

Growing Healthy Habits:

Strategies for Teaching Nutrition and Gardening in Early Education



Training Guide

FOR EARLY EDUCATION PROFESSIONALS



The John C. Stalker Institute
of Food and Nutrition
AT FRAMINGHAM STATE UNIVERSITY

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Growing Healthy Habits:

Strategies for Teaching Nutrition and Gardening in Early Education

About Us

The John C. Stalker Institute of Food and Nutrition (JSI) is the premier provider of child and school nutrition training in Massachusetts. JSI is a partnership of the Massachusetts Department of Elementary and Secondary Education, Office for Food and Nutrition Programs and Framingham State University. This institution is an equal opportunity provider.

The child care and school environment play a vital role in shaping children's nutritional health throughout their growing years and into their adult lives. The programs offered by JSI support child nutrition programs in their efforts to provide healthy, safe, and wholesome meals to children. The primary audience for JSI includes school nutrition program directors, managers, and production/service staff along with other professionals working to improve the nutritional health of Massachusetts' school children. The John C. Stalker Institute also supports child nutrition programs through special initiatives, such as the Team Nutrition Training Grant: MassCAMPS (Massachusetts Children's Access to Meals Planned Smart) aimed at providing training and resources for child care professionals.

JSI was established in May of 1988 and was named for Mr. John C. Stalker, who was the Director of the Massachusetts Bureau of Nutrition Education and School Food Services between 1945 and 1982. He devoted his life to the betterment of nutrition education and school food service and was responsible for expanding the Child Nutrition Programs in Massachusetts and instrumental in the passage of the National School Lunch Act of 1946.

VISION

The John C. Stalker Institute is the creative entity and force to lead Massachusetts school and child nutrition professionals in forward thinking, growth, education, and development to address the needs of the whole child.

MISSION

The John C. Stalker Institute of Food and Nutrition uses current research and technology to educate and inform Massachusetts professionals concerned with child nutrition and healthy nutrition environments.



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Massachusetts Department of
ELEMENTARY & SECONDARY
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INTRODUCTION

Growing Healthy Habits was developed by The John C. Stalker Institute of Food and Nutrition in collaboration with the Massachusetts Department of Elementary and Secondary Education. This project has been funded in part with Federal funds from the U.S. Department of Agriculture, Food and Nutrition Service, under the Team Nutrition and Training Grant. The contents of this publication do not necessarily reflect the view or policies of the U.S. Department of Agriculture, nor does mention of trade names, commercial products, or organizations imply endorsement of the U.S. Government.

The overall goal of this manual is to provide early education professionals with strategies to teach children about nutrition and gardening. The manual is divided into two modules containing four lessons each. These modules were developed using adult learning theory. The active, hands-on approach ensures that participants will feel confident incorporating these lessons into their day.

MODULE 1 - Inspiring Healthy Eaters: Behavioral Strategies for Improving the Nutrition of Young Children

Goal:

To introduce early education professionals to a variety of behavioral strategies to improve the nutrition of young children in their early education programs.

- Lesson 1: Healthy Role Models, Happy Mealtimes
- Lesson 2: Encouraging Healthy Habits
- Lesson 3: Fun with Food: Using Food Activities to Increase Acceptance
- Lesson 4: Interactive Nutrition Education





MODULE 2 - Gardens in Early Education & Care Programs

Goal:

To introduce early education professionals to a variety of ways to incorporate gardens, agriculture education, and local food into early education programs.

- Lesson 1: Using Gardens to Grow Minds
- Lesson 2: A Harvest of Choices by Season
- Lesson 3: How to Meet a Farmer
- Lesson 4: Young Sprouts: Planting Seeds with Children

THIS MANUAL INCLUDES

- Goals
- Objectives
- Outline
- Preparation checklist
- Lesson narrative
- Participant handout
- Activity sheet
- Pre- and Post-tests

Please review the learning objectives in advance to understand what participants will be expecting from each module. Each module has pre- and post-tests that are based on the learning objectives.

Before each lesson, take some time to familiarize yourself with the script, hand-out, and activity sheet for that lesson. Please feel free to contact us if you have any questions or need support at (508) 626-4756 or www.johnstalkerinstitute.org. We hope you enjoy your experience!

How to Use *Growing Healthy Habits*

This curriculum is divided into two modules containing four lessons each. Each lesson takes approximately 30 minutes to present. The format of each lesson is consistent throughout the manual. Reviewing the lesson and preparing materials in advance will help you deliver these lessons successfully. Each lesson contains the following:

GOAL – Describes what will be taught in each module.

OBJECTIVE – Describes what the participants will learn from each lesson.

OUTLINE – Provides a brief overview of each lesson, including the estimated time, content, instructor notes, and materials needed.

PREPARATION CHECKLIST – Lists all of the materials the instructor will need to prepare prior to delivering the lesson.

LESSON NARRATIVE – Delivers the information covered in each lesson. The instructor may read the lesson script word-for-word or use it as a guide for the discussions. The lessons use the following terms to guide the instructor during the presentation:

- **SAY** – Provides talking points.
- **ASK** – Encourages participants' input.
- **DO** – Instructs an action.

PARTICIPANT HANDOUT – Provides a summary of the lesson material. Participants can follow along on the handout as the lesson is presented. At the bottom of each handout is a Kid's Corner Activity. These are hands-on activities to use with children to reinforce the lesson material. The lesson will instruct you when to point out this activity. The Participant Handout also includes website resources that relate to the lesson topic.

ACTIVITY SHEET – Reinforces what the participant has learned. The script will instruct when to use the Activity Sheet. Answer keys for Activity Sheets are provided at the end of each appropriate lesson.

PRE- AND POST-TEST – Each module contains 10 questions that participants should complete before Lesson 1 and after Lesson 4. This will help assess whether the participants have met the learning objectives.

Inspiring Healthy Eaters:

Behavioral Strategies for Improving the Nutrition of Young Children

Module 1



Goal

To introduce early education professionals to a variety of behavioral strategies to improve the nutrition of young children in their early education programs.

INTRODUCTION

Inspiring Healthy Eaters: Behavioral Strategies for Improving the Nutrition of Young Children

As an early education professional, you have the opportunity to lead as a healthy role model for young children. The children in your care look to you for guidance on how to act during mealtimes, how to have polite conversations at the table, and how to make healthy choices throughout the day. This series of four lessons will offer strategies to improve the nutrition of young children by encouraging healthy eating habits and expanding food preferences. The topics include:

- **Lesson 1: Healthy Role Models, Happy Mealtimes**
 - Being a healthy role model
- **Lesson 2: Encouraging Healthy Habits**
 - Encouraging young eaters to make healthy choices
- **Lesson 3: Using Food Activities to Increase Acceptance**
 - Increasing food acceptance with food-related activities
- **Lesson 4: Interactive Nutrition Education**
 - Using nutrition education throughout the day

Food and nutrition activities can provide a fun opportunity to teach young children healthy behaviors for life. However, even if you don't have time to incorporate all of the lessons in this module, you can still have a positive influence on children's eating habits by being a good role model.



Healthy Role Models, Happy Mealtimes

OBJECTIVE: Participants will review tips for being a healthy role model and identify one strategy to implement while interacting with children in their care.

AUDIENCE: Early education professionals

OUTLINE (30 MINUTES):

TIME	CONTENT	INSTRUCTOR NOTES
3 minutes	Introduction	Provide an overview of what will be discussed during the lesson. Handout: <i>Tips for Being a Healthy Role Model</i>
6 minutes	Take advantage of the benefits of family-style meals	Describe how using family-style meals help participants be healthy role models.
6 minutes	Create a pleasant eating environment	Explain ways to create a pleasant eating environment.
4 minutes	Encourage physical activity	Discuss ways to help children and participants become more active throughout the day.
7 minutes	Lesson application	Activity Sheet: <i>Healthy Role Models, Happy Mealtimes</i> – Participants identify strategies to become a healthy role model.
4 minutes	Closing – “Kids’ Corner Activity”	Review key points from the lesson. Answer questions. Review “Kids’ Corner Activity.”

Prior to the start of the presentation, review scripted lesson plan, handout and activity sheet. Print one handout and one activity sheet for each participant. During the presentation, refer to scripted lesson for talking points.

Preparation Checklist

TASK

Review scripted lesson, handout and activity sheet

Materials needed:

- 1 printed handout for each participant
- 1 printed activity sheet for each participant
- Pens or pencils available for use by participants

OVERVIEW

SAY:

As an early education professional, you play a key role in children's lives. Children and their parents rely on educators to provide opportunities for children to eat right in supportive mealtime environments. Inspiring Healthy Eaters has four lessons to provide you with behavioral strategies for improving the nutrition of young children. The topics include:

- How to be a healthy role model
- How to encourage healthy eating
- Involving children in food activities
- How to use interactive activities as nutrition education

ASK:

Think of a role model you had when you were growing up. What were some characteristics of that person?

SAY:

A role model is someone whose behavior is imitated by others. The children in your care admire and look to you as a role model. Your actions and words can influence their behaviors and experiences. Today we are going to talk about ways you can be a role model who encourages healthy eating and physical activity.

DO:

Share the *Healthy Role Models, Happy Mealtimes: Tips for Being a Healthy Role Model* handout with the participant. Encourage them to follow along during the lesson.



SECTION 1

Take advantage of the benefits of family-style meals

SAY:

During family-style meals all food is placed on serving dishes on the table and children serve themselves, with assistance if needed. Serving meals family-style offers many benefits and learning opportunities for children. They help children learn and practice many different skills. For example, social skills such as sharing and gross and fine motor skills such as passing and pouring. But, a lot of the learning during family style meals comes from watching you! Let's talk about some ways that the children can learn from you.

- **Eat at the table with children to model behavior.** One benefit of family style meals is that adults are able to eat at the table with the children. When adults are sitting at the table, they can model passing, serving, and proper use of utensils. As children learn these skills, they become more confident. Mealtimes, where healthy food is served and eaten, becomes a positive experience.
- **Eat the same food as children to encourage healthy eating.** When adults eat the same food as the children, it encourages them to try new foods and to have a positive relationship with food. As a role model, be willing to try new foods or try foods that you may not like. Leave the sugary drinks, coffee, and diet sodas for another time and enjoy the healthy beverage served with the meal you are sharing with the children. Your example will help children build healthy habits for a lifetime.





SECTION 2

Create a pleasant eating environment

ASK:

What are some approaches that help create a pleasant experience during mealtime?

SAY:

Creating a pleasant eating environment makes mealtime a place where children feel comfortable and willing to try new foods and learn new skills. As a role model, a few tips to keep in mind are:

- **Avoid distractions.** It is important not to be distracted with phones or other electronic devices during meals. Instead focus on the food and the conversation with the children.
- **Model good table manners.** Appropriate mealtime behavior is demonstrated and reinforced by the adult at the table. Gently remind children what rules they should follow at the table and give positive reinforcement for appropriate behavior. Each child care will have different table rules, but good manners should include waiting until everyone is at the table before serving or eating, keeping hands to oneself, saying please and thank-you, and engaging in polite conversation.
- **Be patient with mistakes.** Remember that the children are working to learn new skills. When you are patient with mistakes, a pleasant environment is maintained. Be prepared for spills and other accidents by having paper towels and cleaning supplies nearby.
- **Lead productive conversations.** The type of conversation during meal time also adds to a positive environment. Focus on the children, their likes and interests. Allow the children to do most of the talking. The conversation can be guided to healthy eating by asking children questions like, "Where do carrots come from? How do beans grow? Have you ever visited a farm and seen vegetables growing? What vegetables did you see?"

SECTION 3

Encourage physical activity

ASK:

What types of physical activities do the children in your care enjoy?

SAY:

In addition to healthy eating, adults can be positive role models for physical activity. Children learn many of their behaviors and attitudes about physical activity from you. Engaging in physical activity and playing with children not only provides children with a role model but is a good stress reliever for you too.

- **Participate with children during play time.** Be prepared to move along with the children by wearing comfortable clothes and shoes that allow you to move easily. As you participate, make positive comments about physical activity and show through your actions that play is an important and fun part of the day. As an added benefit, when adults are active with children the children are more likely to move more.
- **Encourage movement during indoor play and learning activities.** Think about ways to teach through physical movement instead of sitting or watching a screen. Incorporate movement into reading, math, or science. For example, act out a book while you are reading it to the children or have children jump as they count numbers.
- **Lead structured activities at least twice a day.** In addition to participating with children during free play, plan structured activities that will involve all of the children. These can be games that promote movement like “Follow the Leader” or cards that have various yoga poses that allow children to try different movements and positions.
- **Encourage children to explore their environment.** When we allow children to explore their surroundings they gain a better understanding of the world they live in and how to move their body in that space.

KIDS' CORNER ACTIVITY: DO

Review the “Kids’ Corner Activity” at the bottom of the handout.

SAY:

Another fun way to get your kids moving is to get them involved in a pre-lunch activity:

Tell the children what fruits and vegetables are on the lunch menu (for example: apples and broccoli). Explain that you need to plant these foods before you can eat them. Have each child curl up into a ball and pretend to be a seed. Tell one group they will grow to be apples and the other broccoli. Pretend to cover the “seeds” with soil and water them. Tell them to grow into plants or trees. Talk about how the fruits and vegetables taste during the meal.

DO:

Have the participant turn to the *Healthy Role Models, Happy Mealtimes Activity Sheet*.

SAY:

Read over the list of best practices for being a healthy role model. Place a check in the box next to the strategies you feel you already do well, and an X by those you feel you could improve. Then select one strategy to work on over the next week and write it in the “goal” section.

DO:

Give the participants time to complete the activity sheet and the goal section.

CONCLUSION

SAY:

Remember that the children in your care look up to you and you have the opportunity to be a healthy role model for them each day.



Tips for Being a Healthy Role Model

PARTICIPANT HANDOUT



1. TAKE ADVANTAGE OF THE BENEFITS OF FAMILY STYLE MEALS

- Eat at the table with children to model behavior
- Eat the same food as children to encourage healthy eating



2. CREATE A PLEASANT EATING ENVIRONMENT

- Avoid distractions (e.g. phones, tablets, televisions)
- Model good table manners
- Be patient with mistakes
- Allow children to do most of the talking



3. ENCOURAGE PHYSICAL ACTIVITY

- Participate with children during play time
- Encourage movement during indoor play and learning activities
- Lead structured activities at least twice a day



Kids' Corner:

Use this transition activity before lunch to get the kids moving and their appetites ready. Tell the children what fruits and vegetables are on the lunch menu (for example: apples and broccoli). Explain that you need to plant these foods before you can eat them. Have each child curl up into a ball and pretend to be a seed. Tell one group they will grow to be apples and the other broccoli. Pretend to cover the "seeds" with soil and water them. Tell them to grow into the plants or trees. Talk about how the fruits and vegetables taste during the meal.

WEBSITE RESOURCE: *Be a Healthy Role Model for Children:*

choosemyplate.gov/ten-tips-be-a-healthy-role-model

Healthy Role Models, Happy Mealtimes

ACTIVITY SHEET

DIRECTIONS:

Read over the list of best practices for being a healthy role model. Place a check in the box by the strategies you feel you already do well and an X in those you feel you could improve. Then select one tactic to work on over the next week and write it in the "goal" section.

Children are allowed to serve themselves from bowls and platters of food on the table.

Adults are willing to try new food.

Adults talk respectfully to children (e.g. saying "please" and "thank-you").

Adults do not use phones or other electronic devices during meals.

Adults use good table manners.

Adults do not consume unhealthy foods and beverages in front of children.

Adults gently remind children of the mealtime rules if necessary.

Adults talk positively about physical activity.

Adults prepare ahead of time for accidents at the table so that they can be cleaned up quickly.

Adults incorporate physical activity into daily lessons and routines.

Adults eat the same food as the children.

Adults participate in physical activity with the children.

Adults sit at the table with the children throughout the entire mealtime.

Adults talk positively about healthy food.

Adults demonstrate physical activity skills to children.

Goal:

Encouraging Healthy Habits

OBJECTIVE: Participants will explore strategies and identify at least one way to encourage young eaters to make healthy choices.

AUDIENCE: Early education professionals

OUTLINE (30 MINUTES):

TIME	CONTENT	INSTRUCTOR NOTES
3 minutes	Introduction	Provide an overview of what will be discussed during the lesson. Handout: <i>Tips for Encouraging Healthy Habits</i>
5 minutes	Outline mealtime responsibilities	Summarize which responsibilities care givers have and which responsibilities children have.
6 minutes	Techniques for picky eaters	Explain five strategies to try when planning successful mealtimes and encouraging picky eaters.
5 minutes	Mealtime phrases	Discuss phrases that help or hinder development of positive habits during mealtime.
8 minutes	Lesson application	Activity Sheet: <i>Encouraging Healthy Habits</i> – Participants identify techniques to try and phrases to use during mealtime.
3 minutes	Closing – “Kids’ Corner Activity”	Review key points from the lesson. Answer questions. Review “Kids’ Corner Activity.”

Prior to the start of the presentation, review scripted lesson plan, handout and activity sheet. Print one handout and one activity sheet for each participant. During the presentation, refer to scripted lesson for talking points.

Preparation Checklist

TASK

Review scripted lesson, handout and activity sheet

Materials needed:

- 1 printed handout for each participant
- 1 printed activity sheet for each participant
- Pens or pencils available for use by participants

INTRODUCTION

SAY:

Encouraging children to try new and healthy options can sometimes be frustrating. During this lesson we will discuss a few tips to use during mealtime. These tips will provide a chance to practice having pleasant conversations around food, and to use techniques to encourage children to try new foods.

ASK:

What do you like most about mealtime? What is difficult about mealtime?

DO:

Pass out *Tips for Encouraging Healthy Habits* to participants and encourage them to follow along while you discuss the various sections.

SECTION 1

Responsibilities of educators and children during mealtime

SAY:

During mealtime it is important to remember that educators and children each have different responsibilities.

ASK:

What is the educator responsible for at mealtimes?

SAY:

Educators are responsible for what the child is offered to eat, when the child eats, and where eating takes place.

ASK:

What is the child responsible for at mealtimes?

SAY:

The child is responsible for whether they eat and how much food they eat. All children should be expected to sit at the table together during mealtime, but it is the child who should determine how much of the offered foods they will eat. When everyone focuses on their own responsibilities during mealtime it stops being a battle and children can enjoy deciding for themselves which of the offerings they will try.

SECTION 2

Techniques for picky eaters

ASK:

When was the last time you tried to learn a new skill? How long did it take you to master it?

SAY:

Children are just learning how to eat and are seeing many different foods for the first time, so be patient. As with trying anything new, children need some help learning to make healthy choices. Here are five strategies that you can try when planning successful mealtimes.

- 1. Start with preparation.** Don't wait until mealtime to start encouraging healthy eating. Read books about food or look at a map of where different foods come from. Allow children to be involved with food selection and preparation. Children are more likely to eat foods they have helped prepare. Simple tasks such as mixing, measuring and scrubbing are enjoyable tasks for children and foster excitement for eating. (See more about this in the *Fun with Food* lesson.)
- 2. Choices, choices, choices.** When possible, provide choices. Instead of giving every child peas for lunch ask if they would like peas or carrots for lunch. Offering choices between two vegetables or two fruits allows children to feel like they have a voice and gives them a way to find something they like.
- 3. Have fun.** Let children design faces out of different vegetables, use cookie cutters to make sandwiches into shapes, or dip banana chunks into yogurt. Presenting food in new and interesting ways makes mealtime fun and encourages children to try new foods.
- 4. Be patient.** When introducing new foods, pair them with familiar food choices you know the children like. Offer the food multiple times in different ways. Sometimes it takes many tries before a new food is accepted so be patient and offer small portions so children don't feel overwhelmed.
- 5. Lead by example.** Children often mimic adult behavior so if they see you trying new foods and enjoying the same foods they are being offered they are more likely to try them. As you eat, talk about the different tastes, textures and smells the food has and ask the children to do the same. (See more in *Healthy Role Models, Happy Meal Times*.)

It will not happen overnight, but by using these strategies you will slowly see children's eating habits change.

SECTION 3

Positive phrases to use during mealtime

SAY:

In addition to the strategies that were already mentioned, what you say during mealtime can make a big difference in promoting a positive eating experience.

ASK:

Take a moment to consider - How would you feel if someone tried to dictate what foods you tried and how many bites of something you took?

SAY:

As adults this seems ridiculous, but this is exactly what often happens to children. Use positive phrases that will encourage and empower children to make healthy choices. Here are some ideas to help you TALK at the table.

T – Tell how the food smells, looks, tastes

Talk about the sensory qualities of the food. Try phrases like, “This beet is red, just like your sweater,” or “I love how crunchy this carrot is. It sounds like I’m chomping like a dinosaur.” This raises the children’s interest and curiosity about trying new food.

A – Approval is not dependent on eating food

Make sure children don’t feel that your approval of them depends on eating, or not eating, a certain food. And be sure to spend time with children instead of rewarding or comforting them with food. Avoid phrases such as, “You are such a terrific girl for finishing all the food on your plate” or “I’m going to be mad if you don’t try a bite of asparagus.” Children should feel cared about regardless of whether they try a new food or eat all of their food. Instead encourage them by saying, “That’s okay if you don’t want any asparagus today. We can always try it again another time.”

L – Listen

“Which vegetable on the table would you like to have?” “Which of these foods is your favorite?” Asking questions and then listening to children’s thoughts empowers them and prevents them from battling you for authority. Ask questions about how they like different aspects of food such as how it was cooked, how they liked eating it together with another food, etc.

K – Know when to stop

Help children recognize when they are full by asking questions like, “Does your tummy need more or is it all full?” Helping them listen to their body to know when to stop eating is a much healthier approach than forcing kids to overeat by eating everything on their plate.

DO:

Pass out the *Encouraging Healthy Habits Activity Sheet*.

SAY:

At the top of the activity sheet are different strategies that can help encourage young eaters. Put a check mark next to two or three of the ideas that you would like to try in the next couple of weeks.

DO:

Give participants time to check the strategies they want to try.

SAY:

The next section of the activity sheet lists different phrases that might be used during mealtime. According to our discussion, circle (+) next to the positive phrases that you think would encourage children to choose healthy food options. Circle (-) next to each negative phrase that might be less effective at promoting healthy habits during mealtime.

DO:

Give participants 2-3 minutes to review the sheet and circle the helpful phrases. Be ready to assist them if they have any questions about which phrases are the most useful.

KIDS' CORNER ACTIVITY: SAY

Now it is your chance to practice some of these strategies yourself. One idea that was mentioned was to help get the children involved in talking about food before mealtime. Sometime during the next few weeks read the book *The Very Hungry Caterpillar* by Eric Carle with the children. Have the children pretend to be the caterpillar and act out the scenes in the book. As they pretend to eat, ask them to describe how each food tastes. Later during mealtime remind them of the caterpillar and ask them if they can try something on their plate and tell you how it tastes.

CONCLUSION**SAY:**

Remember that being selective about food is natural behavior for toddlers and preschoolers. Don't get frustrated. Be patient and practice using the strategies we discussed to encourage healthy eaters.

ANSWERS FOR THE ACTIVITY SHEET**Mealtime phrases – Positive or Negative?**

Circle (+) next to each positive phrase that you think would encourage children to choose healthy food options. Circle (-) next to each negative phrase that might be less effective at developing healthy habits during mealtime.

- + / - "It's ok if you didn't like the raw broccoli. Next time we can steam it."
- + / - "You have to try some beans before you leave the table."
- + / - "Is your tummy feeling full?"
- + / - "Show me what a good girl you are by finishing up your sandwich."
- + / - "This chili tastes a little spicy to me. Does it taste spicy to you?"
- + / - "I like to put peanut butter on my apple slices. What is your favorite way to eat apples?"
- + / - "Sarah ate everything on her plate. Can you do that too?"
- + / - "I'm sorry you are sad. Let's go get a cookie to help you feel better."
- + / - "I like the crunchy sound my mouth makes when I eat carrots."



Tips for Encouraging Healthy Habits

PARTICIPANT HANDOUT



Mealtime responsibilities of Educators and children

Educator is responsible for:

- What is offered to eat
- When to eat
- Where eating happens

Child is responsible for:

- Whether to eat
- How much food to eat



Strategies for successful mealtimes

- 1. Start with preparation.** Let children be involved in selecting food, mixing ingredients, etc.
- 2. Choices, choices, choices.** Have more than one healthy option to choose from.
- 3. Have fun.** Cut sandwiches into shapes, let children design faces out of different vegetables, use sauces for dipping.
- 4. Be patient.** Introduce foods multiple times in different ways and offer small portions.
- 5. Lead by example.** Eat with children and talk about different tastes, textures and smells.

Ideas to help you **TALK** at the table

TELL how the food smells, looks, tastes

Example: This beet is red, just like your sweater. I love how crunchy this carrot is. It sounds like I'm chomping like a dinosaur.

APPROVAL is not dependent on eating food

Example: That's ok if you don't want any asparagus today. We can always try it again another time. Example: I'm sorry you got hurt. Why don't we go read a book together?

LISTEN to their responses

Example: Which of these foods is your favorite? Would you like to dip your apple slices in some peanut butter?

KNOW when to stop

Example: Does your tummy need more or is it all full? Is your tummy still growling for more food?



Kids' Corner:

Read the book *The Very Hungry Caterpillar* by Eric Carle with the children. Have the children pretend to be the caterpillar and act out the scenes in the book. As they pretend to eat, ask them to describe how each food tastes. Later during mealtime remind them of the caterpillar and ask if they can try something on their plate and tell you how it tastes.

WEBSITE RESOURCE: Picky Eating:
www.choosemyplate.gov/preschoolers-picky-eating

Encouraging Healthy Habits

ACTIVITY SHEET

STRATEGIES TO HELP CHILDREN MAKE HEALTHY FOOD CHOICES

Put a check mark next to two or three of the ideas that you would like to try.

- | | |
|--|---|
| <input type="checkbox"/> Read a book about food | <input type="checkbox"/> Serve one food item as a different shape, such as a star, heart or circle |
| <input type="checkbox"/> Let children set the table | <input type="checkbox"/> Select one food item that will be served two different ways during the week (i.e., offer raw carrots on Monday and cooked carrots on Thursday) |
| <input type="checkbox"/> Let children mix and stir | <input type="checkbox"/> Talk about how a food smells while eating it |
| <input type="checkbox"/> Plan two fruit and/or vegetable choices at each meal | <input type="checkbox"/> Eat at the table with the children |
| <input type="checkbox"/> Provide sauces or other food items (i.e., yogurt) for dipping | <input type="checkbox"/> Be an example and try a new food |
| <input type="checkbox"/> Cut fruits and vegetables into small pieces for easy handling in little hands | |

MEALTIME PHRASES – POSITIVE OR NEGATIVE?

Circle (+) next to each positive phrase that you think would encourage children to choose healthy food options. Circle (-) next to each negative phrase that might be less effective at developing healthy habits during mealtime.

- | | |
|---|--|
| + / - "It's ok if you didn't like the raw broccoli. Next time we can steam it." | + / - "I like to put peanut butter on my apple slices. What is your favorite way to eat apples?" |
| + / - "You have to try some beans before you leave the table." | + / - "Sarah ate everything on her plate. Can you do that too?" |
| + / - "Is your tummy feeling full?" | + / - "I'm sorry you are sad. Let's go get a cookie to help you feel better." |
| + / - "Show me what a good girl you are by finishing up your sandwich." | + / - "I like the crunchy sound my mouth makes when I eat carrots." |
| + / - "This chili tastes a little spicy to me. Does it taste like you?" | |

Fun With Food:

Using Food Activities to Increase Acceptance

OBJECTIVE: Participants will investigate strategies for increasing food acceptance, and identify food-related activities which are age-appropriate for young children and promote best practices for food safety.

AUDIENCE: Early education professionals

OUTLINE (30 MINUTES):

TIME	CONTENT	INSTRUCTOR NOTES
3 minutes	Introduction	Provide an overview of what will be discussed during the lesson. Handout: <i>Fun with Food: Using Food Activities to Increase Acceptance</i>
4 minutes	Benefits of children helping with food preparation	Describe various benefits, specifically highlighting increased acceptance of food.
8 minutes	Appropriate tasks for children	Discuss – What food preparation have they already tried with children? Activity sheet: <i>Fun with Food (top portion)</i> – Outline of appropriate tasks for children.
7 minutes	Best time for cooking activities	Discuss – Ideas for when food preparation is possible. Logistics of making it work. Activity sheet: <i>Fun with Food (bottom portion)</i> – When? How?
5 minutes	Food and kitchen safety	Review list of food and kitchen safety rules. Introduce an idea to make safety fun.
3 minutes	Closing – “Kids’ Corner Activity”	Review key points from the lesson. Answer questions. Review “Kids’ Corner Activity.”

Prior to the start of the presentation, review scripted lesson plan, handout and activity sheet. Print one handout and one activity sheet for each participant. During the presentation, refer to scripted lesson for talking points.

Preparation Checklist

TASK

Review scripted lesson, handout and activity sheet

Materials needed:

- 1 printed handout for each participant
- 1 printed activity sheet for each participant
- Pens or pencils available for use by participants

INTRODUCTION

SAY:

This lesson is meant to provide ideas for involving children in activities around food which may increase their acceptance of healthy foods.

ASK:

Have you ever had children help you with food preparation? Why do you think it is important to take the extra time to involve children in food preparation?

DO:

Pass out the handout to participants.

SAY:

This handout outlines the main points we will be discussing today. Please follow along while we review the various sections.

SECTION 1

Benefits of children helping with food preparation

SAY:

Having children help in the kitchen is a great way to encourage them to try new foods. Children are more likely to taste food that they have helped prepare. When children are willing to try new foods, it provides an opportunity to introduce healthier options. Other positive benefits that can come from children helping in the kitchen include:

- Practicing following directions
- Increasing interest in:
 - Math, by adding different ingredients and using timers
 - Science, by seeing what happens when different ingredients are mixed
 - Geography, by learning where different foods come from
- Encouraging creativity
- Enhancing appreciation for those that cook for them
- Bonding with you and with other children
- Discussing the five senses and taking care of our bodies



SECTION 2

Practice the basics

SAY:

Now that we've talked about some of the potential benefits of involving children in food preparation, let's discuss tasks that children can actually help with.

ASK:

Have you had any good experiences cooking with children? What were they? Were there any challenges?

DO:

Pass out the *Fun with Food* activity sheet and provide instructions for the participants.

SAY:

There are many basic skills that children can participate in during food preparation. On this activity sheet you will see a list of various tasks that are appropriate for different age groups. Take some time to circle the age group or groups of children that you work with. Then within each group circle the activities you feel the children would like. Keep in mind the space you have available and make sure the activities would work in that space.

DO:

Wait for participants to circle the tasks they would like to have children help with.

SECTION 3

The best time to do cooking activities

SAY:

Before we complete the bottom of the activity sheet, let's talk a little about the best time to do food activities with children. Right before the meal seems like the obvious time to have children help. However, this time during the day can sometimes be chaotic with a lot going on.

So think about other times throughout the day that might not be as hectic. Do the children have a morning or afternoon snack? Maybe they could help assemble ingredients for snack instead of for the main lunch meal. Another idea might be to prep some items, such as snapping beans, the day before. Children can even practice measuring with dried beans or rice or pouring water as an activity completely separate from mealtime. There is no right or wrong time to have children help. You should develop a schedule that works best for your child care program.

DO:

Direct attention back to the activity sheet.

SAY:

Now that you've circled the tasks you think are appropriate you need to make a plan for how to actually have the children help. Think about when this food preparation will take place and how children will accomplish each task. Who is going to help them? How will you assign tasks? How many children will actually be able to help at one time? Is it something you incorporate every day or just a few days a week?

DO:

Give participants time to complete this portion of the activity sheet.

SAY:

Having a plan in place will help you be successful in your goal of allowing children to help with food preparation. Remember that not all children of the same age will have the same skill level and every day is a little different, so be flexible and alter your plan accordingly. You may have to try multiple options before you find the one that is best for you.

SECTION 4

Food and kitchen safety

SAY:

Being safe in the kitchen is always important, but with children helping it becomes even more essential to make sure everyone knows and follows safety rules.

DO:

Direct participants to look at the handout (Fun with Food: Using Food Activities to Increase Acceptance).

SAY:

On your handout you will see a list of safety rules to keep in mind when preparing food with children.

DO:

Give them a moment to read the list. Then highlight one or two of the rules by saying them out loud.

- Wash hands for at least 20 seconds with soap and warm water.
- Keep long hair pulled back.
- Avoid touching your face and licking fingers.
- Use a clean spoon each time you are trying a dish that is to be shared. Avoid "double dipping".
- Keep knives and other sharp objects out of reach.
- Clean all tables, countertops and other surfaces.
- Make sure children are kept far from the stove or other hot surfaces.

SAY:

It is a good idea to periodically review all of the rules with children and maybe have a sign near the food area showing pictures of each rule. Once you have introduced all the rules, you can highlight one rule each time before starting food preparation. A fun way to review food safety rules with children is to make it into a rhyme. Here are some examples using a revised version of the rhyme Pat-A-Cake:



*“Pat-a-cake, pat-a-cake, chefs all around,
Be sure to wash your hands before we’re kitchen bound!”*

*“Pat-a-cake, pat-a-cake, chefs here and there,
Keep yourself safe by tying up long hair.”*

*“Pat-a-cake, pat-a-cake, chefs standing proud,
Licking fingers are a no-no when you’re cooking for a crowd!”*

*“Pat-a-cake, pat-a-cake, chefs-in-training now,
Make sure to wipe up counters, for messes we can’t allow!”*

*“Pat-a-cake, pat-a-cake, young chefs all about,
Knives are really sharp, please have an adult help out!”*

Each time before you begin food preparation choose one of the safety rules and say the rhyme together with the children. It will help them remember what to do and keep everyone safe.

KIDS’ CORNER ACTIVITY: SAY

A simple way to start your goal of involving children is to have kids make veggie faces. During snack time offer a variety of vegetables. Give each child a white paper plate and have them arrange the vegetables into a face or picture. Then allow them to enjoy their creation. Serve with whole wheat crackers for a reimbursable CACFP snack.

CONCLUSION

SAY:

With a little planning, food preparation with children can be very beneficial and a lot of fun. Children learn new skills and will be more likely to try new foods: a win-win for everyone.

Fun With Food: Using Activities to Increase Acceptance

PARTICIPANT HANDOUT

BENEFITS OF HAVING CHILDREN HELP WITH FOOD PREPARATION

- Encourages them to try new foods
- Provides practice following directions
- Increases interest in:
 - Math, by adding different ingredients and using timers
 - Science, by seeing what happens when different ingredients are mixed
 - Geography, by learning where different foods come from
- Encourages creativity
- Enhances appreciation for those that cook for them
- Bonding time with you and with other children
- Chance to discuss the five senses and taking care of our bodies

APPROPRIATE PREPARATION TASKS FOR CHILDREN TO HELP WITH

- Divide tasks according to age and skill level
- Always provide adult supervision
- Think of when and how preparation will take place
- Refer to the activity sheet for specific ideas

FOOD AND KITCHEN SAFETY

- Wash hands for at least 20 seconds with soap and warm water
- Keep long hair pulled back
- Avoid touching your face and licking fingers
- Use a clean spoon each time you are trying a dish that is to be shared. Avoid “double dipping”
- Keep knives and other sharp objects out of reach
- Clean all tables, countertops and other surfaces
- Make sure children are kept far from the stove or other hot surfaces

Food and Kitchen Safety Rhyme

“Pata-cake, pata-cake, chefs all around, Be sure to wash your hands before we’re kitchen bound!”

“Pata-cake, pata-cake, chefs here and there, Keep yourself safe by tying up long hair.”

“Pata-cake, pata-cake, chefs standing proud, Licking fingers are a no-no when you’re cooking for a crowd!”

“Pata-cake, pata-cake, chefs-in-training now, Make sure to wipe up counters, for messes we can’t allow!”

“Pata-cake, pata-cake, young chefs all about, Knives are really sharp, please have an adult help out!”

Kids' Corner:

Involve children in food preparation by having them make veggie faces. During snack time offer a variety of vegetables. Give each child a white paper plate and have them arrange the vegetables into a face or picture. Then allow them to enjoy their creation. Serve with whole wheat crackers for a reimbursable CACFP snack.

WEBSITE RESOURCE: *Care Connection: Cooking Connection (lessons for children that include preparing a snack):*

www.theicn.org/ResourceOverview.aspx?ID=354

Fun With Food:

Using Activities to Increase Acceptance

ACTIVITY SHEET

Circle the age group or groups of children that you work with. Within each group check off one or two activities you feel the children would like and that they could do in the available space.

MEALTIME PREPARATION ACTIVITIES APPROPRIATE FOR 2 YEAR OLDS

- Wipe tables
- Rinse fruits or vegetables
- Tear lettuce and snap peas
- Put small food items on a plate
- Hand ingredients to an adult
- Place things in the trash

MEALTIME PREPARATION ACTIVITIES APPROPRIATE FOR 3 YEAR OLDS

- Sort, count or name items
- Add ingredients into a mixing bowl
- Stir ingredients together
- Knead dough
- Scoop noodles, potatoes, mandarin oranges, etc.
- Group utensils together

MEALTIME PREPARATION ACTIVITIES APPROPRIATE FOR 4 YEAR OLDS

- Set the table
- Peel some fruits such as oranges and bananas
- Count and do simple measurements of dry ingredients
- Crack and peel eggs
- Help assemble salads and sandwiches
- Press the start and stop button on the mixer and help set timers

MEALTIME PREPARATION ACTIVITIES APPROPRIATE FOR 5 YEAR OLDS

- Pour and measure liquids
- Start to read recipes
- Cut soft items with a plastic or butter knife
- Use an egg beater or egg slicer
- Clear the table and rinse dishes
- Invent and help prepare new snacks

Look at the items you circled and make a plan to have the children help with mealtime in the next few weeks. Think about when (what time during the day) and how (who will help, how will assignments be made, etc.) the children will accomplish each task. Describe your plans on the lines below:

When: _____

How: _____

Interactive Nutrition Education

OBJECTIVE: Participants will explore various nutrition education strategies and develop an activity to use with young children in their program.

AUDIENCE: Early education professionals

OUTLINE (30 MINUTES):

TIME	CONTENT	INSTRUCTOR NOTES
3 minutes	Introduction	Provide an overview of what will be discussed during the lesson. Handout: <i>Tips for Planning Interactive Nutrition Education</i>
3 minutes	Importance of nutrition education	Explain the importance of nutrition education for young children and different ways to provide it.
4 minutes	What do you want to teach?	Discuss how to determine what nutrition topic to teach.
5 minutes	When will you teach it?	Discuss the daily routine and how to incorporate nutrition activities.
4 minutes	How will you do the activity?	Discuss the different types of activities that can be used to teach nutrition education.
8 minutes	Lesson Application	Activity Sheet: <i>Interactive Nutrition Education</i> – Participants will create a short nutrition activity. Review the “Kids’ Corner Activity” as an example.
3 minutes	Closing	Review key points from the lesson. Answer questions.

Prior to the start of the presentation, review scripted lesson plan, handout and activity sheet. Print one handout and one activity sheet for each participant. During the presentation, refer to scripted lesson for talking points.

Preparation Checklist

TASK

Review scripted lesson, handout and activity sheet

Materials needed:

- 1 printed handout for each participant
- 1 printed activity sheet for each participant
- Pens or pencils available for use by participants

INTRODUCTION

SAY:

This lesson will cover how to plan interactive nutrition education activities for the children in your care.

DO:

Pass out *Tips for Planning Interactive Nutrition Education* to participants and encourage participants to follow along while you discuss the various sections.

ASK:

Have you done any nutrition lessons or activities in your program? What were they? How do you think it went?

SAY:

Interactive nutrition activities help young children learn about the good things food can do for their bodies. Children can learn to make healthful food choices and develop positive eating habits that will last a lifetime.

Nutrition education can be taught by using readily available nutrition education curriculum and materials. It is recommended to provide weekly nutrition education activities for children that focus on developing healthy behaviors. The Institute of Child Nutrition has many lessons to choose from: www.theicn.org (*click on the Child and Adult Care Food Program link*).

Note: *This website is found on the participant handout.*

Another way to provide nutrition education is to build on what you are already teaching and draw on the abilities and interests of the children to guide you. When nutrition education is linked with other content areas, children have daily exposure to nutrition concepts and messages while also solidifying learning. Nutrition education should be included in other content areas, such as language and literacy development, mathematics, science and music. Additionally, nutrition concepts should be integrated into daily routines whenever possible, such as mealtimes and transitions.

This lesson will go through the steps of developing integrated and interactive nutrition education activities.

SECTION 1

What do you want to teach?

SAY:

We know that when nutrition education is linked with other content areas, children have daily exposure to nutrition concepts and messages. When planning a nutrition lesson or activity, first think about *what* nutrition concept you want to teach. What do you want the children to learn or be able to do? What connections do you want to make with other content areas? Think about questions that children have already asked about food, difficulties children have had at meal time, or upcoming lessons that could be connected to good nutrition.

ASK:

What nutrition concepts are important for children in your care to learn about?

SECTION 2

When do you want to teach it?

SAY:

Next, think about when works best to incorporate nutrition activities.

Review current curricula to identify content areas that can incorporate nutrition.

- **Math:** Use nutrition to teach math concepts, i.e., charting how many servings of fruits and vegetables children eat.
- **Science:** Demonstrate nutrition-related science concepts, i.e., cooking activities or growing vegetables from seeds.
- **Social Studies:** Use a cultural holiday, like Cinco de Mayo, that the children are learning about to make a connection between culture and food. Plan a Mexican themed lunch or snack, like tacos. Be sure to consider the various backgrounds of children in your care.
- **Language Arts:** Use literature with appropriate nutrition themes or help children create stories based on nutrition topics.

Coordinate nutrition education with meals and snacks.

- Talk about the nutritional benefits of food during meals.
- Have taste tests highlighting new foods before they appear on the menu.

Integrate nutrition concepts into daily routines whenever possible.

- Sing songs during transitions that include nutrition or positive food messages.
- Talk about what children ate for breakfast during morning circle time.
- Let children help with meal preparation.
- Discuss how washing hands is similar to washing fruits and vegetables before eating.

ASK:

What part of your day do you think would work best to incorporate nutrition activities?

SECTION 3

How will you teach it?

SAY:

When thinking about how you want to do a nutrition activity, remember children are naturally curious and want to explore the world around them. Children learn through play and through hands-on activities. Think of ways you can provide learning activities that engage each child's sense of touch, smell, taste, hearing, and seeing.

Activities that you plan might include things such as arts and crafts, games, songs, reading books, or role-playing.

Arts and Crafts: Arts and crafts activities should be developmentally appropriate for the age of the children. One example is to create a "food train". Using clean, empty food boxes and pictures of food, have the children sort the pictures by putting them into different boxes of the "food train" according to a specified category (i.e., colors, shapes, size). Depending on what you would like to focus on, this activity can be used as a lesson on colors, shapes, or size differences.

Games: Put a nutrition spin on traditional games. Play *I Spy* or *Tic-Tac-Toe* with pictures of fruits and vegetables. Use nutrition themed games to help children explore their senses to feel, smell, and taste different foods (see Kids' Corner activity).

Songs: Singing songs is a great transition activity before meals. Change words to familiar songs to include a nutrition message. For example, if you are serving peas for lunch you could sing:



*"Old MacDonald had a farm,
E-I-E-I-O
And on his farm he had some peas,
E-I-E-I-O
With a snap snap here,
And a snap snap there,
Here a snap, there a snap,
Everywhere a snap snap,
Old MacDonald had some peas,
E-I-E-I-O."*

Reading Books: Search your library for books that bring together your lesson plans with food and nutrition. For example, read an alphabet book that uses fruits and vegetables for each letter of the alphabet. Reinforce letters and talk about different foods that start with the letter being discussed.

Role-playing: Kids love to act out stories or events. They can act out a book about food or pretend to plant a garden and harvest different fruits and vegetables. Role playing is a great way to keep kids physically active while learning.

ASK:

Which of these activities do you think the children in your care would enjoy?

SAY:

As with any activity, being prepared will help you be successful. Make a list of the things you will need. Thinking through each step of the activity will help make sure your list is complete and that you know what you want to do. Assemble the resources you will need well before the activity begins.

DO:

Pass out the activity sheet, *Interactive Nutrition Education Activity Sheet*.

SAY:

You are going to have the chance to plan a simple nutrition education activity for your program. Let's go through an example first.

DO:

Review the example that is on the activity sheet. This example corresponds to the "Kids' Corner" example, so review that as well.

SAY:

Now, it is your turn. Answer the questions on the sheet to plan a nutrition activity for the children in your program.

DO:

Give the participant time to answer each of the questions to create an activity. Be ready to assist participants if they have any questions.

CONCLUSION

SAY:

I hope you enjoy doing this nutrition activity with the children in your care. Remember that providing nutrition education is important in helping children learn how to make healthful food choices. It is helpful to coordinate these nutrition activities with lessons the children are already learning. Most of all, make it fun for you and the children.

Tips for Planning Interactive Nutrition Education

PARTICIPANT HANDOUT

Interactive nutrition activities help young children learn about the good things food can do for our bodies. They can learn to make healthful food choices and develop positive eating habits that will last a lifetime.

1. WHAT DO YOU WANT TO TEACH?

- Think about nutrition questions children have recently asked.
- Think about issues children have during mealtime.
- Think about upcoming lessons in other areas and how to make a connection to nutrition concepts.

2. WHEN DO YOU WANT TO TEACH IT?

- Review current curricula to identify content areas that can incorporate nutrition.
 - Math
 - Social Studies
 - Science
 - Language Arts
- Coordinate nutrition education with meals and snacks.
- Integrate nutrition concepts into daily routines whenever possible.

3. HOW WILL YOU DO THE ACTIVITY?

- Arts and crafts
 - Games
 - Songs
 - Reading books
 - Role-playing
- Think through each step of the activity; make a list of the things you will need and assemble the resources.



Kids' Corner:

Select a common fruit or vegetable and one that is less familiar. Put each into a bag. Let each child put their hand in the bag and feel the food. Ask them to describe how it feels and then ask if anyone can name the food. Take the food out of the bag and show the children. If appropriate, have a sample of each food available, pre-cut into bite-sized pieces.

WEBSITE RESOURCE: The Institute of Child Nutrition has many lessons to choose from: www.theicn.org (click on the Child and Adult Care Food Program button); *More than Mud Pies* (nutrition curriculum for young children): www.theicn.org/ResourceOverview.aspx?ID=247

Interactive Nutrition Education

ACTIVITY SHEET

DIRECTIONS:

Answer the questions below to plan a nutrition activity for the children in your child care program. Examples for each question are given.

	ANSWER
What do you want to teach?	<i>Example: More familiarity with vegetables.</i>
When do you want to teach it?	<i>Example: As a transitional activity before lunch.</i>
How will you do the activity?	<i>Example: Play the "Mystery Bag" game (see Kid's Corner). Serve Broccoli for lunch for tasting.</i>

Module 1

Inspiring Healthy Eaters: Behavioral Strategies for Improving the Nutrition of Young Children

Pre-Test

Instructions:

Circle the correct answer for each question below before completing Lesson One of Module 1.

- 1. Family-style meals are when _____.**
 - a. all food is placed on serving dishes at the table and children serve themselves
 - b. families come to eat with the children
 - c. children act out eating a meal during play time
 - d. all food is made from scratch
- 2. When educators eat at the table with children, _____.**
 - a. they can model healthy behavior
 - b. it is distracting for the children
 - c. they should eat food they bring from home
 - d. they can make sure the children eat all the food on their plates
- 3. Educators can be positive role models for physical activity by _____.**
 - a. showing videos
 - b. setting up video game stations
 - c. participating with children during play time
 - d. keeping children indoors when it rains
- 4. During mealtime, the educator is responsible for:**
 - a. what is offered to eat
 - b. when to eat
 - c. where eating happens
 - d. all of the above
- 5. During mealtime, children are responsible for:**
 - a. whether to eat and how much to eat
 - b. having good manners and eating all their food
 - c. taking at least one bite of each food offered
 - d. clearing their plates and wiping the table

6. All of the following are good ways to help children try new foods EXCEPT:

- a. Read books about different foods
- b. Let children help select foods that will be served in meal
- c. Find ways for children to help with food preparation
- d. Avoid talking about food until the child outgrows the “picky” stage

7. A two year old would be able to help with all of the following tasks, EXCEPT:

- a. Wipe tables
- b. Rinse fruits or vegetables
- c. Cracking and peeling an egg
- d. Tear lettuce and snap peas

8. Positive benefits that can come from children helping in the kitchen include:

- a. practice following directions
- b. increase interest in math, science, and geography
- c. creativity
- d. all of the above

9. Nutrition can be taught:

- a. only through specific approved curriculum
- b. when children start kindergarten
- c. by integrating nutrition concepts into daily routines
- d. at home with parents

10. Nutrition concepts can be taught through:

- a. books
- b. songs
- c. arts and crafts
- d. all of the above



Module 1

Inspiring Healthy Eaters: Behavioral Strategies for Improving the Nutrition of Young Children

Post-Test

Instructions:

Circle the correct answer for each question below after completing all lessons in Module 1.

- 1. Family-style meals are when _____.**
 - a. all food is placed on serving dishes at the table and children serve themselves
 - b. families come to eat with the children
 - c. children act out eating a meal during play time
 - d. all food is made from scratch
- 2. When educators eat at the table with children, _____.**
 - a. they can model healthy behavior
 - b. it is distracting for the children
 - c. they should eat food they bring from home
 - d. they can make sure the children eat all the food on their plates
- 3. Educators can be positive role models for physical activity by _____.**
 - a. showing videos
 - b. setting up video game stations
 - c. participating with children during play time
 - d. keeping children indoors when it rains
- 4. During mealtime, the educator is responsible for:**
 - a. what is offered to eat
 - b. when to eat
 - c. where eating happens
 - d. all of the above
- 5. During mealtime, children are responsible for:**
 - a. whether to eat and how much to eat
 - b. having good manners and eating all their food
 - c. taking at least one bite of each food offered
 - d. clearing their plates and wiping the table

6. All of the following are good ways to help children try new foods EXCEPT:

- a. Read books about different foods
- b. Let children help select foods that will be served in meal
- c. Find ways for children to help with food preparation
- d. Avoid talking about food until the child outgrows the “picky” stage

7. A two year old would be able to help with all of the following tasks, EXCEPT:

- a. Wipe tables
- b. Rinse fruits or vegetables
- c. Cracking and peeling an egg
- d. Tear lettuce and snap peas

8. Positive benefits that can come from children helping in the kitchen include:

- a. practice following directions
- b. increase interest in math, science, and geography
- c. creativity
- d. all of the above

9. Nutrition can be taught:

- a. only through specific approved curriculum
- b. when children start kindergarten
- c. by integrating nutrition concepts into daily routines
- d. at home with parents

10. Nutrition concepts can be taught through:

- a. books
- b. songs
- c. arts and crafts
- d. all of the above



Module 1

Inspiring Healthy Eaters: Behavioral Strategies for Improving the Nutrition of Young Children

Pre- and Post-Test Answer Key

- Family-style meals are when _____.
 - all food is placed on serving dishes on the table and children serve themselves**
 - families come to eat with the children
 - children act out eating a meal during play time
 - all food is made from scratch
- When educators eat at the table with children, _____.
 - they can model healthy behavior**
 - it is distracting for the children
 - they should eat food they bring from home
 - they can make sure the children eat all the food on their plates
- Educators can be positive role models for physical activity by _____.
 - showing videos
 - setting up video game stations
 - participating with children during play time**
 - keeping children indoors when it rains
- During mealtime, the educator is responsible for:
 - what is offered to eat
 - when to eat
 - where eating happens
 - all of the above**
- During mealtime, children are responsible for:
 - whether to eat and how much to eat**
 - having good manners and eating all their food
 - taking at least one bite of each food offered
 - clearing their plates and wiping the table
- All of the following are good ways to help children try new foods EXCEPT:
 - Read books about different foods
 - Let children help select foods that will be served in meal
 - Find ways for children to help with food preparation
 - Avoid talking about food until the child outgrows the "picky" stage**
- A two year old would be able to help with all of the following tasks, EXCEPT:
 - Wipe tables
 - Rinse fruits or vegetables
 - Cracking and peeling an egg**
 - Tear lettuce and snap peas
- Positive benefits that can come from children helping in the kitchen include:
 - practicing following directions
 - increasing interest in math, science, and geography
 - encouraging creativity
 - all of the above**
- Nutrition can be taught:
 - only through specific approved curriculum
 - when children start kindergarten
 - by integrating nutrition concepts into daily routines**
 - at home with parents
- Nutrition concepts can be taught through:
 - books
 - songs
 - arts and crafts
 - all of the above**

RESOURCE LIST

Module 1 - Inspiring Healthy Eaters

BOOKS:

The Very Hungry Caterpillar by Eric Carle

ONLINE RESOURCES:

Be a Healthy Role Model for Children

www.choosemyplate.gov/ten-tips-be-a-healthy-role-model

Picky Eating

www.choosemyplate.gov/preschoolers-picky-eating

Care Connection: Cooking Connection (lessons for children that include preparing a snack)

www.theicn.org/ResourceOverview.aspx?ID=354

Institute of Child Nutrition

www.theicn.org (click on the Child and Adult Care Food Program button)

More than Mud Pies (nutrition curriculum for young children)

www.theicn.org/ResourceOverview.aspx?ID=247

MassCAMPS

www.johnstalkerinstitute.org/masscamps



Gardens in Early Education Programs

Module 2



Goal

To introduce early education professionals to a variety of ways to incorporate gardens, agriculture education, and local food into early education.

INTRODUCTION

Gardens in Early Education Programs

As an early education professional, you have the opportunity to help children understand where their food comes from. Doing so has been shown to influence the eating habits of young children while their preferences are still forming and to create healthy lifestyles. This series of four lessons will provide you with strategies to incorporate gardens, agriculture education, and local food into early education programs. The topics include:

- **Lesson 1: Using Gardens to Grow Minds**
 - Incorporating nutrition and agricultural education into lesson plans
- **Lesson 2: A Harvest of Choices by Season**
 - Using locally grown foods in meals and snacks
- **Lesson 3: How to Meet a Farmer**
 - Partnering with farmers to provide agricultural education
- **Lesson 4: Young Sprouts: Planting Seeds with Children**
 - Showing children how to grow plants

Gardening is a fun, interactive experience that everyone can enjoy. For children, participation in gardening can encourage consumption of fruits and vegetables, and improve teamwork skills and understanding. As we review each lesson you might decide to start a garden with the children in your care. However, even if you don't have the ability to start your own garden, just talking about gardens and different plants can have a positive influence on young children.



Using Gardens to Grow Minds

OBJECTIVE: Participants will examine ways to integrate nutrition and agriculture education and select at least one activity to incorporate into their lesson plan.

AUDIENCE: Early education professionals

OUTLINE (30 MINUTES):

TIME	CONTENT	INSTRUCTOR NOTES
5 minutes	Introduction	Provide an overview of what will be discussed during the lesson. Handout: <i>Using Gardens to Grow Minds</i>
4 minutes	Reading	Review three strategies that can be integrated into nutrition and agriculture education reading lessons.
4 minutes	Science	Review three strategies that can be integrated into nutrition and agriculture education science lessons.
4 minutes	Art	Review three strategies that can be integrated into nutrition and agriculture education art lessons.
4 minutes	Math	Review three strategies that can be integrated into nutrition and agriculture education math lessons.
3 minutes	Teaching at the table	Introduce the concept of teachable moments while eating and also the idea of taste tests.
5 minutes	Lesson application	Activity Sheet: <i>Using Gardens to Grow Minds</i> – Participants check ways they want to include nutrition and agriculture into other areas of learning.
3 minutes	Closing – “Kids’ Corner Activity”	Ask participants how they will implement ideas. Answer questions. Review “Kids’ Corner Activity.”

Prior to the start of the presentation, review scripted lesson plan, handout and activity sheet. Print one handout and one activity sheet for each participant. During the presentation, refer to scripted lesson for talking points.

Preparation Checklist

TASK

Review scripted lesson, handout and activity sheet

Materials needed:

- 1 printed handout for each participant
- 1 printed activity sheet for each participant
- Pens or pencils available for use by participants

INTRODUCTION

SAY:

This lesson explores how nutrition and agriculture can be used to teach reading, science, art, and math.

ASK:

Have you ever talked about gardening with the children in your care?

SAY:

Today we're going to talk about educating the children at your early education program on nutrition and agriculture. Each section offers three strategies for you to choose from to help incorporate gardening concepts in your teaching.

DO:

Pass out 'Using Gardens to Grow Minds' handout and encourage participants to follow along within each section.

Note to instructors: As you review the following sections and talk about the various strategies for incorporating nutrition and agriculture education, try to make the conversation with participants as interactive as possible.

Stop periodically during and between sections to ask participants for their experience, feedback and thoughts.

Some questions might include:

- *Have you ever tried this strategy before?*
- *Do you think something like this might work in your program?*
- *Which one of these strategies sounds the most useful for the children in your care?*
- *Do you have any concerns about the strategies we have talked about in this section?*

Don't just lecture, but instead discuss with them how they feel about these strategies. As you create more discussion participants will really be able to see how these strategies can work for them and how they can be successful using them.



SECTION 1

Reading

SAY:

Children love to read and there is no shortage of books about gardening and food. Books spark curiosity about how things grow and where food comes from. Strategies to incorporate gardening books into your lesson might include:

- 1. The ABCs of gardening:** There are many books that offer opportunities to teach children about a variety of different fruits and vegetables. You can use these books to teach children the alphabet as well. For example, *The ABC's of Fruits and Vegetables and Beyond* by Steve Charney and David Goldbeck is one book you could use for this activity. Using this book, help children identify which letter of the alphabet each fruit or vegetable starts with it. Every time you come across a new food in your book write it on a list under the correct sound/letter. You could even create your own ABC plant book with each child picking a different letter and drawing pictures of plants that start with that letter on their page.
- 2. Where does my food come from?:** Knowing where food comes from is an important discovery for children. Read books that let children explore the journey from planting a seed in the ground to eating the food on their plate. Afterwards children could act out the process. Assign certain children to be farmers, truckers, store workers, etc. Have the food pass from one child to the next until it arrives at the table. *Bread is for Eating* by Davis Gershator is a good example of this. The book takes children on the journey of making bread and would be a fun read for this activity.
- 3. Food from around the world:** Children have certain foods that they like to eat and are familiar with. But, do they know about foods that children their same age enjoy in other parts of the world or even the different types of food children in your program eat? Show children a map of the world and explain that in different parts of the world children and families eat a variety of different foods, including some they might have never even heard of. Explain how wonderful it is to live in a world with so much variety and diversity. Consider reading the book *Eating* by Gwennyth Swain. This book describes food people eat in different parts of the world. After reading the book ask the children which food from another part of the world they would most like to try.

There are many additional books that talk about gardening, food, and healthy eating. For a list of book ideas to get you started refer to the *Grow it, Try it, Like it* website that is provided at the bottom of your 'Using Gardens to Grow Minds' handout. This resource provides a list of books with short descriptions (look under the 'Food and Nutrition Fun for Preschoolers' link on the website, or also in Book 1 if you are using a hard copy of *Grow it, Try it, Like it*).

Instructor note: Remember to ask questions while you review the following section. Some examples might include:

- Have you ever tried reading lessons to teach about gardening?
- Do you think one of these reading lessons might spark interest in your program?
- Which one of these books sounds the most relevant for the children in your care?
- Do you have any concerns about the books highlighted in this section?

SECTION 2

Science

SAY:

The science of gardening fascinates children and adults alike. One day you have a seed and some dirt and within a few weeks a plant starts to grow. Use that magical fun to let children explore how plants grow.

- 1. Playing in the dirt:** Provide children with a few plastic cups and a spoon. Go exploring outside and try to find different types of dirt. Have the children put different samples of dirt in their cups. Ask the children questions about the dirt that they found. What color is it? Is it hard or soft? Is it wet or dry? Does it have rocks, leaves, insects, etc. inside of it? Explain to the children that many components of dirt help plants grow.
- 2. Look to the sky:** Weather is a great concept to explore with children and plays an integral part in agriculture. Talk about different types of weather (rain, snow, wind, sun). Tell the children which types of weather are good for plants to grow and which are not. (In general most plants require a warm temperature, sunlight and enough water to keep the soil moist.)
- 3. Plants grow big and so can I:** Every child wants to grow healthy and strong. Show them pictures of plants growing at different stages – from a tiny seedling to a robust plant with vegetables attached. Explain that plants need water and sun to help them grow. Ask them what types of food help their own bodies grow. Help them make the connection that when they eat fruits and vegetables from the garden they help our bodies grow healthy and strong.

Instructor note: Remember to ask questions while you review the following section. Some examples might include:

- *Have you ever tried this science lesson to teach how plants grow?*
- *Do you think a gardening science lesson might work in your program?*
- *Which one of these strategies sounds the most practical for the children in your care?*
- *Do you have any concerns about the ideas we have talked about in this section?*



SECTION 3

Art

SAY:

Art time is a preschool staple. Help children build positive associations with food by using a little creativity. The more positive interactions children have with food the more likely they are to try new things.

- 1. The garden of your dreams:** Let children dream up a garden that they would like to create. Have them draw or paint pictures of fruits, vegetables, flowers, herbs, etc. they would include in their garden. You may want to show them some pictures of different gardens to give them an example. Encourage children to give their garden a name and let them be as creative and imaginative as they want. Consider drawing the pictures on a large sheet of paper and laminating so they can be used as placemats in the future.
- 2. Mosaic magic:** Use garden seeds to create beautiful mosaic pictures. A mosaic can be created by gluing many of the same or different seeds next to each other onto a piece of heavy paper or cardboard. To make things easier you may want to have children draw a picture of what they want to create on the paper first and then glue the seeds on top of their drawing. If available, use a variety of seeds that incorporate different colors, shapes and sizes.
- 3. Very colorful veggies:** Create stamped wrapping paper using designs from different vegetables. Potatoes, squash or carrots all make wonderful stamps. Simply cut the vegetable into halves or thirds crosswise (not the long way). Put a variety of acrylic paints on a paper plate and let the children stamp the vegetable into the paint and then onto their paper. They will love all the different lines and textures they create.

Instructor note: Remember to ask questions while you review the following section. Some examples might include:

- Have you ever tried using food in an art activity?
- Do you think incorporating food in an art project would work in your program?
- Which one of these projects sounds the most fun for the children in your care?
- Do you have any concerns about using food in art projects?



SECTION 4

Math

SAY:

Counting, charts, addition, and subtraction can easily be taught using food. By taking tasks that you already do and incorporating food and agriculture concepts children will begin realizing how fun the world around them is.

- 1. Prove it with charts:** Learn about graphs and charts by asking children questions about food. Chart how many children like strawberries vs. raspberries or carrots vs. potatoes. Then look at your charts to see which foods are most popular. You can also create size charts by arranging your produce from biggest to smallest.
- 2. Simple sorting:** There is no end to the different ways you can sort plants and food. Show the children pictures of different flowers and have them sort the flowers into colors. Put a variety of produce pictures on the table and have the children decide which ones are fruits or which are vegetables. Then sort the pictures by the category: fruit, vegetable, or by colors and shapes.
- 3. Count them up:** Count everything and anything. When eating oranges you can count how many whole oranges you have and then even count how many slices are within each orange. If you are growing your own seeds, count the number of days it took to see your first seed sprout. There are lots of things to count with food.

***Instructor note:** Remember to ask questions while you review the following section. Some examples might include:*

- *Have you ever tried incorporating food into a math lesson?*
- *Do you think a food-related math lesson might work in your program?*
- *Which one of these suggestions sounds the most practical for the children in your care?*
- *Do you have any concerns about using food to teach math lessons?*



SECTION 5

Teaching at the table

SAY:

Everything doesn't have to fit into a lesson plan for it to be beneficial for children. Look for teachable moments throughout the day. Lunch and snack time are two good opportunities for this. Talk about where the foods you are eating come from and describe the food. Juicy strawberries and crunchy carrots are far more appealing to children than plain strawberries and carrots. In fact, research shows that when healthy foods are labeled with attractive names children are more likely to consume them.

Lunch or snack time is also the perfect time to taste test new foods. Prepare a new food and offer it in a fun, appealing way. Give the food a creative name, try it with a dip or serve it on a special colored napkin. All of these strategies will build excitement around the food and encourage the children to try it. Ask children what they think of the new food and keep track of their responses. You can share the results with the entire group or even create a chart to discover which of your taste test items were most popular. You can also create themed taste tests highlighting a food with a certain color or letter.

DO:

Hand out the 'Using Gardens to Grow Minds' Activity Sheet.

SAY:

By now I hope you are able to think of some ways you can incorporate nutrition and agriculture into many areas of learning. The ideas we shared are examples of options that are available to you. The 'Using Gardens to Grow Minds' activity sheet outlines a few of the suggestions we discussed and some that we haven't. Take a few minutes to review these suggestions and think about which ones would work well for you. Put a check mark by the suggestions you feel you can use and underline at least one idea that you plan to incorporate into this week's lesson plan.

DO:

Allow time for participants to check off their ideas.

ASK:

Let's share with each other one idea you are planning to try this week.



KIDS' CORNER ACTIVITY: SAY

All of these are really good activities that will help children grow. One idea is to have children create a garden on a piece of paper. They can draw and/or cut and paste pictures of different fruits and vegetables onto the paper. It is so fun to see how creative the children get and how exciting having their own garden is for them.

CONCLUSION

SAY:

Remember that nutrition and agriculture education isn't just for when you are eating food. Incorporating these concepts into other learning areas helps children grow and develop healthy behaviors. At the bottom of your 'Using Gardens to Grow Minds' handout you will see a web address for a nutrition education kit entitled *Grow it, Try it, Like it!* It was specifically designed for early education professionals and features fruits and vegetables in a fun way that children will love. Each of the six lessons integrates nutrition and agriculture with other subjects and provides many activity ideas. This education kit is offered as an online resource or as a hard copy. It is a great resource that we hope you will take advantage of when planning your lessons and activities.

Using Gardens to Grow Minds

PARTICIPANT HANDOUT

INTEGRATE FOOD AND AGRICULTURE CONCEPTS INTO OTHER EDUCATIONAL TOPICS:

READING

- The ABC's of gardening – Read a gardening book and talk about what letter each plant starts with.
- Where did this come from? – Use a book to talk about how food gets from garden to table.
- Foods from around the world – With a map and a book show different parts of the world and what types of foods children eat in various locations.

SCIENCE

- It's a dirty business – Go outside and explore different types of dirt.
- Look to the sky – Talk about different weather and how rain, snow or wind might affect how plants grow.
- Plants grow big and so can I – Talk about how what we eat affects how our body grows. When we eat healthy foods our body grows healthy and strong.

ART

- The garden of your dreams – Let children draw the garden of their dreams.
- Mosaic magic – Use seeds to create pictures.
- Very colorful veggies – Create stamped wrapping paper using vegetables as your stamps.

MATH

- Prove it with charts – Create graphs showing which foods children like best.
- Simple sorting – Sort fruits and vegetables into different categories.
- Count them up – Count everything and anything from how many oranges you have to how many seeds are in an apple.

TEACH AT THE TABLE

- Have a taste test and make a big deal out of one new food for the children to try.
- Use descriptive words when talking about food to make them more appealing.



Kids' Corner:

On a piece of paper, have each child create a garden. Draw and/or cut and paste pictures of different fruits and vegetables onto the paper.

WEBSITE RESOURCE: *Grow It, Try It, Like It:*

www.fns.usda.gov/tn/grow-it-try-it-it

Using Gardens to Grow Minds

ACTIVITY SHEET

DIRECTIONS:

There are lots of ways to talk about food. Below is a list of some ideas. Put a check mark by the suggestions you can use. Underline one of the ideas and use it in this week's lesson plan.

- Read gardening books.
- Create an ABC plant book.
- Act out how plants grow (have children start out as a small seed and then grow big and tall).
- Act out how food gets from the garden to the table.
- Sort plants into colors or shapes.
- Play "What am I?" and have children decide whether the plant is a fruit or vegetable.
- Compare different types of dirt samples you find outside.
- Track the weather and talk about how it might affect plant growth.
- Find out why certain foods are good for us and then choose a nickname for that food that correlates with its benefits. For example, you could say "super vision carrots" since the vitamin A in carrots is good for healthy eyes.
- Draw pictures of fruits, vegetables or flowers.
- Create mosaic images using seeds.
- Go outside and find something interesting to draw. See if others in the class can guess what it is.
- Arrange foods from biggest to smallest.
- Create a graph showing how many children like different foods.
- Develop counting skills by counting food, seeds, slices, etc.
- Have a taste test.
- Choose a letter of the day, color of the day, etc. and talk about plants that fit into that category.

A Harvest of Choices by Season

OBJECTIVE: Participants will be able to explore local foods for use in CACFP meals and snacks.

AUDIENCE: Early education professionals

OUTLINE (30 MINUTES):

TIME	CONTENT	INSTRUCTOR NOTES
3 minutes	Introduction	Provide an overview of what will be discussed during the lesson. Handout: <i>Tips for Using Locally Grown Food</i>
6 minutes	Use locally grown food	Explain what locally grown food is and why it is important.
5 minutes	Utilize cycle menus and a scratch cooking model	Explain ways cycle menus and scratch cooking can be tools to using more locally grown food.
4 minutes	The Massachusetts-Grown Produce Calendar	Review the Massachusetts-Grown Produce Calendar and how it can be used.
8 minutes	Lesson Application	Activity Sheet: <i>A Harvest of Choices by Season</i> – Participants use the produce calendar to make menu substitutions.
4 minutes	Closing – “Kids’ Corner Activity”	Review key points from the lesson. Answer questions. Review “Kids’ Corner Activity.”

Prior to start of presentation – Review scripted lesson plan, handout and activity sheet. Print one handout and one activity sheet for each participant. During the presentation – Refer to scripted lesson for talking points.

Preparation Checklist

TASK

Review scripted lesson, handout and activity sheet

Materials needed:

- 1 printed handout for each participant
- 1 printed activity sheet for each participant
- Pens or pencils available for use by participants

INTRODUCTION

SAY:

This lesson is meant to provide you with ideas to use more locally grown foods in meals and snacks on your early education program's menu.

ASK:

Have you ever eaten a tomato fresh from the garden or locally grown corn on the cob (or other produce from a garden or farmers' market)? If so, how did it taste?

DO:

Share the *A Harvest of Choices by Season: Tips for Using Locally Grown Food* handout with the participant. Encourage them to follow along during the lesson.



SECTION 1

Use locally grown food

SAY:

Local food is fresh and tastes delicious; this makes children more likely to eat it. In addition to great taste, buying local products also helps sustain the local economy.

Buying local food is a good thing, but can sometimes seem a little overwhelming when trying to figure out where it can be purchased. The term "local" usually means it was grown within 50-200 miles from where you live, but the definition is flexible.

If you have a large site, you can work with your administrators and vendors to find the best way to buy local. If you are a small early education site, there is a wide variety of ways you can purchase locally.

Community Supported Agriculture (CSA): Usually food purchased from a CSA is paid for up front for an entire season. The fresh produce is delivered or available for pick up each week throughout the harvest season. This type of purchasing requires flexibility in menu planning as you will not always know what produce you will receive each week. Building a relationship with a CSA farm can lead to opportunities like field trips for your early education program.

Cooperative Buying: This method of purchasing means partnering with other early education programs or existing buying cooperatives to buy in bulk from a farmer to keep costs low. Talk with other early education professionals you know to see if a cooperative buying program already exists.

Farm Direct: Working closely with a local farmer to buy direct can be helpful if you need large quantities of food, consistent quantities each week, or deliveries to your location.

Farmer's Market: Early education programs that need smaller quantities of food can often meet their needs by shopping at a nearby farmer's market, or arranging in advance to pick up larger orders at the market. Farmer's Markets are also a great place for field trips with children! (Explored further in Lesson 3)

Grocery Stores: Many grocery stores sell local produce when it is in season. It is usually marked as "local" but you can also ask the produce manager what they have that is local.

Use the MassGrown website www.mass.gov/agr/massgrown to find local CSAs, farmers and farmers' markets. (This website address is found on the participant's handout: *Tips for Using Locally Grown Food.*)

ASK:

Have you ever purchased food from a farmer's market or any of the other methods we discussed?

If yes, ask them to tell you how it went.

If no, would you consider doing so?

Where are farms or farmer's markets around here?

SAY:

When you start a local purchasing program, start small. Buying fruits and vegetables is the easiest place to start. Try using local food for snacks or taste tests. As you find food the children enjoy and you begin to build a relationship with the local vendor, start adding more local food into your main menus. Over time, expand your purchasing to local foods to span the entire meal, from produce to dairy, grains, meat, eggs, and beans as you incrementally add local foods to your menu.

SECTION 2

Utilize cycle menus and scratch cooking to promote fresh and local food items

SAY:

Using effective menu planning and scratch cooking will help you include fresher, local food items into your meals.

- **Cycle Menus:** A cycle menu is a series of menus planned for a period of time. The menu is different for each day during the cycle and then repeats. Cycle menus make it easier to plan ahead for substitutions. There are probably items already served through your meal programs that you can simply substitute with local items.

Look at your menu for fruits and vegetables that can be substituted. For example, if strawberries are in season and available at the farmer's market, you use them as a substitute for sliced apples on your cycle menu to meet the fruit requirement. Salads are also a great way to use local seasonal produce by simply substituting salad greens or vegetables you have available for the ones in the cycle menu recipe.

- **Scratch Cooking:** Another way to use local items more often is to scratch cook when you can. This gives flexibility to substitute local ingredients into recipes when they are available. First, find out which produce items are in season. Then, look for recipes that you could make with the fruits and vegetables in season. For example, when broccoli is in season in your area, plan to use it in a stir-fry recipe for that week.



SECTION 3

Use the Massachusetts-Grown Produce Availability Calendar

SAY:

The Massachusetts Grown Produce Availability Calendar (see the 'Tips for Using Locally Grown Food' handout) is a good tool to help you find local substitutions for menu items. This chart shows you when produce is in season in Massachusetts, which means you should be able to find it at a location near you.

DO:

Point out the Massachusetts-Grown Produce Calendar and explain that it highlights the months of the year different fruits and vegetables are in-season in Massachusetts. Then have the participants turn to the 'A Harvest of Choices by Season' Activity Sheet.

SAY:

Please complete the activity sheet named 'A Harvest of Choices by Season' using the Massachusetts-Grown Produce Calendar as a resource.

DO:

Give the participants time to complete the activity and then review together. Answers to the substitutions will vary.

SAY:

You can also help the children in your care explore and learn more about local produce. Let's look at the Kids' Corner section of your 'Tips for Using Locally Grown Food' handout for a suggestion.

KIDS' CORNER ACTIVITY: DO

Read the Kids' Corner activity together. *Print out pictures or bring in samples of food that is grown in Massachusetts (see MA-Grown Produce Calendar). Show the children each picture/food and ask what it is (help them name the food if they need help). Explain that all these foods are grown in Massachusetts. Help the children group the foods by color or shape. Ask them which foods they would like to try.*

CONCLUSION

SAY:

Remember that using local food will taste good and be good for the local economy.

Tips for Using Locally Grown Food

PARTICIPANT HANDOUT

1. USE LOCALLY GROWN FOOD

Local food is fresh and tastes better. Choosing local produce helps sustain the local economy. Some ways you can purchase locally grown food are:

- Community Supported Agriculture (CSA): fresh produce is delivered or available for pick up each week throughout the harvest season
- Cooperative Buying: partnering to buy in bulk from a farmer to keep costs low
- Farm Direct: work openly with a farmer to buy direct
- Farmers' Market: shopping at a nearby farmers' market
- Grocery Stores: usually marked as "local" in the grocery store

2. UTILIZE CYCLE MENUS AND A SCRATCH COOKING MODEL TO PROMOTE FRESH AND LOCAL FOOD ITEMS

- Cycle Menus: Use a cycle menu, and look at your menu for fruits and vegetables that can be substituted
- Scratch Cooking: When a product is in season, use local produce in the recipe

3. USE THE MASSACHUSETTS-GROWN PRODUCE AVAILABILITY CALENDAR

The Massachusetts-Grown Produce Availability Calendar is a good tool to help you find local substitutions for menu items.

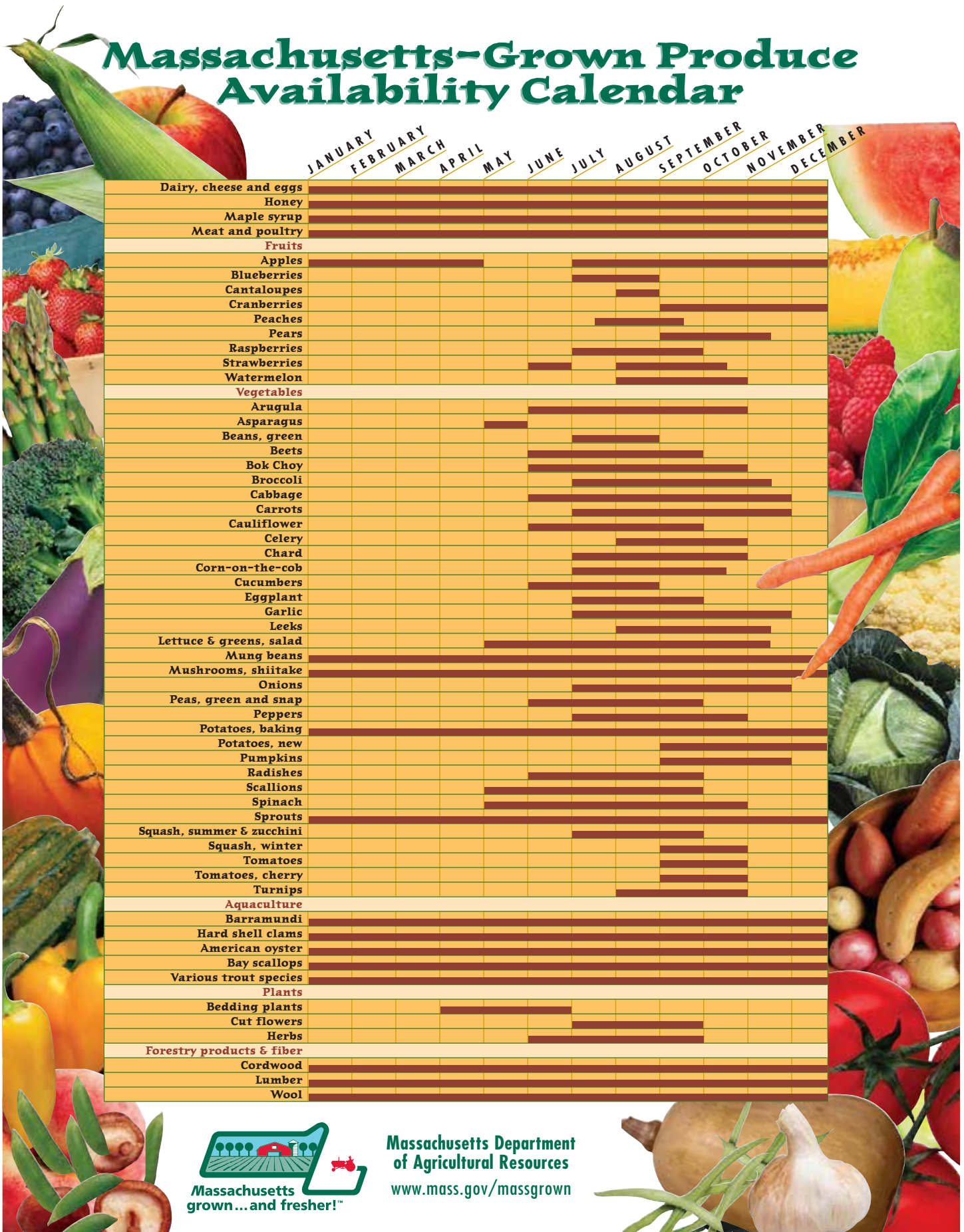


Kids' Corner:

Print out pictures or bring in samples of food that is grown in Massachusetts (see MA-Grown Produce Calendar). Show the children each picture/food and ask what it is (help them name the food if they need help). Explain that all these foods are grown in Massachusetts. Help the children group the foods by color or shape. Ask them which foods they would like to try.

WEBSITE RESOURCE: *Massachusetts Grown:* www.mass.gov/agr/massgrown
Farm to Preschool, Local Food Sourcing:
www.farmtopreschool.org/localfood.html

Massachusetts-Grown Produce Availability Calendar



Massachusetts Department of Agricultural Resources
www.mass.gov/massgrown

A Harvest of Choices by Season

ACTIVITY SHEET

DIRECTIONS:

Look at the cycle menu lunch below. Use the Massachusetts-Grown Produce Calendar to make changes to the lunch for January, April, July, and October substituting locally grown foods that are in season.

LUNCH

Milk

Ham and Cheese Sandwich on Whole Grain Bread

Three Bean Salad

Fresh Kiwi

JANUARY

Milk

Ham and Cheese Sandwich on Whole Grain Bread

APRIL

Milk

Ham and Cheese Sandwich on Whole Grain Bread

JULY

Milk

Ham and Cheese Sandwich on Whole Grain Bread

OCTOBER

Milk

Ham and Cheese Sandwich on Whole Grain Bread

How to Meet a Farmer

OBJECTIVE: Participants will develop a plan on how to partner with a farmer to provide agriculture education to children.

AUDIENCE: Early education professionals

OUTLINE (30 MINUTES):

TIME	CONTENT	INSTRUCTOR NOTES
3 minutes	Introduction	Provide an overview of what will be discussed during the lesson. Handout: <i>Tips for Connecting with Farmers</i>
8 minutes	Partnering with farmers	Discuss the several ways to create experiential farm opportunities for children.
2 minutes	"Kids' Corner Activity"	Review "Kids' Corner Activity".
4 minutes	Questions to ask a farmer	Review questions children may want to ask a farmer and what questions providers may want to ask children about their experience.
4 minutes	Sampling farm fresh produce	Discuss tips for successful taste testing.
7 minutes	Lesson application	Activity Sheet: <i>How to Meet a Farmer</i> – Participants will create a plan for their center to meet with a farmer.
2 minutes	Closing	Review key points from the lesson. Answer questions.

Prior to start of presentation – Review scripted lesson plan, handout and activity sheet. Print one handout and one activity sheet for each participant. During the presentation – Refer to scripted lesson for talking points.

Preparation Checklist

TASK

Review scripted lesson, handout and activity sheet

Materials needed:

- 1 printed handout for each participant
- 1 printed activity sheet for each participant
- Pens or pencils available for use by participants

INTRODUCTION

SAY:

The purpose of this lesson is to provide ideas for how to introduce the children in your care to farmers.

SECTION 1

Partnering with Farmers

ASK:

Have you ever visited a farm or farmers' market? If yes, what were things you liked about it? If no, what do you think you would like about it? Where are the closest farmer's markets to here?

DO:

Share the *Tips for Connecting with Farmers* handout with the participant. Encourage them to follow along during the lesson.

SAY:

Having an experience with a farm or farmer helps children feel connected to local food. They also make connections to classroom lessons about soil, life cycles, food, and community. Today we will talk about three ways you can partner with a farmer: farmers' markets, farm field trips, and farmer visits to your early education site.

Farmers' Market:

Farmers' Markets are a great place to introduce children to different farmers and a variety of farm products. Going to a farmers' market can be easier to plan than going to a farm, but you don't get the individualized attention you will get from making an appointment for a field trip to a farm. The steps for taking children to farmers' markets are:

- Check local resources to find a farmer's market near you. In Massachusetts you can use the MassGrown Map, www.mass.gov/agr/massgrown (Point out this website on the 'Tips for Connecting with Farmers' participant handout.)
- If possible, visit the farmers' market to understand the layout and flow before taking the children. Plan to take children at a time when the market is less busy. Based on your visit, make a detailed plan of what you will do with the children during the field trip.
- Prepare the children before the visit. In the classroom, teach children about where food comes from and how it grows. Also review rules with the children: don't run, follow directions, don't touch unless instructed to do so, and stay with the group.
- Plan transportation and chaperones.
- If possible, allow children to choose a few items at the farmers' market that you will purchase and take back to taste.
- Follow up your visit with a classroom discussion about farms and farmers (and the taste test).

Farm Field Trip:

Going to a farm takes planning and preparation but is an enriching experience for children. The children are able to form relationships with the people who grow their food and gain a deeper understanding of rural ways of life. Through the hands-on experiences of farm field trips, children explore new ideas and discover new interests. The following steps can help you plan your trip:

- Decide who will go on the field trip and what the budget will be.
- Find a farm/farmer that will accommodate visits from small children. Many locations may already have a field trip program. Your local UMass Extension office, Farmers' Market, or the MassGrown website ('Tips for Connecting with Farmers' participant handout) may have suggestions.
- Plan the visit with the farm/farmer by calling to make arrangements. The following is a list of information to gather when talking to the farm/farmer:
 - What is the best time for a visit? June through September are busy months but the weather is usually good and plants are growing and being harvested.
 - Ask about accommodations such as bathrooms, hand-washing stations, and picnic areas.
 - Determine if there is a cost to visit the farm.
 - Discuss what will happen during the visit. Stations often work well so that the groups of children are small and manageable. A station schedule may look like:
 - Station 1: farm tour with the farmer
 - Station 2: hands-on farm activity
 - Station 3: harvesting produce or watching adults harvest if needed.
Ask if children will be able to take something home to try
 - Station 4: coloring journals, farm scavenger hunt, or other activity
- Plan for the day.
 - Recruit chaperones and arrange transportation.
 - Send out permission slips.
 - Prepare children for the field trip and explain rules for visiting the farm.
 - Create name tags and/or other ways to identify people in your group.
- Follow up your field-trip with a classroom discussion about farms and farmers.

Farmer Visit to the Early Education Site:

Sometimes a field trip is not possible and you may choose to have a farmer visit your early education site. It may be difficult for a farmer to leave the farm during the busy season, so a visit may be more feasible during the winter months. The following steps can help you plan the visit:

- Find a farmer. Use local resources like your farmers' market, local farm stands, or the MassGrown website to find a farmer who is willing to come to the early education site.
- Discuss your expectations with the farmer. Ask what they will discuss and how long the visit will last. Find out if they plan to bring any products to share with the children. Negotiate payment, if applicable.
- Prepare the children for the visit with lessons about farms and where food comes from. Also review rules and good manners for listening.
- Follow up the visit with a classroom discussion about farms and farmers.

ASK:

What type of visit do you think would work best for your early education site? Do you have any concerns?

DO:

Remind participants that many of the ideas found in Lesson 1 of this module would make great follow-up visit activities to the farm/farmer visit.

SAY:

One idea for a follow-up activity is to help the children remember their visit through a transition song. Look at the Kids' Corner Activity on your 'Tips for Connecting with Farmers' participant handout.

KIDS' CORNER ACTIVITY: DO

Read through the Kids' Corner Activity. *As a transition activity for lunch, have the children sing Old MacDonald Had a Farm but substitute a fruit or vegetable being served for the animals. For example: Old Mac Donald had a farm and on that farm he grew some carrots. E-I-E-I-O. With a crunch, crunch here and a yum, yum there.*



SECTION 2

Questions to Ask a Farmer

SAY:

Regardless of the way you choose to expose the children in your care to farms and farmers, you can prepare them to ask good questions. Before your visit, discuss questions the children might want to ask the farmer. There are many possibilities; below are a few examples.

- What do you grow on your farm?
- How long have you been farming?
- What do you like about being a farmer?
- How big is your farm?
- Who helps you on your farm?
- Do you have any animals on your farm?
- What is the hardest thing about farming?



ASK:

Can you think of other questions children might want to ask?

DO:

If the participant contributes additional questions, have them write the questions in the location provided on the 'Tips for Connecting with Farmers' participant handout.

SAY:

In addition, you will want to ask the children some questions of your own during your visit or afterward. Asking questions will help them to recognize connections between the experience with the farmer and their own lives. Some examples might be:

- What fruits do you see here?
- What vegetables do you see here?
- What are the different colors you see?
- Which fruits or vegetables have you tried?
- What new fruit or vegetable would you like to try?
- Where else have you seen some of these foods?

ASK:

What other questions would you want to ask the children?

SECTION 3

Sampling Farm-Fresh Produce

SAY:

Tasting the fresh, local produce is a fun end to any farm or farmer's visit. Children may be more willing to try a new food during a taste test than during a meal. Encourage all children to try the food but never force them. Ensure that children get the most out of the experience by using the following tips:

- Use principles of good food safety. Wash the produce under running water, clean all cutting utensils and cutting boards, and ensure everyone has properly washed their hands. Also, don't allow children to use sharp knives.
- Talk about the food. Talk about the color of the food (inside and out) as well as the texture.
- Have the children taste the food and then ask them how it tasted. You can ask them if they have eaten it before or seen it in the store or in a book.
- Finally take a survey of those who "liked it" and those who "don't like it yet". Creating a chart from the answers is a good way to integrate math into the activity.

ASK:

Have you done a taste test with your children? If yes, how did it go? If no, how do you think it would work at your early education site?

SAY:

Now you are going to have a chance to plan an opportunity for children at your early education site to visit a farm or farmer.

DO:

Review the instructions on the 'How to Meet a Farmer' activity sheet with the participant. Give them time to complete the activity.

CONCLUSION

SAY:

Create opportunities for children to spend time with farmers to help them feel connected to their food. It may also increase their willingness to try new foods. Good luck as you plan this experience for the children at your early education site!



Tips for Connecting with Farmers

PARTICIPANT HANDOUT

1. PARTNERING WITH FARMERS

• Farmers' Market

- Check local resources
- Visit the farmers' market before taking the children
- Prepare the children before the visit
- Plan transportation and chaperones
- Purchase items to taste test
- Follow up

• Farm Field Trip

- Decide who will go on the field trip and what the budget will be
- Find a farm/farmer
- Plan the visit with the farm/farmer
- Plan for the day
- Follow up

• Farmer Visiting the Early Education Site

- Find a farmer
- Discuss your expectations
- Prepare the children
- Follow up

2. QUESTIONS TO ASK A FARMER

- How long have you been farming?
- What do you like about being a farmer?
- How big is your farm?
- Who helps you on your farm?
- Do you have any animals on your farm?
- What is the hardest thing about farming?

3. SAMPLING FARM FRESH PRODUCE

- Use principles of food safety
- Talk about the food
- Taste the food
- Take a survey

OTHER QUESTIONS YOU COULD ASK A FARMER:



Kids' Corner:

As a transition activity for lunch, have the children sing Old MacDonald Had a Farm but substitute a fruit or vegetable being served for the animals. For example: Old Mac Donald had a farm and on that farm he grew some carrots. E-I-E-I-O. With a crunch, crunch here and a yum, yum there.

WEBSITE RESOURCE: Massachusetts Grown: www.mass.gov/agr/massgrown

How to Meet a Farmer

ACTIVITY SHEET

FARMERS' MARKET <input type="checkbox"/>	FARM FIELD TRIP <input type="checkbox"/>	FARMER VISIT TO THE EARLY EDUCATION SITE <input type="checkbox"/>
How will you find a local farmers' market?	Who will go on the field trip?	How will you find a farmer?
Are you able to visit the farmers' market before taking the children?	How will you find a farm/farmer?	What will your expectations be?
What will you do to prepare the children before the visit?	What will you discuss with the farmer to prepare for the trip?	How will you prepare the children?
How will you plan to arrange for transportation and chaperones?	How will you plan to arrange for transportation and chaperones?	How will you plan to arrange for chaperones?
What will you do to follow-up?	What will you do to follow-up?	What will you do to follow-up?

Young Sprouts: Planting Seeds with Children

OBJECTIVE: Participants will create a plan for teaching young children how to grow plants.

AUDIENCE: Early education professionals

OUTLINE (30 MINUTES):

TIME	CONTENT	INSTRUCTOR NOTES
5 minutes	Introduction	Ask for participants' experience with planting seeds and provide an overview of what will be discussed during the lesson. Handout: <i>Tips for Planting Seeds with Children</i>
7 minutes	Planting a seed	Review equipment and care instructions for planting seeds in small containers. Activity Sheet: <i>Planting Seeds with Children</i> – Participants check equipment they need and circle items they already have.
10 minutes	P.L.A.N.T. week	Outline possible topics to discuss with children while waiting for their seeds to grow. Activity Sheet: <i>Planting Seeds with Children</i> – Check topics that sound interesting.
5 minutes	Transplanting your seeds	Help participants determine where sprouts should be transplanted and review strategies to increase success of transplantation.
3 minutes	Conclusion – "Kids' Corner Activity"	Explain "Kids' Corner Activity." Answer questions.

Prior to start of presentation – Review scripted lesson plan, handout and activity sheet. Print one handout and one activity sheet for each participant. During the presentation – Refer to scripted lesson for talking points.

Preparation Checklist

TASK

Review scripted lesson, handout and activity sheet

Materials needed:

- 1 printed handout for each participant
- 1 printed activity sheet for each participant
- Pens or pencils available for use by participants

INTRODUCTION

SAY:

The purpose of this lesson is to share ideas about planting seeds with children.

ASK:

Have you ever planted seeds before, either at your early education site or at your home for personal use? What was your experience like? If you haven't planted anything before, what is your hesitation?

SAY:

Planting seeds with children can be a very rewarding and educational experience, and it can boost their interest in trying different foods. With a little planning everyone will enjoy learning how things grow and watching their seeds thrive.

DO:

Pass out *Tips for Planting Seeds with Children* and encourage participants to follow along within each section.



SECTION 1

Planting a seed – Easy as 1, 2, 3

SAY:

Very little equipment is needed to get started planting seeds at your early education site. Let children plant a variety of seeds to increase their chance of success. Here are the three steps you will need to follow to get things growing.

1. Gather your ingredients.

- **Seed starter mix:**

- This type of formula is specifically designed to give your seeds the best chance of survival and should be available at any garden or hardware store.

- **Spray bottle and water:**

- A spray bottle allows for a gentler pressure of water poured onto the soil.

- **Growing container with a few drainage holes in the bottom:**

- Container options might include plastic cups, milk containers, or yogurt containers. Let children get creative with their containers and decorate them with markers or foam shapes. The children will have a great time and it is a fun way to help tell the containers apart.

- **Seeds:**

- There are many different seeds to choose from but remember that young children are often impatient waiting for plants to grow. Consider using faster growing options such as watermelon (5-7 days), squash (4-6 days), corn (5-7 days), cucumber (5-7 days) and tomato (6-10 days).

- **Holding tray to put your containers in:**

- This enables you to easily move the containers around and to catch any water that comes out of the bottom of the seed containers.

- **Plastic wrap (optional):**

- This isn't necessary but can be helpful in creating a greenhouse effect for your seeds to retain moisture and promote growth.

2. Plant and nurture.

Help the children fill their decorated containers with the starter mix. Give each child a few seeds to plant. Depending on the container type you choose, each container might have room for multiple seeds or only one seed. If planting multiple seeds in the container, it is a good idea to plant only one type of seed in each container. Label each container so you know what type of seed is inside. Read the directions on your seed packet to know how deep to plant your seed. After planting the seeds make sure your soil stays moist. Use the spray bottle to water your seedlings since adding too much water can result in rotting. To keep moisture in your containers consider covering them with plastic wrap.

3. Watch the magic happen.

Place your containers in a sunny, warm place. Continue to check the moistness of your soil every few days and spray with water when dry. Within a week or two your seeds should start sprouting.

DO:

Hand out the 'Planting Seeds with Children' activity sheet.

SAY:

On the top of this activity sheet you will see the list of items needed to plant seeds. Take a few minutes to put a check next to the items you already have and circle the items you still need to obtain.

DO:

Allow participants time to complete the activity.

SECTION 2

PLANT week

SAY:

While you are waiting for the seeds to sprout, ask the children questions and have discussions about plants to keep them interested. Think about having a **P.L.A.N.T.** week (spells out topics for five days of learning how plants grow) and talk about one aspect of growing a plant each day. Below are five suggested topics you could introduce to help children learn more about the seeds that are growing.

Day 1: P – Parts of the plant – Just like we have different parts of our body, plants have different parts as well and each part has a special purpose. Ask children if they know what the parts of a plant are called. Show a picture of a fully developed plant - preferably a type that you have planted. Tell the children that their seeds can grow to look like the plant in the picture.

- **Leaves** use light to make food for the plant.
- **The stem** carries water and nutrients from the roots to the main part of the plant.
- **Roots** absorb water and nutrients from the soil.

Day 2: L – Look-a-likes – Show children a carrot seed (or any seed of your choice). Ask them what type of plant they think will grow from the seed. Do they think a cucumber could grow from a carrot seed? Explain that each seed is unique and will always grow into the same type of plant. Look at each of your labeled seed containers and talk about which type of seed is in each. Ask the children what each seed will look like when it is fully grown.

Day 3: A – Ask what they know – Children will have different experiences growing plants. Ask if they have ever planted a seed before. Do they know what seeds need to grow into plants? Do all seeds grow into plants every time? Why might some seeds grow and other seeds not? Get a sense of what they know and what they are interested in learning more about.

Day 4: N – Nutrients are important – Show children a picture of a living plant and a non-living plant. Ask them the difference between the two. Ask children their ideas about what plants need in order to live. Explain that plants need light and water to make food and help them survive. Without enough of these things, or with too much of these things, the plant will die. Help the children realize that growing plants is a very delicate and complex process. Make sure they understand that not every seed they plant will grow. There are several things that affect seed growth, so some might not survive, but if they keep trying they will eventually have success.

Day 5: T – Take note of changes - Ask children how their seeds/sprouts differ from day to day. How did their seeds/sprouts look different today than they did yesterday? Take a picture of the seeds each day so you can see the progress that they make and then talk about how they are changing. Display these pictures somewhere in the room. This is a fun way for the children to remember the progress that the seeds have made and helps them notice even small changes along the way.

DO:

Refer participants back to the 'Planting Seeds with Children' activity sheet.

SAY:

The bottom section of the activity sheet outlines some topics about plants. Some are topics that could be discussed as part of your P.L.A.N.T. week and others are additional ideas if you want to keep the conversation going. Check the topics that you think children at your early education site would be most interested in.

DO:

Allow time for participants to check their topics of interest. When they are finished point out the website reference on the 'Tips for Planting Seeds with Children' participant handout, Farm to Preschool Harvest of the Month Curriculum, (www.farmtopreschool.org/documents/Farm2PreschoolYear2.pdf). Explain that this is a link to curriculum lessons about different fruits and vegetables. Some of these lessons could be used during "PLANT" week.

ASK:

What topics did you like best? Do you have any ideas of how to teach these concepts to children in your care?



SECTION 3

Moving your sprouts to a pot or garden

SAY:

Now that your seeds have sprouted you have the option of transplanting them to a more permanent location. If this is your first time gardening be sure to start small. You don't want to exhaust yourself or the children by taking on a bigger project than anticipated. Let everyone enjoy the success of a small garden first and remember you can always expand in the future. Also keep in mind that any food harvested from your garden can be used as part of a reimbursable meal. Children will enjoy seeing the food they grow served in a meal!

ASK:

How much space do you have available at your early education site? Would a garden or pots work better for you? How much time during the day do you have to take care of the plants? If you planted items that grow mostly in the summer, will the children be available during the summer to care for the plants or will they be gone?

SAY:

It is important to consider these questions before deciding what to do with your sprouts. After answering these questions you will know whether it is best to transplant the sprouts at your facility or send them home with the children to be transplanted at home. For either option, the following tips will help your transplanting be more successful:

- "Harden off" your plants by setting them outside for progressively longer periods of time each day so they can get used to the harsher outdoor weather. Set them outside for only a few hours at first and then gradually increase to a full day. This process usually takes about a week.
- Look at the weather forecast and schedule a day to transplant. Cloudy or drizzly weather is best to protect newly transplanted plants from losing too much water.
- Protect the roots by watering the plants before transplanting and transferring as much soil as possible from the original containers to the new outdoor location.
- Dig transplant holes that are larger than your current plant and root system. Plant your seedlings at about the same depth they were in the containers and then mix in compost and soil around them to hold them in place.
- Water them well after planting and continue to check on them daily.

KIDS' CORNER ACTIVITY: SAY

There are a lot of steps involved in planting and teaching about seeds, but there is also a lot of learning and fun to be had. A great way to start off your planting adventure is to bring in fruits and vegetables that contain visible seeds. These might include apples, peppers, tomatoes, strawberries, avocados or sugar snap peas. Explain to the children that fruits and vegetables come from seeds. Show the children the seeds in each of the foods you brought and talk about the similarities and differences between them.

CONCLUSION

SAY:

Gardening can be a grand adventure where children can make an intimate connection to where food comes from. Start small with your efforts and then expand as you become more comfortable with how seeds grow and what a garden looks like at your early education site.



Tips for Planting Seeds with Children

PARTICIPANT HANDOUT

THREE STEPS TO PLANTING A SEED IN A SMALL CONTAINER

- 1) Gather your ingredients
 - Seed starting mix
 - Growing container
 - Tray for containers
 - Spray bottle and water
 - Seeds
 - Plastic wrap or plastic covering
- 2) Plant and nurture. Read seed packet directions and label containers.
- 3) Watch the magic happen. Place your containers in a warm place, keep them moist and be patient. Within a week or two your seedlings should start sprouting.

P.L.A.N.T. WEEK

Parts of the plant: leaves, stem, roots

Look-a-likes: each seed is unique and will always grow into the same type of plant

Ask what they know: ask questions about children's experiences growing plants

Nutrients are important: plants need just the right amount of light and water to survive

Take note of changes: look for how plants change from day to day and take pictures to document the progress

TIPS FOR MOVING YOUR SPROUTS TO A POT OR GARDEN

- "Harden off" your plants
- Choose a cloudy or drizzly day for transplanting
- Water the plants before transplanting and transfer as much soil as possible
- Dig transplant holes that are larger than your current plant and root system, then mix in compost and soil around them.
- Water sprouts well after planting and continue to check on them daily



Kids' Corner:

Bring in fruits and vegetables that contain visible seeds (i.e.: apples, peppers, tomatoes, strawberries, avocados or sugar snap peas). Explain to the children that fruits and vegetables come from seeds. Show the children the seeds in each of the foods you brought and talk about the similarities and differences between them.

WEBSITE RESOURCE: Farm to School Harvest of the Month Curriculum:

www.farmtopreschool.org/documents/Farm2PreschoolYear2.pdf

Young Sprouts: Planting Seeds with Children

ACTIVITY SHEET

Before you start growing seeds make sure you have all the necessary equipment. Below is a list of things you will need. Put a check mark next to the items you already have and circle the items you still need to obtain.

- Seed starting mix
- Spray bottle and water
- Growing container with a few drainage holes in the bottom (container options might include plastic cups, milk containers or yogurt containers)
- Seeds: Faster growing options include watermelon (5-7 days), squash (4-6 days), corn (5-7 days), cucumber (5-7 days) and tomato (6-10 days)
- Holding tray to put your containers in
- Plastic wrap or other plastic covering for containers

While you wait for your seeds to grow, keep children interested by learning more about how seeds/plants grow. Below are a few ideas of topics to discuss. Check the topics that sound interesting to you:



- Parts of the plant
- How water moves to different parts of the plant
- Function of the leaves, stems and roots
- What different seeds look like when they become fully grown
- Why some seeds grow and other seeds don't
- Weather and how it affects plant growth
- Nutrients needed for plants to grow
- Which plants grow in different parts of the world
- Which plants grow during different seasons
- Different varieties of the same vegetable (bell pepper, chili pepper, cayenne pepper, etc.)
- Famous locations that have gardens (castles, palaces, government buildings, universities)
- What are the fastest and slowest growing plants

Module 2

Gardens in Early Education & Care Programs

Pre-Test

Instructions:

Circle the correct answer for each question below before completing Lesson One of Module 2.

1. Nutrition and agriculture concepts can be used to teach:

- a. reading, science, art, and math
- b. health and science only
- c. good manners during meals
- d. they are not useful concepts in early education

2. If you have children draw pictures of a garden you should make sure:

- a. every plant is drawn 100% accurate
- b. they have fun choosing which fruits and vegetables to include, or giving their garden a name and being creative
- c. they only draw plants that are found in the United States
- d. all of their garden rows are in a straight line

3. USDA Food and Nutrition Service created a nutrition education kit that is available to you as a resource. What is this resource called?

- a. Eat Like Me
- b. Always Choose Healthy Foods
- c. Fruits and Vegetables Rock!
- d. Grow it, Try it, Like it!

4. Locally grown food can be purchased through:

- a. Community Supported Agriculture (CSA)
- b. Grocery Stores
- c. Farmers' Markets
- d. all of the above

5. Using _____ can help you include more fresh, local food items into your meals.

- a. cycle menus and scratch cooking
- b. last minute menu planning
- c. pre-packaged entrees
- d. recipes that include canned food

6. All of the following are ways to make connections with farmers, EXCEPT:

- a. farm field trip
- b. farmers' market
- c. grocery store
- d. farmer's visit to your early education site

7. When having children sample farm-fresh produce, you should:

- a. require each child take a bite
- b. provide large portions
- c. use good food safety practices
- d. not let children discuss if they like the taste

8. What types of containers can you use to grow seeds inside?

- a. plastic cups
- b. milk containers
- c. yogurt containers
- d. all of the above

9. The three main parts of a plant are:

- a. leaves, stem, roots
- b. flowers, leaves, roots
- c. leaves, stem, soil
- d. seed, stem, soil

10. In gardening, the term "harden off" means what?

- a. The plant has become hard
- b. Taking sprouts that have been planted inside and setting them outside for progressively longer periods of time each day
- c. Taking any hard soil off of your garden bed
- d. Using hard ground to plant seeds so they are more robust and survive better



Module 2

Gardens in Early Education & Care Programs

Post-Test

Instructions:

Circle the correct answer for each question below after completing all lessons in Module 2.

1. Nutrition and agriculture concepts can be used to teach:

- a. reading, science, art, and math
- b. health and science only
- c. good manners during meals
- d. they are not useful concepts in early education

2. If you have children draw pictures of a garden you should make sure:

- a. every plant is drawn 100% accurate
- b. they have fun choosing which fruits and vegetables to include, or giving their garden a name and being creative
- c. they only draw plants that are found in the United States
- d. all of their garden rows are in a straight line

3. USDA Food and Nutrition Service created a nutrition education kit that is available to you as a resource. What is this resource called?

- a. Eat Like Me
- b. Always Choose Healthy Foods
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- d. Grow it, Try it, Like it!

4. Locally grown food can be purchased through:

- a. Community Supported Agriculture (CSA)
- b. Grocery Stores
- c. Farmers' Markets
- d. all of the above

5. Using _____ can help you include more fresh, local food items into your meals.

- a. cycle menus and scratch cooking
- b. last minute menu planning
- c. pre-packaged entrees
- d. recipes that include canned food

6. All of the following are ways to make connections with farmers, EXCEPT:

- a. farm field trip
- b. farmers' market
- c. grocery store
- d. farmer's visit to your early education site

7. When having children sample farm-fresh produce, you should:

- a. require each child take a bite
- b. provide large portions
- c. use good food safety practices
- d. not let children discuss if they like the taste

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- d. all of the above

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- b. flowers, leaves, roots
- c. leaves, stem, soil
- d. seed, stem, soil

10. In gardening, the term "harden off" means what?

- a. The plant has become hard
- b. Taking sprouts that have been planted inside and setting them outside for progressively longer periods of time each day
- c. Taking any hard soil off of your garden bed
- d. Using hard ground to plant seeds so they are more robust and survive better



Module 2

Gardens in Early Education & Care Programs

Pre- and Post-Test Answer Key

1. Nutrition and agriculture concepts can be used to teach:
 - a. **reading, science, art, and math**
 - b. health and science only
 - c. good manners during meals
 - d. they are not useful concepts in early education

2. If you have children draw pictures of a garden you should make sure:
 - a. every plant is drawn 100% accurate
 - b. **they have fun choosing which fruits and vegetables to include, or giving their garden a name and being creative**
 - c. they only draw plants that are found in the United States
 - d. all of their garden rows are in a straight line

3. USDA Food and Nutrition Service created a nutrition education kit that is available to you as a resource. What is this resource called?
 - a. Eat Like Me
 - b. Always Choose Healthy Foods
 - c. Fruits and Vegetables Rock!
 - d. **Grow it, Try it, Like it!**

4. Locally grown food can be purchased through:
 - a. Community Supported Agriculture (CSA)
 - b. Grocery Stores
 - c. Farmers' Markets
 - d. **all of the above**

5. Using _____ can help you include more fresh, local food items into your meals.
 - a. **cycle menus and scratch cooking**
 - b. last minute menu planning
 - c. pre-packaged entrees
 - d. recipes that include canned food

6. All of the following are ways to make connections with farmers, EXCEPT:
 - a. farm field trip
 - b. farmers' market
 - c. **grocery store**
 - d. farmer's visit to your early education site

7. When having children sample farm-fresh produce, you should:
 - a. require each child take a bite
 - b. provide large portions
 - c. **use good food safety practices**
 - d. not let children discuss if they like the taste

8. What types of containers can you use to grow seeds inside?
 - a. Plastic cups
 - b. milk containers
 - c. yogurt containers
 - d. **all of the above**

9. The three main parts of a plant are:
 - a. **leaves, stem, roots**
 - b. flowers, leaves, roots
 - c. leaves, stem, soil
 - d. seed, stem, soil

10. In gardening, the term "harden off" means what?
 - a. The plant has become hard
 - b. **Taking sprouts that have been planted inside and setting them outside for progressively longer periods of time each day**
 - c. Taking any hard soil off of your garden bed
 - d. Using hard ground to plant seeds so they are more robust and survive better

RESOURCE LIST

Module 2 - Gardens in Early Education & Care Programs

BOOKS:

The ABC's of Fruits and Vegetables and Beyond by Steve Charney and David Goldbeck

Bread is for Eating by Davis Gershator

Eating by Gwenyth Swain

ONLINE RESOURCES:

Grow it, Try it, Like it

www.fns.usda.gov/tn/grow-it-try-it-it

MassGrown

www.mass.gov/agr/massgrown

Harvest of the Month

www.massfarmtoschool.org/programs/hotm

Farm to Preschool

www.farmtopreschool.org

Farm to Preschool, Local Food Sourcing

www.farmtopreschool.org/localfood.html

UMass Extension

www.umass.edu/safefoodfarm2kid/content/resources

Farm to School Harvest of the Month Curriculum

www.farmtopreschool.org/documents/Farm2PreschoolYear2.pdf

MassCAMPS Webpage

www.johnstalkerinstitute.org/masscamps



Growing Healthy Habits:

Strategies for Teaching Nutrition and Gardening in Early Education



www.johnstalkerinstitute.org/masscamps



The John C. Stalker Institute
of Food and Nutrition
AT FRAMINGHAM STATE UNIVERSITY