

LIVEWELL KIDS GARDEN EDUCATION MODULE ONE: MINDFUL TASTING IN THE GARDEN ALL GRADES

Helpful Bites

There is a lot of information to digest in the LiveWell Kids lessons. "Helpful Bites" is our way of providing a quick reference tool to the key points for each lesson. It is intended to help guide your discussions but should not replace the full content.

Preparation

This lesson requires preparation. **PLEASE RECRUIT HELP AHEAD OF TIME**. Be sure to check your garden bed prior to your lesson to see what is growing and available for picking during the lesson. Check food allergies with your teacher ahead of time.

- Ask your teacher to have students wash their hands right before the lesson because they will be doing food prep.
- Set 2 bowls and a weeder hand tool next to the garden bed.
- Set up the WASH ACTIVITY station, FOOD PREP ACTIVITY station and TASTING ACTIVITY station.
- Use wipes to clean storage bin and pack it with paper food trays, forks and paper towels.
- Obtain a bag of chips from the shed.

Introduction

- Introduce yourself, the garden and the lesson topic.
- Lead the class through a mindful breathing exercise.
- Go over the garden rules.

Exploring and Harvesting the Summer Crops

- Walk the class through the garden and discuss what's growing.
- Encourage students to practice mindful seeing, smelling and hearing while experiencing the garden.
- Divide the class into two groups to harvest the garden.

Washing Activity

• Have the teacher/parent helper supervise this area while students wash their produce and put it in the colanders.

Food Prep Activity

- Wear food handling gloves when preparing food.
- Discuss each vegetable and herb as well as its health benefits.
- Prepare the food tasting.
- Serve 1-2 teaspoons of salsa in each food tray along with a few chips.

Tasting Activity

- Pass out the food trays and paper towels to students for tasting.
- Follow the guided mindful eating exercise outlined in the script.

Reflection

- If there is time, have students write or draw something they have learned from today's lesson or ask the teacher to have them do this when they return to class.
- Select a few to share with us a photo from your phone works great.

After Lesson

- Thank your teacher/helper and dismiss the students.
- Clean up and return supplies to the shed and return the shed key to the office.
 Report your lesson completed at http://bit.ly/LiveWellGarden_19-20 or scan the QR code:



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Objectives

By the end of this lesson, students will:

- Learn the rules of the garden.
- Identify warm season vegetables, describe how they are harvested and learn their health benefits.
- Harvest summer crops and participate in a mindful tasting using the five senses.

Supplies

- 2 Colanders
- 2 bowls (used first for Harvesting Activity, then for Food Prep Activity)
- Paper towels
- Wash bin
- 2 knives
- Food handling gloves

- 2 cutting boards
- 1 2 serving utensils
- Garden-friendly soap
- 1 Weeder hand tool
- Scissors
- Clear plastic storage bin
- Chips
- Sanitizing wipes

- Paper food trays
- Salt
- Garlic powder
- Bag of Chips
- Produce harvested from the garden

- Before the Lesson
 - Check with the teacher for any stinging insect or food allergies. The tasting includes any/all of the following ingredients: tomatoes, onions, cilantro, jalepeno (or other chili pepper), tomatillos, salt, garlic powder and corn tortilla chips. Suggest that parents can send a small amount of their own salsa or chips for their child if they have an allergy to any of the ingredients listed.
 - Have your helper read the lesson ahead of time and discuss their role with them.

Lesson Preparation

Please allow about 45 minutes for set-up and prep before the lesson

Harvesting Activity Station

- <u>Communicate with your Lead Docent prior to the lesson to determine how much your class can harvest</u>. Supplemental produce is in your LiveWell Kids refrigerator on campus. If you don't know where this is, ask your Lead Docent.
- Set two bowls and a pair of pruners next to the garden bed. You need bowls for all the items that you are harvesting with the class.

Washing Activity Station

- Place these items at the sink: wash tub/bin, vegetable scrub brush, hand soap and paper towels.
- Set up a washing station near the sink by filling the tub halfway with water.
- Set the colanders next to the sink (to be moved next to the wash tub while students are washing produce).
- Set the hand soap and paper towels at the sink.

Food Prep and Tasting Activity Station

- Set up food prep table near the tables where the students will do their tasting.
- Set the following items at the Food Prep Station:
 - Food handling 1-2 serving utensils
 gloves Salt
 Cutting boards Garlic powder
 Knives Bowls (after
 - Knives
 Paper towels
 Bowls (afte harvesting)
- Set a trashcan or trash bag near the Tasting Activity Station.
- Wipe the large clear storage bin clean with sanitizing wipes, then wash your hands.
- Place paper food trays and paper towels in the storage bin, cover and put next to Tasting Activity Station.
- 2

- Scissors
- Sanitizing wipes
- Food trays
- Colander
 - 1 Bag of chips

To deliver the lesson you are not required to memorize a script. Below is a sample script with suggested wording. We encourage you to use your own words when teaching so it feels more natural for you.

Introduction

Introduce yourself to the class and guide them through a mindful breathing exercise (see the sample script below). Gather feedback from the students about how they feel after the mindful breathing experience. Explain that for their first lesson of the year they will be exploring their garden, harvesting some produce and participating in a mindful tasting.

(Sample script)

"Hi everyone, my name is ______. Welcome to your school garden! Let's start with a mindful breathing exercise. If you're comfortable, close your eyes and 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.

"This is our first LiveWell Kids Garden lesson of the year! Today we are going to mindfully explore the garden that grew over the summer break and then pick some produce to taste."

Garden Rules

Point out the "Garden Rules" sign and go over the rules together.

(Sample script)

"Before we begin, let's talk about the rules of the garden.

- 1. Always walk when in the garden.
- 2. Stay on the paths.
- 3. Always ask before using any tool or picking any crop.
- 4. Respect each other and all living things in the garden."

Exploring the Summer Crops

Gather the class in the garden and share with them what occurred in the garden during the summer: caretaking was done by the Garden Angels, and Beach Cities Health District's Annual Community Volunteer Day took place. During this event, volunteers harvested and donated produce from the gardens to local food donation sites in the community, new plants were planted for the student harvest lessons.

(Sample script)

"A group of volunteers called The Garden Angels took care of your garden all summer long. Since these are summer crops that love the long hours of sunlight and lots of heat, they grew wonderfully during the summer and were ready to pick by the end of July. We had a big event called Community Volunteer Day during which 150 volunteers worked at the school gardens to harvest the ripe crops. Together more than 50 boxes of vegetables and herbs were donated to various food donation sites in the community! The volunteers planted new plants for you to harvest now in the fall."

Inform them that not all seeds thrive when planted and discuss why.

(Sample script)

"Whenever we plant seeds, we hope that they will grow and thrive. It takes the right conditions for a plant to sprout and grow up. Some seeds were successful, and some were not. Can anyone tell me why a seed wouldn't thrive?"

Examples of why plants fail to thrive:

- Temperature
- Hours of light
- Depth and position of seed in the soil
- Amount and frequency of water
- Health of soil

- Seeds are eaten by birds
- Disease or pests
- Time of year
- Age of seed

Tell them what is growing in the garden now:

(Sample script)

"Every plant that you see growing determined that the conditions were right to thrive, so they sprouted and grew. Some seeds grew to a certain point, then died or suffered due to weather or pests. Today in the garden you see what is left of the warm season garden. We will be harvesting various crops and making a salsa to taste with some chips."

Show them what they can pick.

Harvesting Activity

This activity will take place in the garden. Plants vary slightly in the different gardens. Below is a list of items that we've seen growing in the different school gardens. The salsa ingredients are in black while other edible plants are in gray. You may have some of these:

- Tomatoes
- Onion
- Cilantro
- Tomatillos
- Jalepenos or other chili peppers
- Arugula or arugula flowers

on how to talk about each plant that they will be harvesting.

Basil

You will be picking the ingredients to make salsa, using the recipe on the last page of the lesson plan to determine what to harvest. The harvesting instructions and talking points are detailed below. There is also a sample script and grade level discussion suggestions

ΤΟΜΑΤΟ

Bring the students to stand around a tomato plant in the garden and discuss the characteristics of the plant. Some of the tomato plants are vining and some are bushing. See if the students can tell the difference. Allow them to take turns coming up close to inspect the plant. The vining plants are usually "leggy" and sprawling while the bushing ones are more compact, shrubby and upright. Tomatoes come in all sizes, colors, shapes and flavors. Most people think of them as round and red, but they come in dark purples, pinks, orange, green striped, white, yellow and more. They can be large and lumpy or tiny and round like a pea.

Tomato plants can be either *determinate* - putting out fruit a little at a time, over a longer time period, or *indeterminate* – setting fruit once, and all at the same time.

HARVESTING DIRECTIONS:

Choose one with the most intense color you can find, making sure there is no green color on the piece of fruit that you are choosing to harvest. For perfect ripeness, the stem will be drying and beginning to turn brown where it attaches to the fruit. Gently take hold of the fruit and twist it which will detach it. Place the tomato in one of the harvest bowls.

Harvest peppers and tomatillos the same way.

ONION

Bring them to stand around some onions. The green parts of the onions above the ground are actually its leaves. The leaves have a milder taste than the more intense bulb-end, which develops underground.

HARVESTING DIRECTIONS:

There are different ways to harvest onions depending on your intended use. You can either harvest the leaves or the bulb. Either way, select the largest one you can find.

To harvest the leaves: cut some of the green leaves (with scissors) only, leaving just a few inches above ground so the onion can continue to grow.

To harvest the whole onion: insert a "weeder" tool (or a hand trowel) deeply into the ground very close to the onion and loosen the ground underneath the onion. Repeat this on the other side of the onion until you can tug on it and lift it out of the ground without resistance. Show them that since the bulb-end of the onion was underground, it has soil on it that needs to be washed off.

Place the harvested onion or leaves in one of the bowls.

- Mizuna
- Mint
- Cucumber
- Trombetta squash
- Melon

CILANTRO

Bring them to stand around the cilantro plants. Leafy green herbs can be used in salads, water and more. They can be used in both savory or sweet dishes. Have the students gently rub a leaf and smell their fingers. The plant is an herb and herbs have oils that leave a residue on their skin. Gently rubbing a leaf and smelling the residue left on your fingers is one way of figuring out what a plant is. Ask them to describe the smell (allow just a couple of answers.)

HARVESTING DIRECTIONS:

Pinch off a leaf or two with your fingernail, separating the leaf from the stem and add it to the of the harvest bowl. Pinching off leaves will stimulate the plant to produce more. Demonstrate first and then have them try it. Each student can harvest a leaf for the salsa – it is a strong flavor.

| GRADE | GRADE LEVEL TALKING POINTS |
|---------------------------|---|
| | Can be discussed at any point in the lesson |
| K & 1 ST GRADE | Ask the students if they can think of other fruits and vegetables that are like the ones that are being harvested today (i.e. mint, basil and other leafy greens are similar to cilantro.) Inform them that tomatoes, peppers and tomatillos are all "relatives" in the plant world. |
| 2 ND GRADE | Ask the students if they can think of other fruits and vegetables that are like the ones that are being harvested today (i.e. mint, basil and other leafy greens are similar to cilantro). Inform them that tomatoes, peppers and tomatillos are all "relatives" in the plant world. Ask the students to describe the appearance of the items they harvested (i.e. red, straight, rough, smooth, etc.) |
| 3 RD GRADE | Ask the students if they can think of other fruits and vegetables that are like the ones that are being harvested today (i.e. mint, basil and other leafy greens are similar to cilantro). Inform them that tomatoes, peppers and tomatillos are all "relatives" in the plant world. Ask the students to describe the appearance of the fruit or vegetable (i.e. red, straight, rough, smooth, etc.). Ask if they can tell you the difference in the growing habits of some of the (i.e. onions are bulbs, tomatoes can be bushing or vining, cilantro is a leafy herb.) |
| 4 TH GRADE | Ask the students if they can think of other fruits and vegetables that are like the ones that are being harvested today (i.e. mint, basil and other leafy greens are similar to cilantro). Inform them that tomatoes, peppers and tomatillos are all "relatives" in the plant world. Ask the students to describe the appearance of the fruit or vegetable (i.e. red, straight, rough, smooth, etc.). Ask if they can tell you the difference in the growing habits of some of the (i.e. onions are bulbs, tomatoes can be bushing or vining.) Ask them if they can think of other fruits in the same botanical family as tomatoes: <i>nightshades</i> (eggplant, tomatillos, other peppers etc.) |
| 5 TH GRADE | Ask the students if they can think of other fruits and vegetables that are like the ones that are being harvested today (i.e. mint, basil and other leafy greens are similar to cilantro.) Inform them that tomatoes, peppers and tomatillos are all "relatives" in the plant world. Ask the students to describe the appearance of the fruit or vegetable (i.e. red, straight, rough, smooth, etc.). Ask if they can tell you the difference in the growing habits of some of the (i.e. onions are bulbs, tomatoes can be bushing or vining.) Ask them if they can think of other fruits in the same botanical family as tomatoes: <i>nightshades</i> (eggplant, tomatillos, other peppers etc.) Many nightshades are poisonous but many of the nightshade family vegetables fall under the species of Capscium and Solanum and are safe to eat. |

After you have finished harvesting everything, take the class and both bowls to the washing station. Set the bowls next to the washing bin on the opposite side as the colanders.

Washing Activity

Have your teacher/helper monitor this station, as a line will most likely form. A few students can wash at the plastic bin at the same time. They should be able to move quickly but might need some prompting.

- Take the colanders from the sink area and place them next to the wash bin.
- Have the class stand back as they wait for their turn to allow enough space around the work area.
- Instruct a few students at a time to come forward and to take an item from the bowl and swish it around in the wash bin water to rinse off any surface dirt (there shouldn't be much). If handling cilantro, let them know that they are very fragile and need delicate handling. Put their washed leaf in a colander.
- After the delicate leaves are washed, instruct the remaining students to choose a piece of produce to wash in the bin.
- For sturdier items, the students can use their fingers in the wash bin, i.e. tomatoes need very gentle rubbing with fingers to remove any surface dirt, while onion/s and squash can handle a bit more vigorous rubbing to gently remove any soil.
- Have them place sturdier washed items in the other colander.
- As they finish their turn, they can move on to the Tasting Station where you are waiting for them.
- When the washing is done, the helper will take the colanders of washed produce and the roll of paper towels to the Food Prep Station.
- The helper will rinse the bowls used to collect the harvest and bring them to the Tasting Station.
- The helper will GENTLY shake the colander with any delicate leaves to drain excess water before emptying the contents of the bowl onto the folded paper towels, trying to spread them out as much as possible.
- After the leaves are spread out, the helper will GENTLY pat them dry.

Food Prep Activity

The class is at the Food Prep Activity/Tasting Activity station for this activity. Depending on your class, feel free to involve students in the food prep steps.

- Put on the food handling gloves.
- Wait to start the demo until all students are together at the Food Prep Station/Tasting Station, ready to listen.
- Explain to the class that you will now make salsa by combining the produce they harvested and serving it with chips for them to taste.
- Inform them that all produce scraps will go in the compost.
- Take one of the larger items such as a tomato from the colander and pat it dry with a paper towel. Explain that you will dice it and all items using the knife and cutting board. Discuss knife safety while they watch you demonstrate dicing and put the pieces in the large bowl. Put any produce scraps in a small pile or another bowl/container for the compost. After demonstrating, set aside an onion and have your helper complete dicing the rest of the items and add to the bowl.
- Next, hold up a cilantro leaf. Using the knife, either mince into small pieces on the cutting board or add to the bowl whole.
- If mincing cilantro, leave the rest for the parent helper to mince and add to the bowl.
- While the helper is busy chopping, take an onion and show them the root. Let them know that you will not be eating the roots, but the rest of the entire onion is edible, and they will be using the whole thing in their salsa. Cut the roots off and add to the compost. Using the knife, slice the white part of the onion in fine slices before passing to your helper. Your helper will show them how they will use the scissors to cut up the green part of the onion into small pieces into the bowl.
- Add ¼ teaspoon of garlic powder and a couple pinches of salt to taste, then mix.
- Have your helper assist you by taking the food trays and forks out of the storage bin.
- Spoon 1 tablespoon of the salsa onto each food tray with a few chips and serve with a paper towel.

Mindful Tasting

Explain that flavors can greatly change depending on how you combine ingredients. Some flavors are much stronger than others, so you might want to use less of them, while other flavors are subtler and to be noticed, you need more of them. For example, if you like things spicy, add more peppers. Experimenting with different combinations of ingredients can sometimes result in delicious discoveries that might become a new favorite!

Take the students through a mindful tasting experience, using all their senses.

(Sample script)

"We are going to enjoy the tasting together as a class. Before we begin our tasting, let's mindfully smell the food sample on our plates. Everyone takes a deep breath like this (demonstrate taking a deep breath). Now, close your eyes and smell the ingredients. Do you recognize the smells? Which smell stands out the most? Good, now open your eyes and look at the sample. Notice the colors, the different shapes and sizes.

Now, using a chip, scoop some salsa and take a small bite. How would you describe the taste? Is it sweet, sour, salty or bitter? See if you can chew it several times before swallowing. Does the taste change at all as you're chewing? Notice all the flavors in your mouth. Pay attention to the texture. Does it start out crunchy in your mouth and change as you chew? Do you taste all the flavors as a blend? Can you detect the different flavors separately as you chew? Go ahead and continue practicing this mindful way of eating until you have finished the tasting."

Share with them some of the health benefits of what they might be tasting:

- Tomato Tomatoes are a great source of vitamin C, potassium, folate and vitamin K.
- **Onion** The phytochemicals in onions along with their vitamin C help improve immunity.
- Peppers Bell peppers are high in vitamin C that helps with healing cuts and wounds.
- **Tomatillos** Tomatillos are a good source of potassium, fiber and manganese.
- Cilantro Cilantro is considered a "super food" packed with vitamins, minerals and antioxidants.

Classroom Management

- If you hear a negative comment, say, "Please don't yuck someone else's yum! Remember, it can take trying something several times before you know if you really like it or not."
- Encourage them to use all their senses: look, smell, touch, taste and hear. Even if they don't want to taste the food, they can use their other senses to interact with the food.
- Remind them that just a few months ago, almost everything that they tried was just a tiny seed that was planted!
- Teach them the phrase "**seed-to-mouth**," which is the process of planting, growing, harvesting and eating their food with no processing, packaging or additives.
- Recap what they learned today and inform them that they will be planting new seeds in their next lesson.
- Thank the teacher and parent helper.
- Have students dispose of their plates and paper towels in the trash can as they leave the garden.

(Sample script)

"Great job, everyone! Ask your parents if they would like to make salsa together at home and teach them what you learned today. Remember how to have a mindful experience using your senses while in the garden, as well as when you're eating – just slow down and really look at the colors and textures of your food, taking time to smell and taste every ingredient. Next time we meet in the garden for a lesson, we'll be planting cool season seeds."

Post-Lesson Tasks

- After the students leave, wash all dirty dishes and utensils with the garden-friendly soap and return to the shed.
- Wipe out the storage bin again with sanitizing wipes.
- Any leftover paper goods can be returned to the shelf in the shed along with all other supplies.
- Report your lesson completed on the online form: <u>http://bit.ly/LiveWellGarden_19-20</u>
- Send any pictures of reflection papers to: <u>mishell.balzer@bchd.org</u>

Did You Know?

- Besides tomatoes, tomatillos and peppers, the 'Nightshade' or 'Solanaceae' family also includes eggplants and potatoes.
- Tomatoes, tomatillos and peppers are actually berries!
- The word *salsa* means 'sauce' in Spanish, Italian and Arabic.
- Onions belong to the 'Allium' family, along with chives, shallots, garlic, leeks, ramps and scallions.
- Some onions that have been left to flower can grow a flower stalk over 2 feet tall.
- Alliums have been found in every culture of the world, and there are over 300 species.
- Cilantro is a Spanish word for 'coriander', also called Chinese parsley.
- Some people are missing a digestive enzyme and to them cilantro taste like soap.
- North and South America are the only places that use the term 'Cilantro.' The rest of the world calls the plant 'Coriander.'
- The entire cilantro plant is edible, even the seeds and roots.
- No single fruit or vegetable provides all the nutrients you need to be healthy. Eat plenty of colorful fruits and vegetables every day.



LIVEWELL KIDS GARDEN EDUCATION MODULE ONE: MINDFUL TASTING IN THE GARDEN GARDEN SALSA

Ingredients:

- 1 1/2 cups of diced tomato (about 2 medium tomatoes)
- 1/3 cup chopped cilantro
- 1/4 cup finely diced onion
- 1/4 cup finely diced jalepeno pepper (or other chili pepper) remove seeds
- 1/2 teaspoon of kosher salt
- 1/4 teaspoon of garlic powder

Preparation:

Mix all the ingredients together in a bowl

Serve:

Scoop 1 tablespoon of salsa onto each paper food tray and serve with approx. 3 chips*

Servings:

Makes approx. 2 cups / 96 teaspoons

*Use one bag of blue corn tortilla chips from the shed for your class

References

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