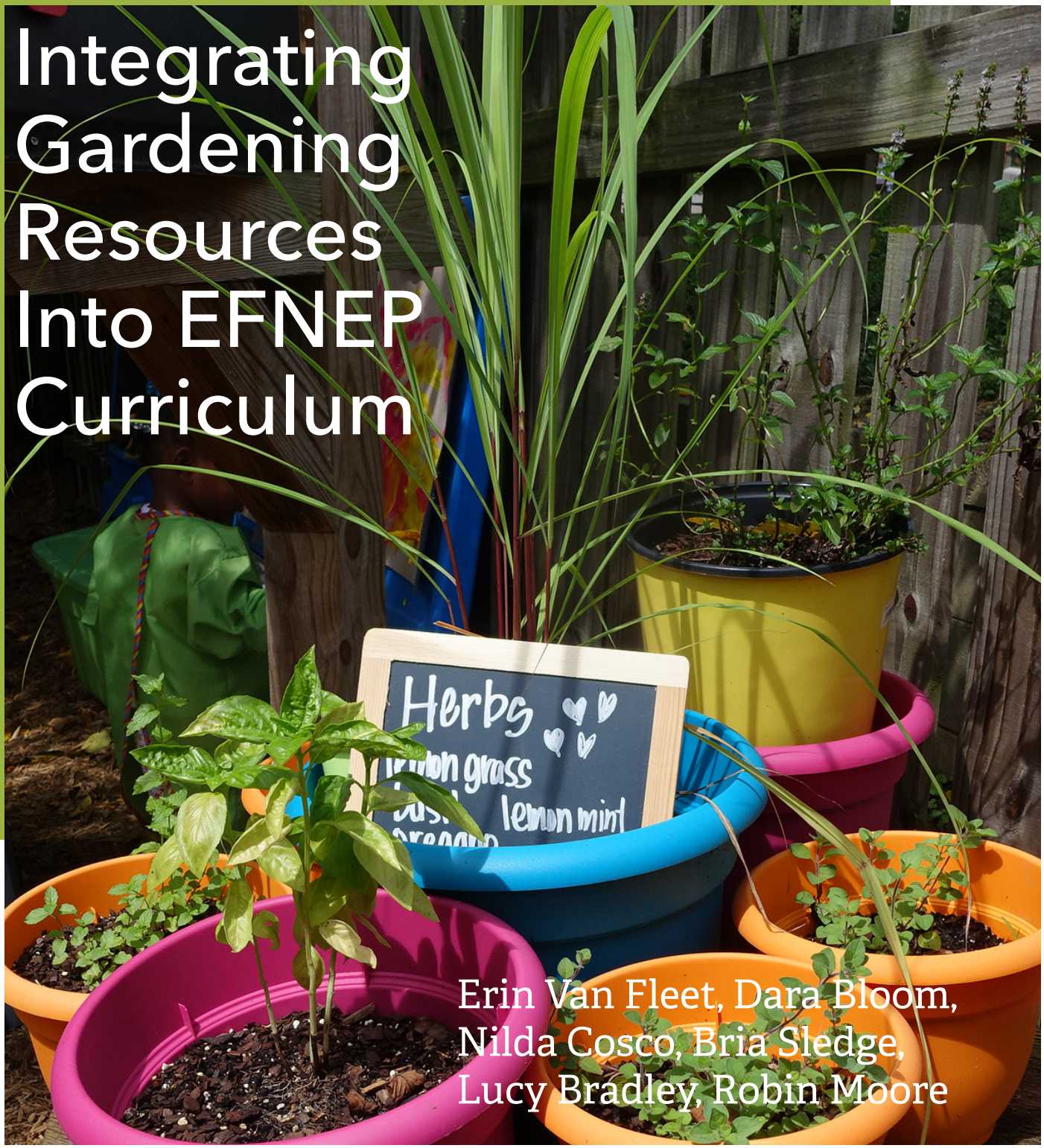
A GUIDE FOR EFNEP EDUCATORS

Integrating Gardening Resources Into EFNEP Curriculum



Erin Van Fleet, Dara Bloom,
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Lucy Bradley, Robin Moore

EFNEP
Expanded Food and Nutrition Education Program

NC STATE
Extension Gardener

NC STATE Design
NLI
NATURAL LEARNING INITIATIVE

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May 2022

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CITATION – Van Fleet, E., Bloom, D., Cosco, N., Sledge B., Bradley L., Moore, R. (2022). *A Guide for EFNEP Educators: Integrating Gardening Resources into EFNEP Curriculum.* Cooperative Extension, The Natural Learning Initiative (NLI), and College of Design, North Carolina State University

ISBN – 978-1-7360138-1-6 (Print)
ISBN – 978-1-7360138-2-3 (Online)

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Contents of this publication are based on research conducted as part of the above project by the Natural Learning Initiative in collaboration with North Carolina State University Departments of Food, Bioprocessing, and Nutrition Sciences; Horticultural Science; Landscape Architecture; and Statistics. Other collaborators include the College of Human Ecology, Cornell University, NY; Sandhills Community College, NC; and Wake County Smart Start, NC.

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This material is based upon work that is supported by the National Institute of Food and Agriculture, US Department of Agriculture. USDA is an equal opportunity provider, employer, and lender. This publication is part of a project titled: Childcare Outdoor Learning Environments as Active Food Systems: Effectiveness of the Preventing Obesity by Design (POD) Gardening Component, supported by the Agriculture and Food Research Initiative Competitive grant no. 2017-68001-26354 from the USDA National Institute of Food and Agriculture (NIFA). Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the authors and do not necessarily reflect the view of the United States Department of Agriculture.

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Human subjects research approval was granted by the Institutional Review Board of North Carolina State University.

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TABLE OF CONTENTS

INTRODUCTION: BENEFITS OF NATURE AND GARDENING 01

BENEFITS OF NATURE 01

HEALTH BENEFITS OF GARDENING 01

Improves Nutrition 01

Promotes Physical and Mental Health 01

Encourages Family Togetherness 02

COMMUNITY BASED GARDENING 02

CONNECTING GARDENING RESOURCES WITH EFNEP CURRICULUM 03

GARDENING WITH CHILDREN 04

HEALTHY EATING 05

Look for Local 05

Seasonality 05

Drying Herbs 05

Getting kids involved in cooking! 06

RECIPE ADDITIONS AND ADAPTATIONS 07

MOVING MORE 07

BUDGETING FOR HEALTHY EATING 08

PARTICIPANT ENGAGEMENT 09

NC Cooperative Extension 10

ADDITIONAL RESOURCES 11

NC Extension Resources 11

Natural Learning Initiative Resources 11

INTRODUCTION: BENEFITS OF NATURE AND GARDENING

Food-based gardening is strongly aligned with curriculum principles of the Expanded Food and Nutrition Education Program (EFNEP). If gardening is integrated into EFNEP, families will find practical resources as well as guidance for growing their own food. Integration will also help reinforce messaging on eating more healthy foods, eating more local foods, moving more, engaging with community, and budgeting for healthy eating.

Included are specific examples of where and how gardening can be mentioned in lesson plans. Resources can help engage children in gardening and cooking and encourage them to get outdoors and take part in gardening activities with friends and family.

BENEFITS OF NATURE FOR CHILDREN

Research demonstrates that nature is a wide-ranging, preventive measure for human health. Before all, nature exposure for mothers may protect against low birth weight. Childhood exposure to nature builds protection against ailments such as depression, anxiety, diabetes, obesity, and heart disease.[1]

- Nature attracts children and accompanying adults to go outside, which increases physical activity, reduces screen time, and achieves recommended daily doses of Vitamin D.[2]
- Nature play stimulates children's curiosity, motivates creativity and problem solving, supports positive social relations, and increases self-discipline and cooperation.[3]
- Exposure to nature reduces the risk of asthma and other allergies.[4]
- Learning through nature reduces stress, enhances cognitive abilities, protects against attention deficit disorder (ADD) symptoms and can improve academic performance.[5]
- Growing up engaged with nature encourages environmental caring behaviors and growth of a conservation ethic in adults.[6]

HEALTH BENEFITS OF GARDENING

Gardening offers multiple, evidence-informed benefits for families and children, including:

Improves Nutrition

- Eating fresh fruits and vegetables supplies the wide range of nutrients needed to support health and wellbeing.[7]
- Gardening motivates children and families to eat more fresh fruits and vegetables.[8]
- Children who grow their own fresh fruits and vegetables are more likely to eat them.[9]
- Fruits, vegetables, and herbs picked ripe from a garden can be more flavorful and attractive to eat than store-bought produce.

Promotes Physical and Mental Health

- As an outdoor activity, gardening supports moderate physical activity that helps to maintain a healthy weight into adulthood.[10]
- Diverse gardening activities can exercise neglected muscles.[11]
- Increased time outside and exposure to nature, including "hands -in-the dirt," can boost the immune system and therefore may protect individuals against infection.[12]



Okra has different colors!

- Gardening rewards effort with rapid results and a sense of accomplishment, helping participants gain agency and feel part of the cycle of life.[13]

- By directing care towards living things, gardening diverts attention from internal worry, frustration, and potentially depressing thoughts.[14]



Neighborhood community gardening.

Encourages Family Togetherness

- Gardening can engage family members of all ages in a collective effort to increase the quality of family life and offer a rewarding sense of community.[15]

COMMUNITY BASED GARDENING

Gardening can happen in other places besides backyards. Encourage participants to look for opportunities to get involved with community gardens locally and statewide.[16]

- Childcare centers and schools recognize gardening as a significant child and family health intervention and source of community learning about the nutritional value of fresh fruit and vegetables.[17]

- Faith communities engage in community gardening as a meaningful activity for congregants, including connections to the Faithful Families, Thriving Communities program.[18]

TO LEARN MORE ABOUT COMMUNITY GARDENING VISIT:
The NC State University Community Gardens website, which offers community gardening resources and promotional opportunities statewide and beyond. [https://nccommunitygardens.ces.ncsu.edu]

The North Carolina Community Gardens Directory, which is an exemplar for identifying local sites. [https://www.nccgp.org/garden-directory]

FOR CREATIVE OUTDOOR ACTIVITIES FOR CHILDREN, DOWNLOAD:
At Your Doorstep: A Family Factsheet on Outdoor Play and Learning
[https://content.ces.ncsu.edu/at-your-doorstep-a-family-fact-sheet-on-outdoor-play-and-learning]

TO LEARN MORE ABOUT THE IMPACT OF NATURE ON EARLY CHILDHOOD HEALTH AND DEVELOPMENT, DOWNLOAD: The Natural Learning Initiative's Research Brief: Impact of Early Childhood Outdoor Learning Environments [https://naturalearning.org/research-brief]

Benefits of Engaging Children with Nature [https://naturalearning.org/01-benefits-of-engaging-children-with-nature]

TO LEARN MORE ABOUT ACTIVE OUTDOOR LEARNING ENVIRONMENTS FOR CHILDREN, VIEW:
Playgrounds to Outdoor Learning Environments—a video exploring childcare outdoor learning environments and how they support children's health and wellbeing.
[https://naturalearning.org/playgrounds-to-outdoor-learning-environments]

TO EXPLORE HOW AND WHY OUTDOOR LEARNING ENVIRONMENTS ARE DESIGNED TO PROMOTE CHILDREN'S HEALTH AND WELLBEING, VIEW: A Virtual Field Trip [https://naturalearning.org/vft]

CONNECTING GARDENING RESOURCES WITH EFNEP CURRICULUM

With an understanding of the benefits of gardening and possibilities for domestic and community implementation, start integrating some of these ideas into lesson plans to reinforce main themes of the EFNEP curriculum.

- A good place to start is *Moving More Every Day Throughout the Day (Pg. 16, Slide 13). This* incorporates main themes of EFNEP: *Eating Healthy, Moving More, Budgeting, and Participant Engagement*.
- Discuss gardening as a health promotion opportunity for all ages to exercise, enjoy fresh air, and grow healthy food.
- Explore ways to engage children in gardening to make it a fun, family activity. (See Tips in later sections).
- Ask participants about their gardening experiences. Encourage sharing of knowledge and memories.



Bean teepee with children exploring together.



Gardening in pots is an easy place to start.

- Highlight how gardening can be started in small, sunny spaces around the home or even in containers on a porch or balcony.
- Mention how SNAP benefits can be used to purchase seeds and seedlings to help participants get started gardening!
- Incorporate budgeting for healthy eating into the discussion by highlighting how growing fruits and vegetables can save money that would otherwise be used for store purchases.
- Be sure to emphasize that gardening success may be influenced by weather and pest-related challenges that can make it less cost-effective. (Check budget-friendly gardening tips in later sections.)

With gardening themes in mind, consider other opportunities to emphasize gardening throughout the EFNEP curriculum. The following sections include resources focused on being active outdoors and cooking with garden-fresh fruits and vegetables!



Happy pea smile, "I grew it!"

GARDENING WITH CHILDREN

Gardening is a great way to expose children to nature, to stimulate physical activity and foster healthy eating habits.

The Natural Learning Initiative (NLI) has developed extensive resources in collaboration with NC State Cooperative Extension. Visit *Gardening with Young Children* [https://naturalearning.org/gardening-series] as a place to start engaging children in gardening. The downloadable *Gardening Activity Guide* provides kid-friendly gardening ideas accompanied by related children's literature.

Another NLI resource, *Children's Vegetable Gardens: Introduction addresses garden placement, construction, and installation* [https://naturalearning.org/childrens-vegetable-gardens-introduction]. Although geared towards childcare centers, the content can be applied to other garden spaces.

Gardening is a fun way to engage the whole family to spend quality time together. To this end, NLI also developed *Natural Learning at Home* [https://naturalearning.org/nlh_january]. Guides for each month include activities, lessons, and recipes motivating the whole family to get outdoors—and into the kitchen! Some NLI resources are available in Spanish.

SHARE

Helping to gather fruits, vegetables, and herbs from the garden is a great children's activity.

Assembling items for a salad for instance can include younger children picking tomatoes or pulling carrots and radishes, while older children harvest herbs and lettuces. Salad preparation also shows that not all produce requires cooking.

Food grown at home may help folks feel more secure about safety because they watch it grow and know that less hands have touched it before appearing on the plate. Nonetheless, it's still important to make sure produce is thoroughly cleaned prior to preparing.

When children help harvest, clean, and prepare fresh produce from the garden and get involved in cooking, it is important that they learn how to clean the fruits and veggies (and their hands!), before cutting, chopping, and cooking!

RESOURCES MENTIONED ABOVE ARE A GREAT PLACE TO START LEARNING ABOUT GARDENING WITH CHILDREN. TO LEARN MORE PLEASE EXPLORE THE NLI INFOSHEETS LISTED BELOW:

Gardening: Making Newspaper Seedling Pots [https://naturalearning.org/18-newspaper-pots/]

Gardening: "Edibles" [https://naturalearning.org/tag/edibles/]

Gardening: Growing Edibles in Containers [https://naturalearning.org/10-growing-edibles-in-containers]

Gardening: Starting Veggies Indoors [https://naturalearning.org/19-starting-veggies-indoors/]

Food Safety in the Garden [https://nccommunitygardens.ces.ncsu.edu/nccommunitygardens-food-safety-in-community-gardens/]

TO LEARN MORE ON GARDENING WITH CHILDREN AND AGE-APPROPRIATE ACTIVITIES VISIT:

Grow For It: Gardening with Children [https://growforit.ces.ncsu.edu/]

Youth Gardening Resources [https://gardening.ces.ncsu.edu/youth/]

HEALTHY EATING

Look for local

Success in healthy eating is influenced by several factors, including local availability, seasonality, use of herbs, and involving kids.

- Wherever there are "Look for Local" icons, connections to gardening can be made.
- Discuss "Look for Local" gardening in the following lesson: *Eating Smart at Home: Fix it Safe (pg. 31).*
- Mention that fruits and vegetables from farms may have more dirt attached than store-bought produce.

Seasonality

"Look for Local" icons often mention seasonality, which provides great opportunities for discussing recipes using seasonal produce.

For example: *Eating Smart at Home, Plan: Know What's for Dinner (pg. 22).* See the note about NC Sweet Potatoes and link to the What's in Season Chart (NC Department of Agriculture).

Eating Smart at Home: Fix it Fast, Eat at Home (pg. 24). The Look for Local note in the Stir Fry recipe suggests shopping at a farmers' market to choose seasonal vegetables.

Eating Smart on the Run: Making Smart Breakfast Choices (pg. 17). The Look for Local suggests adding in-season berries to the French Toast recipe.

Drying herbs

Any time a recipe mentions adding herbs (fresh or dried!), use the opportunity to suggest how easy it is to grow herbs.



Harvesting beans for lunch.

ASK

"What kinds of fruits and vegetables would you expect to grow in a garden?"

SHARE

Choice of stir fry vegetables depends on what's growing in the garden!

Many local fruits and vegetables mentioned may be grown in a home or community garden or in a container.

The "What's in Season" Chart is a useful resource when planning a NC garden to see what grows well during each season.

Try growing fresh berries in the garden and adding those instead of or in addition to berries bought from the store or farmers' market!

Herbs are some of the most commonly grown garden plants. A mix of herbs, picked as needed, helps save money and adds more flavor to recipes. Herbs are easy to grow in pots on a windowsill if space is limited.

For example: *Eating Smart at Home: Shop for Value, Check the Facts (pg. 38), Low-Sodium Spice Mixes* provides an excellent example of herb use.

TARGETED VEGETABLE PLANTING CALENDARS PROVIDE INFO ON EACH REGION:

Central NC [https://content.ces.ncsu.edu/show_ep3_pdf/1632324974/23265/]

Eastern NC [https://content.ces.ncsu.edu/show_ep3_pdf/1632324908/23246/]

Western NC [https://content.ces.ncsu.edu/show_ep3_pdf/1632324874/23295/]

READ MORE ON GROWING AND CARING FOR GARDENS:

Vegetable Gardening [https://gardening.ces.ncsu.edu/gardening-plants/vegetables-2]

SHARE

3 STEPS FOR DRYING GARDEN HERBS

1. Thoroughly rinse herbs and shake off water.
2. Spread herbs out on a paper towel or dish cloth until they are dry to the touch.
3. Tie the stems into small bundles using twine or string and hang them upside down in a warm, dry, airy spot, out of the sun, such as in a large empty closet, attic, or unused corner of a room.

NOTES:

- You will know when herbs are sufficiently dry when they are brittle and crumble easily.
- Once dried, remove leaves from the stems and store them in a container or heavy-duty Ziploc bag in a cool, dry place away from sunlight and moisture.
- Stored properly, most dried herbs can keep for up to a year!
- Use dried herbs in any recipe that calls for them and/or to create your own spice mixes!

To learn more about harvesting and drying herbs and to explore other drying and preservation methods, visit the NCSU Extension webpage: Harvesting and Preserving Herbs for the Home Gardener [https://content.ces.ncsu.edu/harvesting-and-preserving- herbs-for-the-home-gardener]

Getting kids involved in cooking!

Stress the importance of engaging kids in gardening and cooking in early childhood onwards including these impacts:

- Introduces new foods and increases likelihood of tasting different foods
- Helps develop lifelong kitchen skills and healthy eating habits
- Creates more active time and less screen time



Making salad from our garden.

- Reinforces things learned in school such as fractions, measuring, reading, following written instructions
- Motivates harvesting ingredients from the garden as a step before preparing, cooking, and eating. This could be mentioned in *Eating Smart at Home: Fix it Safe (pg. 53) and Eating Smart at Home: Fix it Fast, Eat at Home (pg. 32).* Refer also to the *Gardening Activity Guide (NLI, 2021)* [https://naturalearning.org/gardening-series], based on the full 12-step gardening process, seed to tummy.
- Reinforces the importance of teaching children proper cleaning and food safety practices for fresh produce as introduced in: *Eating Smart at Home: Fix it Safe (pg. 15).*

FOR MORE DELICIOUS SUGGESTIONS ON HOW TO (SAFELY) GET KIDS INVOLVED WITH COOKING (AND SIMPLE RECIPES!), VISIT THE FOLLOWING PAGES:

Growing and Cooking Fruits and Vegetables at Childcare Centers
[https://content.ces.ncsu.edu/show_ep3_pdf/1632402868/22958/]

Snacking and Cooking with Warm-Season Produce from Childcare Production Gardens
[https://naturalearning.org/download/24248]

Snacking and Cooking with Cool-Season Produce from Childcare Production Gardens
[https://naturalearning.org/download/24252]

*Many of these recipes offer tips for specific tasks children can help with. These resources also talk about seasonality and have creative recipe "formulas" that can be adapted to use whatever is growing in your garden!

RECIPE ADDITIONS AND ADAPTATIONS

Wherever a recipe suggests modifications, for example, "During step 2, try adding some of these vegetables listed to stretch the filling and make a more complete *MyPlate* meal," try making connections to seasonality and other recipe adaptations.

In *Moving More Every Day, Everywhere, Watching Less: Choosing a Healthier You for Life (pg. 2)* the Chicken and Cheese Enchilada Recipe (Look for Local note) mentions adding a variety of fresh peppers and onions when in season.

Many recipes offer options to add or adapt and incorporate any vegetable from the garden such as Quinoa Salad, Stir Fry, Chicken and Cheese Enchiladas, Chicken Quesadillas, Hearty Vegetable Salad, Black Bean Burrito, Beef Stir Fry, Zesty Spinach Omelet, Stuffed Bell Peppers, Quick Pizzas, and more!

MOVING MORE

Moving More lessons offer gardening prompts (*See pg. 16, Slide 13).*

The NLI InfoSheet, *Top Ten Activity Settings for Outdoor Learning* [https://naturalearning.org/02-top-ten-activity-settings-for-outdoor-learning] explains how to add value to outdoor learning environments by making physical changes that motivate more movement. The section on creating Edible Landscapes has tips for creating appropriate garden spaces.

ASK

Did you know that peppers are a great summer vegetable to grow in your garden?

SHARE

There are many types of peppers that grow well in NC, and they grow well both in the ground and in containers!

Adding veggies is a great way to bulk up a recipe and get more nutrients! Spinach is a great vegetable to grow during the Fall and Spring of the year. If spinach is not available, use kale, collards, mustard greens, or any other dark leafy vegetables.

Emphasize gardening as way to encourage physical activity! SHARE some of the benefits discussed in Section 1 of this guide! Resources available for creating active outdoor learning environments.

Often, seasonal fruit and vegetable seedlings to transplant to your garden are accessible and easy to find at the farmers' market and retail stores – these are SNAP-eligible as well!



Barrowing soil is purposeful exercise.

OTHER RESOURCES TO EXPLORE:

Learn about multi-purpose lawns and get fun, outdoor activity ideas:

NLI's Multi-Purpose Lawns [https://naturalearning.org/16-multi-purpose-lawns]

PlayDaze for Engaging Outdoor Activity [https://naturalearning.org/playdaze]



Productive veggie garden in pots lining yard fence.

BUDGETING FOR HEALTHY EATING

While gardening provides fruits and vegetables and grocery bill reductions, getting started usually involves the costs of seeds, soil, containers or pots, and paying for extra water.

The following lessons offer information on cost-effective ways to prepare for the garden season:

Eating Smart on the Run: Making Smart Lunch Choices Look for Local (pg. 18), discusses buying fruits and vegetables in season at the farmers' market, via WIC and SNAP.

Moving More (pg. 16, Slide 13) provides an opportunity to mention how SNAP benefits can be used to purchase seeds and seedlings to get a garden started!

Additional budget-friendly gardening ideas include:[8 9]

- Planting foods that the whole family can eat and enjoy, including those typically more expensive at the store, like cherry tomatoes and herbs.
- Starting plants from seed is often cheaper than buying seedlings or transplants.
- Community gardens typically have plots available for community members for a small annual fee but but there may be savings when you borrow, rather than purchase tools, containers and have access to free soil and water.

TIPS

SNAP benefits can be used to purchase seeds and seedlings for food plants.

Seed Sharing: Link up with friends, neighbors, or family members to each buy a different variety of seeds and share amongst each other. This provides opportunities to grow a variety of vegetables and become a group of gardening friends sharing knowledge and local resources!

Seed libraries managed in public libraries are growing across the country, including in North Carolina. Contact local libraries to "check out" free seeds or help them to get going with the service!

Drainage holes are important to add to recycled pots. If holes are missing, drill or cut at least one hole in the bottom.

TO LEARN MORE ABOUT CONTAINER GARDENING, DOWNLOAD:
Growing Edibles in Containers [https://naturalearning.org/10-growing-edibles-in-containers]

TO LEARN MORE ABOUT HOW TO GET STARTED WITH COMPOSTING, DOWNLOAD:
Home & Backyard Composting: Introduction to Home Composting
[https://composting.ces.ncsu.edu/home-composting]

TO LEARN ABOUT COMPOSTING AT CHILDCARE CENTERS WITH HELPFUL TIPS AND ACTIVITIES ADAPTABLE TO HOME, DOWNLOAD:
Composting in Childcare Production Gardens
[https://naturalearning.org/wp-content/uploads/2016/12/7_Composting_Final_10192015.pdf]

Vermicomposting in Childcare Production Gardens [https://content.ces.ncsu.edu/childcare-center-production-gardens-8-vermicomposting-in-childcare-center-gardens]



Economic grow bag (bought or repurposed) gardening.



STARTING VEGGIES INDOORS 19

INFOSHEET

Spring is coming! It's time to start seeds indoors to prep for the growing season- and bring gardening fun to school, home, or a childcare center! If you live in a cooler climate, starting veggie seeds indoors will protect delicate seedlings from early spring frosts. In a warmer climate, starting indoors will lengthen the growing season. In either case, starting indoors will support a full and flourishing vegetable garden throughout the summer. Carefully examine seed packets for specific planting instructions to ensure that your seedlings thrive.

CONTAINERS

WHEN TO START SEED

Cool Season Vegetables

Warm Season Vegetables

GROWING EDIBLES IN CONTAINERS 10

INFOSHEET

Container gardening is a practical, low cost, space-efficient, and child-friendly approach to growing fresh produce at home, schools and in childcare centers. Children delight in growing and eating their own food. Research shows that repeated experience with healthy food options increases the likelihood of learning healthy eating habits. Using containers can be a permanent, flexible gardening strategy or a short-term first step towards a larger scale installation. Either way, containers are great for growing tasty herbs, delicious salad lettuce, succulent strawberries, and much more (see listing, p.2). Success depends on six key considerations.

1. Container selection

Edible plants can be grown in purchased, repurposed or recycled containers, as long as they meet two basic requirements: enough space for fully mature plants and adequate drainage (holes drilled in container bottom). Recycled or purchased 5-gallon paint pails (10" dia.) are a sturdy, inexpensive, temporary or permanent choice. Handles make them easy to carry around. Repurposed dish pans/tubs, children's wagons and splash pools, canvas bags, and even boots or shoes can work. Store-bought "grow bags" are another inexpensive choice. Available in different sizes, they are foldable and easily stored when not in use. Engage children in decorating containers to encourage ownership.

2. Suitable edible plants

Many annual edibles and some perennial edibles can be grown in containers, guided by USDA hardiness zone constraints (see 4, below). Plants can be grown directly from seed or as transplants (see companion *InfoSheets*: Making Newspaper Seedling Pots and Starting Veggies Indoors. Plants that spread, such as melons and pumpkins, are not recommended. For plants that climb, such as peas, beans, and cucumbers, provide vertical support using stakes, cages, trellises, or adjacent fences to grow on. Plants with similar needs can share the same container if large enough. Many annual edibles make tasty micro-greens (see 'M' listing, p.2).

3. High-quality growing medium

Usually called "potting mix," high-quality growing medium is critical to ensure that plants thrive in containers. Purchase in 2-cu.ft. bags from local garden supply stores. Using exclusively native soils

Containers make gardening easy indoors and outdoors!

Stakes support climbing edibles

Version 1.1

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- Used tools can be found inexpensively at garage and estate sales, flea markets, thrift shops, and online marketplaces to help offset the upfront cost of starting a garden.

- Pots or containers laying around can be repurposed. Make sure to stress giving them a good cleaning before adding soil and plants.

- As bagged soil and compost can be expensive, starting composting at home using kitchen scraps, if space is available. Alternatively, a community garden plot with composting privileges may be rented.

- When starting a home garden, the local community garden could be asked if they are willing to share the compost pile in return for raw materials.

TIPS

Five-gallon buckets make great plant containers. Bakeries, restaurants, and construction companies will usually give away for free—just ask. Bonus: the lids can double as trays.

Containers and pots can be transformed in appearance using paint. Involve children in creating messages and motifs!

Reusable bags that are often given away as free promotional items by stores can also be used to grow plants!

PARTICIPANT ENGAGEMENT

Engage participants by facilitating discussions about gardening throughout the program.

Suggest additional opportunities for making connections using: *Introduction, pg. v: Checklist for Topics of Interest.* An option on this list is, "Growing my own food."

ASK
Does anyone have access to a garden at a faith community, school, childcare center, community garden, or backyard/container garden?

Does anyone have experience with gardening as a child growing up or now with family?

SHARE
Gardening can be a great way to eat healthier and move more! Throughout our classes I'll share some tips on gardening and how to make it part of a healthy lifestyle!

Community gardens are a great way to get started with growing your own food and saving money on fresh fruits and vegetables for your family!



Children's curiosity is naturally stimulated by sensory-rich edible plants.

- When asking for volunteers to share their Top Three Topics of Interest, if someone mentions gardening, add: *Eating Smart at Home: Plan: Know What's for Dinner (pg. 21, Slide 13).*

- When sharing opportunities for fruits and vegetables be sure to mention any local community garden opportunities.

Moving More Every Day, Everywhere, Watching Less: Choosing a Healthier You for Life (pg. iii):

- When talking about connecting with Extension mention workshops and locations of local food outlets. Talk about Extension resources and connections mentioned in the first section of this guide (e.g., Master Gardener Volunteers and Demonstration Gardens at Extension Centers).

Cooperative Extension

- NC Extension offers many resources to help with gardening [https://gardening.ces.ncsu.edu].

- Extension Horticulture Agents [https://sites.google.com/ncsu.edu/garden-questions/home] help growers solve gardening problems and offer a variety of online resources with helpful tips.

- Extension Master Gardener Volunteers [https://emgv.ces.ncsu.edu] help communities learn about gardening and share best practices.

- Extension Offices [https://www.ces.ncsu.edu/local-county-center] have demo gardens to help teach people interested in gardening.

- The Supplemental Nutrition Assistance Program Education (SNAP-Ed) Steps to Health Program incorporates gardening as part of its emphasis on Policy, Systems, and Environmental changes (PSE), and has helpful information on how to grow food, including a Grow Food From Seeds! brochure.

- Work with a local Family and Consumer Sciences (FCS) Agent and Regional Nutrition Extension Associate (RNEA) to see how Policy, Service, & Environmental Change Opportunities (PSE) can enhance programming and community development.

ADDITIONAL RESOURCES

NC Extension Resources

(www.ces.ncsu.edu)

Gardening Support, Tips, Troubleshooting, and Other Educational Opportunities

- Extension Horticulture Agents
- Extension Master Gardener Volunteers
- Extension Centers by County

PSE Opportunities

- SNAP-Ed Steps to Health Program

Gardening Resources

- Gardening in Preschool
- NC State Extension Gardening Portal
- Vegetable Gardening
- Early Childhood Plant Toolbox
- A Beginners Guide to Vegetable Garden
- Vegetable Planting Calendars by NC Region
  Eastern, Central, Western
- Home Gardener: Harvesting and Preserving Herbs
- Food Safety in the Garden
- Extension Gardener Handbook

Composting

- Home & Backyard Composting
- Composting

Gardening and Cooking with Children

- Grow For It: Gardening with Children
- Youth Gardening Resources
- At Your Doorstep: A Family Factsheet on Outdoor Play and Learning

Community Gardens

- NC State Extension Community Gardens Portal
- NC State Community Garden Handbook
- Community Gardens Directory

Natural Learning Initiative Resources

(www.naturalearning.org)

INFOSHEETS

https://naturalearning.org/infosheetsleaflets/

A set of 40 "how-to" InfoSheets includes those addressing nature and gardening topics:

01. Benefits of Engaging Children with Nature
07. Teepees
08. Vine Teepee Installation
10. Growing Edibles in Containers
18. Making Newspaper Seedling Pots
19. Starting Veggies Indoors
20. Indoor Plants for Homes and Classrooms
23. Straw Bale Planters
26. Wildlife Gardens
27. Attracting Birds to Outdoor Learning Environments
28. Plants for Outdoor Learning
33. Earth Play Settings
34. Mud Kitchens
35. Natural Construction Settings
36. Dry Stream Beds

GARDENING SERIES

https://naturalearning.org/gardening-series

- **Gardening Activity Guide**
- **Local Foods: Childcare Center Fruit & Vegetable Gardening Series**

01. Growing and Cooking Fruits and Vegetables at Childcare Centers
02. Creating Childcare Center Production Gardens
03. Growing Warm-Season Fruits and Vegetables in Childcare Production Gardens
04. Growing Cool-Season Vegetables in Childcare Production Gardens
05. Snacking and Cooking with Warm-Season Produce from Childcare Production Gardens
06. Snacking and Cooking with Warm-Season Produce from Childcare Production Gardens
07. Composting in Childcare Production Gardens
08. Vermicomposting in Childcare Production Gardens

RELATED RESOURCES

PlayDaze

Engaging Outdoor Activity

https://naturalearning.org/playdaze

Research Brief

Impact of Earl Childhood Outdoor Learning Environments

https://naturalearning.org/research-brief

Nature Play at Home

A Guide for Boosting Your Children's Healthy Development and Creativity

https://naturalearning.org/nature-play-at-home/

MEDIA

Playgrounds to Outdoor Learning Environments

https://youtu.be/x9YOPMensU0

Virtual Field Trip

https://naturalearning.org/vft

"We Change the Culture Here"

https://youtu.be/1YurSTzkEw8

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