



Lesson Six

The Food Chain

Food Systems, Food Desert & Food Justice

Lesson Overview

This lesson teaches children & youth about where their food comes from, local & global food systems, and how we can support local farmers. We will also discuss food insecurity and food deserts, the environment and ecological health.

Lesson Objectives

Participants will be able explain what food deserts are.

Participants will be able to describe food miles.

Participants will be able to explain why food coming from local farmers/producers is more sustainable and important to the local community.

Participants will learn about food labels (nutrition information and where the product comes from).

Participants will learn about places where they can access local food.

Key Terms

Food Security

Having consistent year round access to safe, local, affordable and culturally appropriate food that is grown, raised, produced and moved about in manners that are responsible to the environment while reflecting a consumption of natural resources that is equitable with a view to our offspring seven generations from now. (Erika Allen, The Lexicon of Sustainability)

Food Desert

An area where residents lack access to affordable fruits and vegetables, whole grains, low fat milk, legumes and other foods that constitute a healthy diet. Grocery stores are either inaccessible to these shoppers due to high prices or inadequate public transit or both. (The Lexicon of Sustainability)

Food Justice/Food Sovereignty

Food sovereignty is a much deeper idea about having the power to decide how you and your community will shape your food system.

“You can certainly have food security under dictatorship, but you can’t have food sovereignty. You need democracy for food sovereignty to happen. Food sovereignty requires discussion. It takes putting people around the table, with meetings to figure out how water and food are shared, and how hunger is eradicated. Most of all, it’s characterized by conversations around hunger, poverty, and community.” – Raj Patel
(The Lexicon of Sustainability)

Community Garden

A community garden is any piece of land gardened by a group of people, utilizing either individual or shared plots on private or public land. The land may produce fruit, vegetables, and/or ornamentals.

Introduction to Lesson Six

Food Insecurity

This lesson must be approached with care. Part of the lesson involves talking about food insecurity and food deserts. Some of the children & youth participating in the program may be experiencing hunger or food insecurity at home. Please take special care when talking about these subjects and remain positive.

For example – Talk about how important it is that we learn to grow our own food so that we can have more food to go around and share with our neighbors. Or talk about how important it is to have farmers growing edible crops in our area so that we can have food to eat. Mention that what we are doing – learning how to grow our own food is a key step in food security. If we know where our food comes from, and have the skills to grow it ourselves, we have the power!

This is a great lesson to bring the “I am an urban gardener” cut out and take pictures with the kids. Print out copies for them to bring home, so they can be reminded that they are playing an important role in our food system by growing a little bit of their own food, and sharing it with others.

Food Deserts ————— **A VISUAL STUDY** ————— **5**

FOOD DESERT SOLUTIONS

SEVEN STEPS TOWARDS PUTTING HEALTHY FOOD IN GOOD HANDS

COMMUNITY

FOCUS ON LOCAL AGRICULTURAL SOLUTIONS TO DECENTRALIZE SUPPLY AND INCREASE THE AVAILABILITY OF QUALITY FOOD.

- 1 GROW FOOD LOCALLY**
Build and develop backyard and community gardens as well as larger scale urban agriculture.
- 2 DEVELOP ALTERNATIVE RETAIL OUTLETS**
Farmers Markets, Public Markets, Cooperatives, Farm Stands, and Community Supported Agriculture (C.S.A.) Programs

ACCESS

INCREASE THE EASE OF OBTAINING QUALITY FOOD.

- 3 REPLACE "CONVENIENT" WITH QUALITY**
Increase stocks of fruits and vegetables at corner stores or small groceries.
- 4 MORE FULL-SCALE GROCERY STORES**
Attract and/or develop more grocery stores and supermarkets where they are scarce.
- 5 TRANSPORTATION**
Improve transportation to grocery stores and farmer's markets.

EMPOWERMENT

EQUIP INDIVIDUALS AND FAMILIES WITH THE TOOLS TO MAKE HEALTHIER FOOD CHOICES.

- 6 COOKING CLASSES**
Implement programs at shelters, churches, community colleges, & civic centers teaching people how to cook cheap, simple, and healthy meals.
- 7 NUTRITIONAL EDUCATION**
Teach classes on nutritional information including the dangers of preserved and fast food while stressing the healthy benefits of freshly prepared meals.

Activity One - Food Security Game

Materials // Two apples

Ages // 7+

Time // 5-10 minutes

Activity Description //

Show the apples that you brought and tell the students that you have brought them a healthy treat. Ask them to name the food group that apples belong to. Pretend to be unsure of how you will distribute the apples because you have only two and there are more than two young people in the group.

Say: “This is called a scarce resource - something that can be drawn on when needed or wanted. How can I use this resource wisely?” Suggest that you could give both apples to one child, but you would be upset because you would have nothing to give the other students. Ask for suggestions about how you could distribute the treat. When the group has come to consensus about the best choice for distributing the treat, distribute the apples.

While the young people are eating their treat, introduce the word *scarcity* (the lack of a resource, such as money, food, education, and housing) and *security* – *when there are enough resources such as food to share with everyone*.

Ask the participants, “What if we could grow these apples in an orchard right here?” How could that help us? Explain that having the skills to grow our own food right here, instead of depending on farmers across the ocean or hundreds of miles away will help everyone, so that there is enough food to go around.

Activity Two - Recognizing Abundance

Materials // Harvest baskets, scissors, a bucket to wash produce, access to water, paper, notecards, pens and pencils

Ages // 7+

Time // 20 minutes

Activity Description //

By this time there should be many items to harvest in the garden, and some that are in abundance. Talk about the word abundance, ask what it means. Describe that in nature we have an abundance, things are always producing and often times in our garden we also have an abundance (or extra). Make a list of what is ready to harvest in the garden (and what items are in abundance). For example — kale, swiss chard, basil, cucumbers. Then ask the participants if there are people or places they would like to share their abundance with.

Who could use this produce?

Who would like it?

Do you have a friend, neighbor, or family member that would like some fresh produce?

Harvest items from the garden, wash them, dry them, and make up sacks of fresh food that could be given away. Make notecards that list what each item is and put the sacks in the refrigerator. Make a plan with the students and teachers on-site to distribute these bags including having the participants themselves take it home if they would like. If there are locations close to the garden like a neighboring house ask the staff if participants could walk to deliver the items.

Activity Three - Food Deserts, Food Security, Food Sovereignty

Materials // Posterboard or rolls of paper, pens/pencils/markers, dry erase markers

Ages // 7+

Time // 20 minutes

Activity Description //

Food justice or food sovereignty might be difficult terms to share with the participants at the garden, but they are important. We want to emphasize the importance of working toward just, and equitable food systems.

Start with multiple BIG sheets of paper, poster board or multiple dry erase boards. Write the terms “Food Desert, Food Security, Food Sovereignty” on the paper or dry erase boards. Split the participants into groups, and invite them to work together.

Describe each term in the most simple way possible, using the following demonstrations. A food desert is a place in the city or the country (in a rural area) where people do not have access to healthy & affordable food. Many times grocery stores or corner stores do not offer items that are not processed. Bring examples of processed food and produce so that they can visually see the difference. Explain that our bodies really like fresh, colorful foods (again bring a few examples to show the different colors). Note that most processed foods are brown, yellow, orange, etc.

Ask participants to draw pictures or images that make them think of food deserts. Ask participants what we could do to get rid of food deserts.

Food insecurity means that people do not know where their next meal is coming from and/or they don't have enough groceries at home. Ask participants for their ideas on how we could make sure that people have enough food to eat — what could we do? Have them draw and/or write their ideas.

Food Sovereignty means that everyone is involved in changing their food system. It means that every single person, no matter their religion or race or class or income has adequate food, housing, their basic needs are met, and they have the power to change things. Ask participants to draw images or write words that this definition makes them think of or how it makes them feel.

Activity Four - Where Does My Food Come From?

Materials // World map, produce with produce stickers, actual food items (produce or otherwise, depending on what is available & what you would like to use), laminated pictures of different plants and animals so that participants see both meat, dairy, produce, etc and what products it turns into. Pictures of animals out in the field or crops out in the field are especially interesting as many participants have never experienced farming/agriculture. Try to also bring food items that you know they like or eat regularly so that you can discuss how the ingredients got in there.

Ages // All Ages

Time // 20 minutes

Activity Description //

Ask participants — where does your food come from? In the soil? Farmers? Farmers in what countries? Ask participants — what are your favorite foods?

Ask — have you ever looked at a produce label at the grocery store or the ingredients in your favorite processed food item? Then, take a look at labels and ingredients to try and parse out what is in various food items.

With produce stickers — Have a large world map drawn out. Have participants place the stickers with the continent or country of origin on the sticker. Ahead of time figure out how many miles it is from these various countries to Omaha, Nebraska to give them an idea.

For younger/little ones — Similarly, have many different produce items and ask participants how they grow. Do they grow above ground or below? On a tree? On a vine? Have different laminated pictures so they can see various crops.

Play one of two matching games —

Game #1:: Can you match the food item with where it comes from/is usually grown?

Game #2 :: Can you match the food item with the plant or animal that it comes from?

Examples:

Pasta Sauce - Tomatoes

Pickles - Cucumbers

French Fries - Potatoes

Jam - Strawberries

Cheese - Cow's milk

How does a global system impact the environment, economy, community as compared to a local system? How much energy does a global system use versus a local system?

- What types of produce/food items definitely don't grow here in the Midwest, in Nebraska?

Activity Four (Continued)

Questions to ask (Ages 10 – 18) --

- What are the benefits and disadvantages of our food traveling so far?
- What would a more local diet look like?
- How does a global system impact the environment, economy, community as compared to a local system? How much energy does a global system use versus a local system?
- What types of produce/food items definitely don't grow here in the Midwest, in Nebraska? Make a list on a white board or piece of large butcher paper.
- What types of produce/food items can we grow here? Make a list on a white board or piece of large butcher paper. Then compare both lists. How would our diet differ?

Finally, have participants harvest something out of the garden, wash it, cut it (if it needs to be) and then serve it. Time how long it takes for this process. Now, have them imagine if that same thing took place in Mexico, Canada or Australia. Ask them about the amount of energy and time that would go into getting that item from another country on to the plate. Which is more efficient?

This is a great lesson to encourage participants to take home produce (vegetables & herbs, or even flowers if there are some!) from their own garden OR from Big Garden Campus. Talk about how many miles it is from our campus to their garden.

Activity Five - Food Web Game

Materials // String, Food System Cards

Ages // All Ages

Time // 20 minutes

Activity Description // Ask participants if they know what a food system is. If not, ask them to discuss what a system is; “A regularly interacting or interdependent group of items forming a unified whole.” Then say — a food system is how our food moves from being grown or raised to our plate.

Explain that a food system is all of the steps involved in getting food from its source to your table. Including seed planting, delivery of produce to the grocery store and then to your house, and cooking. Three major steps in the food system are: production (growing the food), distribution (transporting food from the farm to the grocery store), and preparing/consumption (making and eating the food). What might some other steps be in a food system? Harvesting, washing, chopping, mixing, packaging, labeling, and finally even waste management. There are many types of food systems. Some complex with lots of steps and some very simple. Tell participants they are going to participate in a game where they will create a “food system web” Have them gather in a circle. If there are a lot of participants split them into two or more groups and let them each do this exercise in a small group of about 5 - 10.

Cards —

Farmer (Plants the seed)

Farmer (Harvests the plant)

Distributor (Picks up the produce from the farm & delivers it to a processing facility)

Processing Facility (turns the produce into a product)

Delivery (Takes the processed item to a retail store/grocery store)

Grocer (Puts the item on the shelf)

Consumer (Buys the item at the grocery store)

Family or Individual (Eats the food!)

Extra card(s):

Gardener (Grows & Harvests the food)

Gardener & Family and/or Friends (Eat the food)

Give each participant a card (do not give anyone the “Gardener” cards, but save it for later in the game) and ask them to read the description on the card to themselves. Explain that the cards are out of order and that they are going to try to figure out the order however not everyone is going to participate in this first round. One student will start (the Supplier). Give this student one end of the string and tell them to hang onto it. Ask this participant to read their card aloud to the group. After this person reads the card, the student who thinks that they may have the next card in the sequence should raise their hand. Have the second student read their card aloud. If correct, student 1 will toss the string to student 2, still holding onto one end of the string.

Activity Five - Food Web Game (Continued)

Ask participants what they think the next step will be. The student with the next step will read his/her card aloud. Student 2 tosses the ball of string to student 3 but holds onto one end of the string. The goal by tossing the string back and forth is to create a giant web.

Then pass out the Gardener cards. Do the same exercise with the ball of string. Notice how there is only one step from growing it in the garden to eating the food. This is a much smaller food system, it doesn't require much energy or inputs at all!

Finish this exercise with harvesting & eating something from the garden.

Activity Six - Farmers Market Stand

Materials // One or two folding tables depending on number of participants, tissue paper, a variety of baskets, table cloths, chalk and chalkboards, construction paper, cardboard, a scale

Ages // All Ages

Time // 20 minutes

Activity Description // It is time to imagine we are farmers getting ready for a weekend farmer's market. Provide the participants with plenty of fun and creativity-inspiring materials, a table, signs, and baskets to set up their own market stand. Ask them these questions while imagining and creating the farmer's market stand –

- What would you like to sell at the farmer's market?
- What do you think will sell best? What will customers be interested in? These are the first questions to ask – Who is my market? What are my customers interested in?
- How would you like to display your products? Describe the importance of having a visually appealing stand that is well-labeled.
- Go over some customer service basics – You want to have a smile on your face, be inviting, be helpful, ask questions like “How is your day?” “May I help you?” etc. “How can we get our customers to keep coming back?”
- Invite creativity and play. Even for little ones this is a great exercise connecting the food being grown in the garden and basic entrepreneur skills.
- Teach them how to weigh their produce (whether real or “pretend”) before they sell it.
- Ask them what the steps would be if they were to take something they grew to the farmer's market. Harvest, Wash & Package, Process (if it is a value-added item), Set up the stand to display items, work the market
- Once the farmer's market is set up let the participants play and explore. Have half of the group pretend to be customers, and half be the farmers, then switch roles.
- Create your own currency, or encourage bartering. Invite the participants to use their math and counting skills when they are selling items to the pretend customers.

Activity Seven - Local vs. Industrial Food System

Materials // Laminated sheets of the Local Food System and the Industrial Food System (they need to be hole punched at the edges so that they can be laced or tied together). Laminated pictures of industrial and conventional agriculture vs. family farms and organic agriculture (nothing too scary as some of it really is! but good images to give them an idea of the difference).

Growing

Harvesting

Transporting

Processing

Packaging

Wholesaling

Retailing

Eating

Disposing

Farm

Delivery Service

Restaurant

Grocery Store

Table

Belly

Ages // All Ages

Time // 10 minutes

Activity Description // Show participants the difference between the local and the industrialized food system by showing pictures of each step it takes to get the food from the farm to your belly. The industrial chain is much longer. The processes involved are also much larger. Note the difference in a family/small farming operation that sells locally.

LOCAL FOOD SYSTEM



INDUSTRIAL FOOD SYSTEM



Activity Eight - Dream Farms

Materials & Activity Description // Have participants (depending on their age) draw or build their dream farm using art supplies like — paper, paper tubes, paint, pipe cleaners, buttons, yarn, ribbon, string, tape, glue, cardboard (they can paint barns & buildings), pom poms, plant materials, anything that you find laying around!

What would you grow on your farm?

What animals would you like to have?

What items would you sell at the farmer's market?

Bring examples that you have made for them to see.

Ages // All Ages

Time // 20 minutes

Activity Nine - Food Miles (Running Game or Relay Race)

Materials // Laminated food items like pineapple, tomatoes, coffee, corn, soybeans, rice, wheat etc. Two buckets

Ages // All Ages

Time // 20 minutes

Activity Description // Lay various laminated food items around the garden area. Start participants in one line or split them into two if you want to make it a relay. Go through each food item and discuss where it comes from (most commonly). Place the items that are grown the furthest away from the United States the furthest away and the items that grow very close to here (or are often grown in our country) closer. Have them run to get the different items. For younger ones it is best to make multiples of each item. This helps reinforce the different items like 10 tomatoes, 10 rice, 10 avocados, 10 pineapples, 10 coffee beans, etc.

Activity Ten - Farmers Markets in Town

Materials // Paper (laminated if your class sizes are small)

Ages // All Ages

Time // 10 minutes

Activity Description // Make a fun/kid-friendly list of various farmers markets (especially ones that are located in close proximity to your garden site). Write down the day of week, time, address, etc. for each market. Read through them and ask participants if they have been to any of these markets. Hand these out to the participants so they can take them home and put them up on the refrigerator to remind their families of shopping local. Laminated is best so they will keep longer. Even better you could have the kids design their own if you think they would like that, bring them back and laminated them.

Activity Eleven - Local Farm Feature & Letter Writing

Materials // Laminated pictures from various farms, paper, envelopes, stamps, pens and pencils

Ages // All Ages

Time // 10 minutes

Activity Description // Use the internet to research various farms in the area. Print out pictures of their operation and tell participants about the farm. If you can find their address have participants write letters to their farmers to let them know how much they appreciate their work!! If participants are too young to write they could draw. Without farmers (especially women farmers who produce most of the world's food) we would have no food to eat!

For information on farms visit — www.lonetreefoods.com ,

Example — Robinette Farm (Martell, Nebraska)

This farm is located in Martell Nebraska (near Lincoln). They grow vegetables, raise sheep, chickens, and sometimes turkeys. Describe how and where they sell their products (if you can find that information) and what growing practices they use.

Activity Twelve - Food = Culture (Recipe Books)

Materials // Paper, string, hole punch, markers

Ages // All Ages

Time // 10 minutes

Activity Description //

Ask participants if they have any special meals they eat at home for celebrations or special events? What are these? What foods are eaten during holidays or birthdays. Do you have any recipes that are part of your or your families' culture. Pass out paper to all participants and have them list events, the food item/dish, and ingredients (if participants know). Have each participant make their own sheets listing these special items or meals and their names. Have them draw pictures of these dishes. Then make books by putting together all the different food items so everyone can take them home.

Example — Cait

St. Patricks Day we eat corned beef, boiled cabbage and carrots with peppercorns, soda bread, and "irish potatoes" a dish my grandfather makes.

Soda bread is a kind of tangy sourdough bread. This comes from my mother's side which is predominately Irish.

Holidays —

Birthdays —

Other special Days —

Activity Thirteen - "Seed Revolution" Play

Materials & Activity Description // Costumes & Script

Act out the Seed Sovereignty Play (staff and participants)