the pruners to cut the stem from the vine.</li> </ul> <p><u>FACTS:</u><sup>15,16</sup></p> <ul style="list-style-type: none"> <li>● Squash grows on a vine.</li> <li>● There are many kinds of squash: pumpkins, zucchini, patty-pan, trombetta and others.</li> <li>● Squash is also related to all melons and cucumbers.</li> <li>● The vines produce both male and female flowers along the same vine, but only the female flowers can produce a squash.</li> </ul>
<p><b>Grades: K-5<sup>th</sup></b></p>	<p><b>Beans</b></p>
<p>Discussion &amp; Activity</p>	<p><u>HARVESTING DIRECTIONS:</u></p> <ul style="list-style-type: none"> <li>● Bring students to stand around a bean bush.</li> <li>● Beans can be picked at any stage, but if you pick them too early or too late, they’ll taste a bit tough.</li> <li>● Look for peas that are long and slim but have no sign of shriveling. Once bean plants have put out all their beans, the plant starts dying. Beans taste best before their leaves turn brown.</li> <li>● If you are harvesting, gently grasp the bean with your hand and use your fingernails on the other hand to cut its stem from the plant.</li> </ul>

	<p><b>FACTS:</b><sup>16</sup></p> <ul style="list-style-type: none"> <li>• There are many types of beans: pinto, black-eyed, navy, garbanzo, string, just to name a few.</li> <li>• Some grow on vines while others grow on a bush.</li> <li>• Beans are <b>legumes</b>, which means the seeds grow in a pod.</li> </ul>
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**WASHING STATION**

**\*\* Happening at the same time as harvest activity.**

<b>Grades: K-5<sup>th</sup></b>	<p><b>Washing</b></p> <p><i>Depending on how many students are in your class, figure out ahead of time how many jobs you need so that every child can participate. Most of the jobs described can be divided up as needed to involve more kids.</i></p>
<b>Activity</b>	<ul style="list-style-type: none"> <li>• Taking the colander of ingredients, lead your students to the washing station and choose the CLEANERS, the WASHERS and the DRYERS.             <ul style="list-style-type: none"> <li>○ Have the DRYERS wash their hands first.</li> </ul> </li> <li>• The CLEANERS will brush off any loose plant/soil debris as they take each item out of the colander to be washed (especially radishes) and hand it to the WASHER one at a time.</li> <li>• The WASHERS will gently wash the produce, using the vegetable brush as needed.             <ul style="list-style-type: none"> <li>○ Tomatoes need very gentle rubbing with fingers to remove any surface dirt, while onions, radishes and squash can handle the vegetable scrubber to gently remove any soil.</li> <li>○ When handling delicate items such as leafy herbs or greens, let students know that they are very fragile and need gentle handling. These items don't need the vegetable brush and are usually fine with a quick swish in the water.</li> </ul> </li> <li>• As they finish rinsing, have them deposit the produce in the colanders so water can drain.</li> <li>• The DRYERS will take the pieces from the colander and gently pat dry with paper towels before placing them in the mixing bowl (that had been used for harvesting.)</li> <li>• Once all items are washed, take the colanders of washed produce, the paper towels and the bowls that held the harvest to the tasting station.</li> <li>• Also direct the students to head over to the Food Prep/Tasting Station where they will sit and wait to watch the food prep demonstration.</li> </ul>

**FOOD PREP/TASTING STATION**

<b>Grades: K-5<sup>th</sup></b>	<p><b>Set Up &amp; Food Preparation</b></p> <p><i>At the tasting station, you will be making a <b>Tasting Platter</b> in which you will arrange the diced/sliced ingredients on a platter for sampling.</i></p>
<b>Activity</b>	<p><b>SETTING UP:</b></p> <ul style="list-style-type: none"> <li>• Put on food handling gloves and position yourself at the cutting board with a knife.</li> <li>• Cut the lemon in half and squeeze the juice into the small bowl.</li> <li>• Wait to start the demonstration until all students are together at the station, ready to listen.</li> <li>• Choose a student to be your CUTTING ASSISTANT and have them put on food handling gloves.</li> <li>• You will also assign jobs to PLATERS and SERVERS.</li> </ul>

	<p><b><u>PREPARING THE TASTING PLATTER</u></b></p> <ul style="list-style-type: none"> <li>● Explain that you are creating a “tasting platter” so the students can taste the different foods that grew in the garden.</li> <li>● Have the CUTTING ASSISTANT hand the clean produce, one piece at a time, to you (or the adult at the cutting board) to cut/dice/slice.</li> <li>● Hold it up for the class to see and name it before cutting.</li> <li>● Place all produce scraps in the medium bowl for compost.</li> <li>● Choose your PLATERS.</li> <li>● Wearing food handling gloves, your PLATERS will arrange the diced/sliced ingredients on the platter for sampling.</li> <li>● Have an adult place the platter on the table where it will be served into food trays.</li> <li>● Choose 4 (or more) SERVERS.</li> <li>● With all servers wearing gloves, the SERVERS will use a teaspoon to scoop a sample, consisting of a small piece of each ingredient, into each food tray.</li> <li>● Have an adult go around to each child and pour a <u>small</u> amount of oil, vinegar and lemon juice on each plate for optional dipping. An adult can offer to lightly season with salt and pepper as well.</li> <li>● Have the students line up to receive their food trays and sit down.             <ul style="list-style-type: none"> <li>○ For older grades, a job can be created to pass out food trays.</li> <li>○ For younger grades, the adults should pass out the food trays.</li> </ul> </li> <li>● Have them wait to taste so that you can all do a <b>Mindful Tasting</b> together.</li> </ul>
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**MINDFUL TASTING (3 - 5 MINUTES)**

<b>Grades: K-5<sup>th</sup></b>	<p><b>Mindful Tasting</b></p> <p>Optional Supplies: (1) Whiteboard, (2) Dry-erase markers</p>
Activity	<ul style="list-style-type: none"> <li>● Now that we have reviewed what eating mindfully means, we are going to practice by using our senses and having a mindful tasting.</li> <li>● During the tasting, the students can experiment and create different flavor combinations by mixing and matching the various foods on their plates, trying at least a few different combinations.</li> <li>● During a mindful tasting we should:             <ul style="list-style-type: none"> <li>○ Be respectful: don’t throw food on the ground.</li> <li>○ Not say “yuck” or “gross.” Just because you don’t think you may like it, it doesn’t mean someone else won’t, so you don’t want to “Yuck someone else’s yum!”</li> <li>○ Try to take at least one bite.</li> <li>○ Use all of your senses.</li> </ul> </li> <li>● Engage the students with the following questions:             <ul style="list-style-type: none"> <li>○ <b>See</b> <ul style="list-style-type: none"> <li>▪ How was this grown - on a tree, bush, vine or underground?</li> <li>▪ Notice the size, shape and color of the food.</li> </ul> </li> <li>○ <b>Smell</b> <ul style="list-style-type: none"> <li>▪ Lift your plate and slowly smell the food.</li> <li>▪ Does the scent remind of you a place, a person or experience?</li> <li>▪ How would you describe the scent?</li> <li>▪ Does it smell tangy, sweet, strong or spicy?</li> </ul> </li> </ul> </li> </ul>

- **Touch**
  - Use your finger and touch the food.
  - Does it feel soft? Spongy? Hard? Slippery?
- **Taste and Hear**
  - Choose something to take a small bite of and let it sit on your tongue for a few moments, experiencing the taste.
  - Pay attention to how it feels in your mouth. Chew a few times but don't swallow right away.
  - Notice the flavors. Is it sour? Bitter? Sweet? Salty?
  - Do you hear anything when you chew? Perhaps you hear a crunching sound when you bite down.

Optional: Have the students share a favorite food combination with the class. Using the whiteboard and dry-erase markers, write down their "recipes" and take a photo of it before you clean up. Offer the photo to the teacher so they can share it with the parents. Also, please send the photo to Beach Cities Health District as well!

### **CLOSING (1 MINUTE)**

- Bring students together to close the lesson and thank the students, teacher, and other volunteers.
- Recap what they learned and inform them that they will be planting new seeds in their next lesson.
- If time allows, have students draw/write a 'Reflection Page' after the lesson, either in the garden or with the teacher when they return to class. If you see any that you'd like to share with us, take a photo before the students leave with them and share with us: [MishellBalzer@bchd.org](mailto:MishellBalzer@bchd.org)
- Have students dispose of their plates and paper towels in the **trash can** as they leave the garden.
- Thank the students for joining you today and dismiss them.
- Clean and replace supplies to shed.
- Put produce scraps (from the scrap bowl you used during prep) and **nothing else** in the compost bin.

**\*Don't forget to report your lesson as delivered with the online form!**

*Scan this QR code with your phone for scheduling and reporting lessons as delivered:*



*From the computer, click the link that was emailed to you by your Lead Volunteer:*

[LiveWell Kids Tracking Links 2024-25](#)

## **Did You Know? Fun Facts!**

- ❖ All legumes, such as peas and beans, are excellent sources of nutrients: protein, fiber, manganese, magnesium, iron, zinc, potassium and folate (a B vitamin).<sup>17</sup>
- ❖ Cilantro is also called “Chinese Parsley” and is closely related to Parsley but tastes and smells VERY different.<sup>9</sup>
- ❖ Fruits and vegetables contain important vitamins, minerals, and plant chemicals (such as nitrogen, oxygen and carbon).<sup>18</sup>
- ❖ Some fruits and veggies, such as carrots, apples and cucumbers, store a large percentage of their nutrients in their skin, so if you peel them, you’re peeling away some of the nutritional benefit.<sup>19</sup>
- ❖ A diet high in fruit and vegetables can help protect you against illness and disease.<sup>18</sup>
- ❖ Vegetables and fruits are an important part of a healthy diet, and variety is just as important as quantity.<sup>18</sup>
- ❖ No single fruit or vegetable provides all the nutrients you need to be healthy. Eat plenty of colorful fruits and vegetables every day.<sup>18</sup>
- ❖ There are about 2000 different kinds of fruit in the world and our country eats only about 200 different kinds.<sup>20</sup>
- ❖ Fruits and vegetables contain fiber which is like “nature’s scrub brush” for your intestines, keeping particles from sticking to the inside walls as it moves through.<sup>18</sup>
- ❖ If you want your fresh herbs to last longer, pick the lower leaves off the stem and display them in a flower vase like a floral arrangement.

<sup>1</sup> Be Mindful to Stress Less (for Kids) - Nemours KidsHealth. (n.d.). Kidshealth.org.

<https://kidshealth.org/en/kids/mindfulness.html#:~:text=Being%20mindful%20means%20having%20your%20time>

<sup>2</sup> Nemours, & LDN, M.-C. P., RD. (2018, February 6). *Mindful Eating*. Nemours Blog. <https://blog.nemours.org/2018/02/mindful-eating/>

<sup>3</sup> Nelson, J. B. (2017). Mindful Eating: The Art of Presence While You Eat. *Diabetes Spectrum*, 30(3), 171–174.

<sup>4</sup> Nemours, & LDN, M.-C. P., RD. (2018a, February 6). *Mindful Eating*. Nemours Blog. <https://blog.nemours.org/2018/02/mindful-eating/>

<sup>5</sup> Plant Fact Sheet PEA *Pisum sativum* L. Plant Symbol = PISA6. (n.d.) [https://www.nrcs.usda.gov/Internet/FSE\\_PLANTMATERIALS/publications/wapmcf51388.pdf](https://www.nrcs.usda.gov/Internet/FSE_PLANTMATERIALS/publications/wapmcf51388.pdf)

<sup>6</sup> Hofer, J., Tuner, L., Moreau, C., Ambrose, M., Isaac, P., Butcher, S., Weller, J., Dupin, A., Dalmais, M., Le Signor, C., Bendahmane, A., & Ellis, N. (2009). Tendril-less Regulates Tendril Formation in Pea Leaves. *Core.ac.uk*.

<sup>7</sup> Editors, B. D. (2017, January 3). *Thigmotropism*. Biology Dictionary. <https://biologydictionary.net/thigmotropism/>

<sup>8</sup> *To Pinch or Not To Pinch, That Is the Question*. (n.d.). ANR Blogs. <https://ucanr.edu/blogs/blogcore/postdetail.cfm?postnum=26939>

<sup>9</sup> *Cilantro / Coriander, Coriandrum sativum*. (n.d.). Wisconsin Horticulture. <https://hort.extension.wisc.edu/articles/cilantro-coriander-coriandrum-sativum/>

<sup>10</sup> Wolfe, K. (2020). *Basil Varieties*. <https://s3.wp.wsu.edu/uploads/sites/2073/2020/04/Basil-Varieties.pdf>

<sup>11</sup> Onion: benefits and nutritional properties. (2019, December 16). Nutrigenomics Institute. <https://nutrigenomicsinstitute.com/nutrigenomics-news/onion-benefits-and-nutritional-properties/Top Foods High in Vitamin C>. (n.d.). WebMD.

<sup>12</sup> Onions: How to Grow It. (n.d.). Extension.sdstate.edu. Retrieved July 7, 2022, from <https://extension.sdstate.edu/onions-how-grow-it>

List of Allium species. (2022, May 24). Wikipedia

<sup>13</sup> Tomato - Vegetable Directory - Watch Your Garden Grow - University of Illinois Extension. (2013). Illinois.edu.

<sup>14</sup> *What Are the Health Benefits of Root Vegetables?* (n.d.). WebMD. <https://www.webmd.com/diet/what-are-root-vegetables>

<sup>15</sup> *Saving Seed of Pumpkins, Squash, Cucumbers, Melons and Gourds*. (n.d.). Extension.sdstate.edu. <https://extension.sdstate.edu/saving-seed-pumpkins-squash-cucumbers-melons-and-gourds>

<sup>16</sup> Allaire, H., & Brady, T. (n.d.). *Classification and Botanical Description of Legumes*.

[https://academics.hamilton.edu/foodforthought/Our\\_Research\\_files/beans\\_peas.pdf](https://academics.hamilton.edu/foodforthought/Our_Research_files/beans_peas.pdf)

<sup>17</sup> *Plant ID Vegetables: Swiss Chard - Florida Master Gardener Volunteer Program - University of Florida, Institute of Food and Agricultural Sciences*. (n.d.).

Gardeningsolutions.ifas.ufl.edu. Retrieved September 7, 2023, from

[https://gardeningsolutions.ifas.ufl.edu/mastergardener/outreach/plant\\_id/vegetables/chard\\_swiss.shtml#:~:text=Chard%2C%20Swis%20\(Beta%20vulgaris%22Cicla%20group\)&text=E ach%20leaf%20has%20a%20long](https://gardeningsolutions.ifas.ufl.edu/mastergardener/outreach/plant_id/vegetables/chard_swiss.shtml#:~:text=Chard%2C%20Swis%20(Beta%20vulgaris%22Cicla%20group)&text=E ach%20leaf%20has%20a%20long)

<sup>18</sup> Liu, R. H. (2013). Health-promoting components of fruits and vegetables in the diet. *Advances in Nutrition (Bethesda, Md.)*, 4(3), 384S92S.

<https://doi.org/10.3945/an.112.003517>

<sup>19</sup> Slavin, J. L., & Lloyd, B. (2012). Health Benefits of Fruits and Vegetables. *Advances in Nutrition*, 3(4), 506–516. <https://doi.org/10.3945/an.112.002154>

<sup>20</sup> *The Nature of Crops: Why do we eat so few of the edible plants?* New Scientist. <https://www.newscientist.com/article/mg22730301-400-the-nature-of-crops-why-do-we-eat-so-few-of-the-edible-plants/>