

Culture of Wellness in Preschools Head Start Garden Toolkit 2022

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OSU Extension Lucas County

COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES

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OSU Extension Lucas County











OHIO STATE UNIVERSITY EXTENSION

Got Vegetable Gardening Questions?

Gardening is an activity for all ages, abilities, and backgrounds. Every garden plan and growing season is a new experience, so it doesn't matter if you are just starting out or if you've been gardening for generations.

For more information on gardening:

- The county extension office can be a great resource for Ohioans, not only for gardening information, but also other topics such as youth activities, food safety, nutrition, and more. A directory with web links to each county office is available online at extension.osu.edu/locate-an-office.
- The state Agriculture and Natural Resources program offers, Get Answers at <u>agnr.osu.edu/get-answers</u>
- 4H Youth Development Garden and Plant Science project books for purchase extensionpubs.osu.edu/all-publications/4-h/natural-resources/gardening-and-plant-science/
- Ask a Master Gardener <u>mastergardener.osu.edu/ask</u>
- Ohioline connects to hundreds of OSU Extension fact sheets covering a wide array of subjects such as agriculture and natural resources, family and consumer sciences, community development, and 4-H youth development. ohioline.osu.edu/
- Factsheet on soil testing for the garden ohioline.osu.edu/factsheet/hyg-1132
- Celebrate Your Plate find recipes for low-cost, tasty meals that everyone in your family will enjoy celebrateyourplate.org/

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Garden Tips and and Resources

Top 10 Ways to a Better Veggie Garden



10// Good Bug, Bad Bug? -

Knowing the bad ones from the good ones will get you moving in the right direction. Gardeners are best off adopting integrated pest management where they scout, identify, and then control harmful insects. Most plants can take on quite a few bad insects before harm is done. Many times, picking off the bad insects can work. Knowing the insect and its life cycle will also help eliminate the potential destruction. Maintaining the good bugs will help reduce some populations of the bad ones.

9// Lift Your Plants – You can decrease disease pressure immensely if you can change the environment which supports diseases. The best environment for disease? Cool temperatures, darkness and humidity/moisture. So, if you can control the

Author: Eric Barrett, OSU Extension Educator

A well-informed gardener can be happy with their accomplishments in the garden with a few simple guidelines.

Working with and understanding the natural growth of plants will help immensely to get the results you wantwithout all of the extra work.

environment (i.e. – eliminate moisture through proper airflow and sunlight exposure) disease can be controlled or eliminated! Use stakes, trellises, panels, fencing and whatever else you can find toget plants up off the ground. Items need to be strong and sturdy to support plants at their largest size.

8// Prune – Suckering tomatoes, but also thinning their thick canopy will help improve air flow and reduce disease. Pruning is a chore but saves lots of time later. Pruning basics: prune for air flow and sunlight penetration. Make clean cuts. Tomato cages limit your ability to prune and harvest.

7// Pollinate – Yes, bees and other insects can pollinate the plant. Protect ground nesting bees, bumble bees and carpenter bees. But are there other rules?

Sweet corn must be planted in squares, not just rows. They need another plant's pollen to pollinate. Blueberries? Apples? These need another cultivar for full production.

6// Mulch – Using four layers of newspapers will stop most weeds in the vegetable garden for the season. Do this after seeds emerge and transplants are planted. Cover with a thin lay of mulch (grass clippings, bark, compost, etc.) Wetting during application keeps them from moving around. For other mulches, mulching too thick can kill plants. Mulching too thin can leave you with lots of weeds. Mulching takes some work and practice to find what best fits you. Mulching also reduces the splash effect, where soil borne diseases get onto the plant.

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5// Recycle – Compost will help add organic matter to clay for better root penetration. Compost will help sandy soilhold more water and nutrients. Either way, plants will be healthier for the addition. A compost pile can be simple. Start with all yard/garden waste and everything from the kitchen (except oils and meat scraps). Other ways to recycle? Find used stakes for tomatoes, sheets for frost protection, newspapers for mulch and more.

4// Know the Soil – Have you ever used lime on your garden? Is it worth \$20 every couple of years to save \$30 on fertilizer? Only a soil test can steer you in the correct direction. The pH of the soil (chemical charge) can affect how and if your plants can take up certain nutrients. Soil testing is simple and can take all of the guess work out of liming and fertilization. Soils in the valley range from hard clay to coarse sand.

3// Water the Roots – Even though the gardener in the commercial looks happy and the plants look happy when water sprayed all over the tops of plants – neither will be happy for too long. Watering should happen at theroot zone. Use of soaker hoses along the row or slow draining buckets to conserve water and plant health.

2// Cleanup – Many of us do not do a good job cleaning up plant **d**ebris in the fall. This debris left all winter harbors disease into the next year. Pull out plants, rake up de**a**d leaves and get these out of the garden area. Plant a cover crop to hold soil in place and to provide more organic matter for next season's crop.

1// Practice & Learn - The more you grow, the more you will find out what works best for you. Attend classes or gardening events to see how others are improving their gardens. Use the internet to search, but use "university extension" in your search to get the correct answers on how to be the best gardener.

Do you have a Question?

Find answers to your agricultural and natural resources questions from Extension experts!

https://agnr.osu.edu/getanswers

Salad Garden



Benefits of the salad garden:

- Like cooler weather (good to grow in Ohio in the spring and fall)
- Do not take up too much space
- Can grow in the ground, raised beds, or containers
- Fresh, tasty, easy to grow

Would not recommend a salad garden in Ohio if it's...

- Growing in the middle of the hot summer (see description of cool season crops below)
- Growing within easy access for bunnies to eat

Cool season crops are plants that not only prefer, but also thrive during cooler temperature growing conditions. When the weather becomes too warm, the cool-season crops often bolt. Bolting is another way to say that a vegetable plant has started to flower or go to seed.

Cool season crops can be planted before May in the springtime and after July in the summer for a fall harvest. For more details on when to plant, read the seed packets or learn more through your local Ohio State University Extension office extension.osu.edu/lao#county

A few examples of cool season plants for the Salad Garden:

- Lettuce
- Spinach
- Other leafy greens like chard, mustard, kale, arugula, beet greens and turnip greens
- Radishes
- Snow Peas
- Fresh herbs

For more information: <u>lucas.osu.edu/vegetable-gardening</u>









Herb Garden



Benefits of the herb garden:

- Once established, do not necessarily need daily care
- Perennial herbs will return every year
- Taste great!

There are many herbs that grow well in Ohio. This is just a small sample.

Type of plant	Herb Examples
Annuals – plants that compete their life cycle in one growing season. All roots, stems, and leaves of the plants die every year. Many annuals have to be replanted every year but some, like dill easily reseed themselves for the next year.	Basil, rosemary, cilantro/coriander, dill
Perennial – a plant that lives for more than one year. It often look as if they've died back by the end of the year but they return on its own from its crown or root system in the spring. Note: some are difficult to control, meaning they can spread very fast.	Sage, oregano, chives, thyme. While those could be planted in a container, it is not unusual for them to be planted in the ground or a raised bed in order to enjoy that they come back up every year. Mint is an example of an herb that spreads very fast and is difficult to control in the group. One simple solution to this is to only plant mint in a
	container.
Biennial – not as common as annual or perennials, a biennial is a plant that completes its lifecycle in two years by germinating the first year and producing flowers and seeds the next year.	Parsley is a biennial, although it is often grown as an annual.

Reference: https://cfaes.osu.edu/news/articles/horticulture-educator-offers-top-10-tips-for-planting-herbs

For more information: https://lucas.osu.edu/vegetable-gardening



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Grow Sheets

Leaf Lettuce

Lettuce is an easy-to-grow cool-season crop for school gardens that can withstand light frost.

When to plant (spring garden): Lettuce can be planted in most parts of the United States up to 8 weeks before the last expected frost. It can be planted every 10 - 14 days for a continuous harvest. Baby lettuce is ready to harvest 3–4 weeks after planting, depending on weather conditions. Increasing day length and high summer temperatures usually causes seed stalk formation (bolting) and bitter flavor.

When to plant (fall garden): Start planting seeds when students return to school and continue until 6 weeks prior to the first expected fall frost. Lettuce seed germinates slowly when soil temperature is above 80° F. Plant in partial shade to speed germination. Floating row covers, i.e., protective coverings of lightweight materials (e.g., on hoops) that shield plants from the elements, will help to shade late summer/early fall lettuce from direct sunlight and high temperatures.

How to plant: Sow 10 to 20 seeds per foot in rows 8 to 12 inches apart. Leaf lettuce also grows very successfully in a wide bed arrangement when seedlings are thinned to 4 to 8 inches on all sides. Sow seeds evenly, cover lightly with fine soil (¼ inch), and firm gently. Mist or lightly water the soil after planting and keep the soil evenly moist but not too wet until seeds germinate.

Thinning seedlings: When plants are a few inches tall, pull out extra plants so that each remaining plant is 4 to 8 inches from its neighbor. The more space between plants, the larger the plant can grow.

Care of plants:

 Fertilizing: Medium-heavy feeder. Mix organic matter and fertilizer into the soil prior to planting. If plants are growing poorly, fertilize lightly every 2 weeks after planting with compost tea or a liquid fertilizer.

- Watering: Use frequent, light watering to encourage rapid growth, but do not over-water, as this may contribute to root and leaf diseases. Overhead watering should always be done in the morning to give plants time to dry off.
- Weeding: Cultivate carefully, as lettuce is shallow-rooted. Cover the soil around lettuce plants with
 a 1 to 2-inch-thick organic mulch (e.g., sections of
 newspaper covered with straw or grass clippings)
 to maintain soil moisture and suppress weeds.
- **Special Directions:** Floating row covers are very useful in promoting rapid growth in the early spring and minimizing slug and other pest feeding. Lettuce production can be also extended later in the fall with floating row covers (garden fabric stretched over hoops) or cold frames; in the Northern States, heavy snowfall could collapse hoop houses or tear fabric. Some lettuce cultivars may overwinter if healthy 3-week-old transplants are set out around October 15. These small plants will establish a root system and be able to withstand cold weather with protection. When spring arrives they will begin active growth and produce early harvests. Some recommended cultivars for overwintering include Black Seeded Simpson, Waldmann's Dark Green, Salad Bowl, Winter Density, Brune D'Hiver, Winter Marvel, and Arctic King.

Harvesting: Leaf lettuce can be cut as soon as plants are 5 to 6 inches tall—usually 21–30 days from seeding depending on weather conditions. Use sharp scissors to cut older, outer leaves which contain high levels of calcium first. You may wish to harvest every other one of the largest plants to accomplish thinning. You can also let the plants grow to full size (45–50 days from planting) and cut the entire plant at ground level.

Cut and Come Again Harvesting: For continuous harvests of quick-and-easy salad greens, sow a raised bed thickly (about 1 inch apart) with a mixture of your favorite salad greens (with maturity dates close to one another). Shear the plants with sharp scissors when they are 6 to 10 inches tall. Take off 2 to 4 inches or cut them to the crown. They will quickly re-grow if watered and fertilized and be ready to cut a second time 2–3 weeks later. Sow a second bed. Turn under the plants when they become overly mature and bitter.

Spinach

Spinach is a hardy annual plant that grows to a height of 8- to 12-inches. There are two types of regular spinach—smooth leaf and savoy leaf. The savoy types have more texture, but soil and sand tend to catch in the crinkles of the leaves.

When to plant (spring garden): Plant seed as soon as the soil can be loosened, raked, and leveled.

When to plant (fall garden): Plant seed as soon as students return to school.

How to plant: Space seeds 3 inches apart in rows, or broadcast seed evenly in wide rows or beds. Cover with soil, barely covering the seeds, and then tamp down to ensure good soil-to-seed contact. Make several small plantings several days apart.

Note: spinach seed is slow to germinate. You can speed the process by soaking seeds in water for 24 hours prior to planting.

Thinning seedlings: Remove or cut every other plant 2–3 weeks after seedlings emerge so that plants are spaced 6 inches apart. Thinnings may be used in salads or sautéed.

Care of plants:

- Fertilizing: Spinach is a heavy feeder. Incorporate lots of compost and apply a garden fertilizer (according to label directions) prior to planting.
- Watering: Keep plants uniformly supplied with moisture for best performance. Water deeply and regularly during dry periods.

- Weeding: Remove all young weed seedlings by hand and mulch along each side of the row to keep weed seeds from germinating.
- Special Directions: Use floating row covers to exclude pests such as spinach leaf miners and to speed the growth of the plants. Spinach bolts (sends up a flower stalk) as the days lengthen and temperatures rise. Make a final harvest when the plants send up their flower stalks. Because spinach tolerates frost, it is a good crop for the fall garden and with protection can be harvested into December. In mild areas, spinach sown in late fall will overwinter and make new growth in the spring.

Harvesting: Spinach matures in 28–45 days from planting. Cut full-size leaves and new leaves will regrow from the base.

Swiss Chard

Swiss chard (Beta vulgaris var. cicla) is a leafy vegetable in the same species as beet. The word Swiss was used to distinguish chard from French spinach varieties by 19th century seed catalog publishers. The first varieties of this popular leafy vegetable have been traced to Sicily. While tender young Swiss chard leaves are eaten raw in salads, older chard leaves and stems are typically cooked or sautéed.

Some cultivars, such as "Lucullus" and "Fordhook Giant," have cream-colored midribs. Some, such as "Ruby Chard" and "Rhubarb Chard," have red mid-ribs. There are some beautiful cultivars, such as "Rainbow Chard," with multi-colored mid-ribs. All parts of the chard plant contain oxalic acid.

Swiss chard leaves grow vigorously throughout the season, and the plants can reach a height of 3 feet.

When to plant (spring garden): Plant seeds in loose, fertile soil in an area that receives full sun. Plant in early spring, 2-3 weeks before the last spring frost date.

When to plant (fall garden): Plant seed as soon as students return to school.

How to plant: Space seeds 2 inches apart in rows, or broadcast seed evenly in wide rows or beds. Cover with about ½ inch of soil and then tamp down to ensure good soil-to-seed-contact.

Thinning seedlings: Similar to beet seed, Swiss chard seed is really a fruit containing several embryos which will need to be thinned. Thin plants to 4 inches apart when they are about 2 inches high. You can replant the thinned seedlings, but you will need to water them twice daily until they establish new root systems. Continue to thin out plants if plants are growing vigorously before the end of the school year. Large plants need 12- to 18-inch spacing.

Care of plants:

- Fertilizing: Swiss chard is a heavy feeder.
 Incorporate lots of compost and apply a garden fertilizer (according to label directions) prior to planting.
- Watering: Keep plants uniformly supplied with moisture for best performance. Water deeply and regularly during dry periods.
- Weeding: Remove all young weed seedlings by hand and lay down mulch along each side of the row to keep weed seeds from germinating.
- Special directions: Soaking seeds in warm water for 24 hours before sowing will aid germination and may help prevent soil rot problems in cool, spring soil. Use floating row covers to exclude pests, such as leaf miners, and to speed the growth of the plants.

Harvesting: Swiss chard can be harvested while the leaves are young and tender or after maturity when they are larger and have slightly tougher stems. Young leaves (smaller than 4 inches) may be eaten fresh in salads. Mature leaves may be chopped and sautéed. The "ribs" may be eaten like celery. It can be harvested until frost. At any point in the growing season, snip leaves 2 inches above crowns to rejuvenate plants. New, succulent leaves soon will be ready to harvest.



Harvesting Guide

Source: Dig In! Garden Guide USDA Food and Nutrition Service (2013).

Here is a list of fruits and vegetables with a brief description of how to determine when they are ready for harvest and how to harvest them. When this time comes, demonstrate for the students how to safely and correctly harvest each crop and allow the students an opportunity to participate.

Some produce are best harvested using a kitchen scissors. This requires close attention from the teacher and one-on-one instruction to ensure student safety. If this is not a possibility, students should refrain from harvesting such produce. Be sure to use clean harvesting tools.

Beet When the rounded "shoulders" of the beet root appear just above the soil line and are about 1 to 2 inches in diameter, it is time to harvest. Gently pull on the base of the stem, just above the root to harvest.

Broccoli Head is made of tight green buds. Use a serrated knife to cut heads from plant.

Brussels Sprouts Pick/cut sprouts from the stem when they are about 1 to 2 inches in diameter.

Cabbage Head should be at least softball-sized and firm. Cut head from stem using a serrated knife; discard outer leaves.

Carrot Harvest when the orange "shoulders" show above the dirt. Gently pull on the base of the stem, just above the root to harvest.

Collard Greens Cut individual leaves when they are young and tender and approximately 10 inches long using scissors.

Cucumber Cucumbers are ready to harvest when they are large enough to be pickled/sliced (approximately 5 to 6 inches). Separate the fruit from the plant taking care not to break stems of plant. Harvest regularly so plant will continue to produce fruit.

Green Beans Beans are 3 to 4 inches long and crisp. Pluck individual beans from plant, taking care not to damage stems remaining on the plant.

Green Peas Pods are plump and the seeds are almost full size. Use scissors or fingers to remove the pods from the plant.



This material was funded by USDA's Supplemental Nutrition Assistance Program -- SNAP.





Harvesting Guide

Source: Dig In! Garden Guide USDA Food and Nutrition Service (2013).

Kale Harvest individual leaves when they are at least 3 inches long; entire plant can be harvested by cutting at about 2 inches above the soil using scissors.

Leaf Lettuce Pick/cut individual leaves at any time before the plant flowers using scissors.

Mustard Greens Individual leaves or the entire plant can be harvested when the leaves are young and tender using scissors.

Onions The foliage begins to turn yellow, and the visible bulb is thumb-size for green onions, and baseball-size for bulb onion. Gently pull on the base of the stem, just above the root to harvest.

Peppers Pick individual fruit from the plant when it is firm and full in color.

Potato Plants begin to turn yellow and wither. Use a small shovel to gently dig up potatoes for harvest.

Radishes Radishes are the size of a quarter; gently pull on the base of the stem, just above the root to harvest.

Spinach Harvest individual leaves when they are big enough to eat.

Strawberries Fruit is ready when it is completely red; pick fruit by pinching the stem with your finger and thumb about a half-inch behind the berry.

Swiss Chard Harvest when leaves are about 6 inches tall using a scissors to cut leaves at the soil level.

Tomato Ready for harvest when the fruit develops its full color. Pick individual tomatoes from the plant by hand.

Zucchini It is ready for harvest when fruit is 5 to 8 inches long. Pick individual fruit from plant, leaving the remaining plant to produce more fruit throughout the season.



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Weeds in the Vegetable Garden

What is a Weed?

A plant in the wrong place.

An undesirable plant - some, especially poisonous plants can be unsafe - others are not necessarily very harmful, but still undesirable in the garden.

A major challenge of weeds is that they have similar needs to the plants we *want* to grow and they compete with our plants for things like space, water, nutrients, and sunlight. Some weeds attract harmful insects that will easily move to the vegetable plants.

People frequently have different definitions of weeds. For example, some "weeds" are edible, but many people might not eat them.



Two examples are dandelions and lambs quarters. Other plants might be considered either a wildflower or weed. For example, some people call wild violets weeds in the lawn, while others call them wildflowers and use them for beautification and enjoy their edible flowers.

The Best Weed Control is Prevention

Limit adding weeds by making sure transplants (seedlings), or grass or hay mulch, or soil or compost is not already weedy before using in the garden.

Mulch is a great way to control weeds and define where you can walk in the garden. There are different ways to mulch but a very effective way is to use old newspapers and thin layer of mulch such as grass clippings or straw (note: only use grass clippings from lawns that have not been treated with any chemicals).

How to mulch with newspaper: use about four sheets of newspaper, lay them down around the vegetable plants but not over them. Dampen the paper by dunking it quickly in a bucket of water or use a light spray from the hose. The wet paper will lay in the garden and not blow away. Overlap the paper throughout the garden – if there are "cracks" or gaps, the weeds will find their way through. Once the paper is laid, cover the top with a thin layer of mulch. This will help keep the paper in place during the garden season. The paper and mulch will help block out the sunlight, one of the things needed for any plants (including weeds) to grow.

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Control Weeds as Early as Possible

First, identity the plant. Especially when vegetable plants are small, it might be hard to tell them apart from weeds. Some of the reasons people might choose to plant vegetable seeds in straight, labeled rows of plants or on a square-foot grid is to be able to tell the weeds apart from the vegetable plants. If a plant is growing where you didn't plant it, it is likely a weed, and you can remove it when it's small.

Remove Weeds

The oldest form of weed control is pulling the unwanted plants by hand. The University of Kentucky Cooperative Extension Service and Slow Food USA offer some tips:

- When pulling the weed from the soil, hold close to the base to remove the entire plant including the root.
- Depending on your garden, you might use a garden tool like a hoe or hand trowel. Use high quality, ergonomically designed tools to lesson physical strain on your body.
- When using tools like a hoe, shave off the weeds near the soil surface when they are still small (less than 2 inches), and gently break the crust of the soil. Digging too deep could injure vegetable plant roots and also turn up a fresh supply of weed seeds.
- Remove weeds before they flower in order to prevent them from going to seed. If there are no flowers or seeds, you may leave the pulled weeds on the edge of the garden to dry out and become mulch. If there are already flowers and seeds, throw the pulled weeds away.

Weeding with Youth

Young children can certainly work in the garden, but weeding may or may not be a feasible garden chore. If children are not old enough to identify and understand that weeds are different than vegetable plants, wait until they're a little more experienced before pulling weeds out of the ground.

Focus on the identification and characteristics of a single plant and direct the youth to only removed that plant during the weeding activity.

Keep chore time short. Although some gardeners find weeding relaxing, not everyone does. Make a game of weeding (like who can pull five weeds, roots and all?) or limit weeding to five or ten minutes depending on the garden, number of youth and space.

Resources:

The National Gardening Association has an online Weed Identification and Control Library with photos and recommendations for the most common weeds found in lawns and gardens https://garden.org/learn/library/weeds/

Michigan State University Extension has an online turf weed page with photos and descriptions https://www.canr.msu.edu/turf/weeds

Bennet, Pamela, and Maria Zampini. Garden-pedia: An A-to-Z Guide to Gardening Terms. Pittsburg: St. Lynn's Press, 2015.

Home Vegetable Gardening in Kentucky. http://www2.ca.uky.edu/agcomm/pubs/ID/ID128/ID128.pdf

Top 10 Ways to a Better Veggie Garden, Ohio State University Extension by Eric Barrett



Insects in the Vegetable Garden

Good vs. Bad?

There are usually more good insects than bad in the garden. In fact, you might not even notice all the good insects in your garden until you take the time to closely inspect and monitor and learn more.



Lady beetle larvae are considered a beneficial insect.

Beneficials

Good insects are often referred to as "beneficial" since they might be helpful in very different and important ways such as pollinating plants or helping break down organic matter in the compost and some even eat the harmful pests.

Pests

Insects and mites are classified as pests based on their ability to damage plants and reduce the harvest.

Some pests can cause a lot of damage to the garden, but others are more of a nuisance than actually causing damage or destruction.

Identify

Although it is not always easy to identify something if you've never noticed it before, there are resources to help identify and determine if the insect is a beneficial or pest. One of those resources might be your local county Extension office. If you've identified it as a good insect, great! If it's a pest, there will be different management options for control depending on the identification and the number of insects.

Monitor

All gardeners are encouraged to monitor, scout, observe what's going on in their garden! This is part of the fun of gardening and life-long

learning. As you spend time observing what's happening, if there are problems, you will catch them early.

Key Pests in the Vegetable Garden

Pests that feed directly on the harvested part of the plant (roots, stem, leaves, flower, or fruit) are often the most destructive and will need controlled when in large numbers.

One example is the tomato hornworm. It eats so much that it will destroy the tomato plant. Other insects might feed on leaves or parts of the plant that won't be eaten. Many gardens can handle a low number of these pests. In fact, they might offer other benefits to the garden if they are food for beneficial insects. One way to learn more about key pests in the vegetable garden is to learn about what pests may be attracted to the plants that you are growing.

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Key Pests in the Vegetable Garden (continued)

For example, if you don't grow tomatoes, you will probably not be bothered by a tomato hornworm. Some pests are very specific to certain plants, and some insects like aphids, cutworms, flea beetles, and slugs will harm a variety of vegetable plants.

Integrated Pest Management (IPM) is a pest control philosophy, rather than a pest control. It recommends using all options available to control pests and only use chemical pesticides as a last resort. Some of the steps to decrease the risk of harmful pests include keeping the garden and plants healthy and strong.

Examples of Healthy Garden Practices to Help Prevent Insect Damage

Continue to learn about beneficials and pests. Many insects go through different life stages and they might look very different at each stage. Picture the difference between a caterpillar and a butterfly. Another example, the beneficial lady beetle (lady bug) looks drastically different in the larvae stage. At that stage, it looks like a tiny gray and orange alligator! It eats many pests at this stage so it's of value to make them welcome in the garden. Learn to identify insects, then celebrate the beneficials and discourage the pests.

Plant at the recommended times for your area. This will help encourage strong, healthy, plants.

Inspect transplants (seedlings) before you purchase them to make sure they are healthy and not already infested with insects.

If you have diseased plants, remove them from the garden and dispose of immediately to reduce the source of the problem.

Keep up with recommended gardening practices – plants that grow strong and healthy are better able to withstand a minor amount of insect damage compared to poorly growing plants.

Keep out the weeds – in addition to competing with the plants you want, they can also act as host plants and then the insects can easily move from the weeds to the vegetable plants.

Row covers are one tool that some gardeners use to help control pests at certain points in the growing season. Row covers are often a lightweight outdoor fabric used to cover rows. They help to keep out insects but allow the sun and water to reach the plants. For insects that require pollinators, row covers must be removed before those beneficial insects arrive to do their job.

Mechanical removal – large insect pests (like the tomato hornworm) can be removed by hand and disposed. Small, soft-bodied insects like aphids can be washed from plants with a direct steam of water.

As mentioned before, keep observing what's going on in your garden throughout the growing season. If there is minor damage but nothing substantial, most plants will be OK.

If you decide that you must use a pesticide (after trying other steps to manage it), choose the least toxic pesticide and follow all of the instructions carefully. The label is the law.

References:

Vegetable Insects, Managing Insects in the Home Vegetable Garden by Rick E. Foster and John Overmeyer, Purdue University. https://extension.entm.purdue.edu/publications/pubs/veg.html

Organic Pest Control in the Vegetable Garden by Steve Pettis, NC Cooperative Extension, https://go.ncsu.edu/readext?701341

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Fall Vegetable Garden Timeline



Planting a fall vegetable garden is a great way to extend the growing season and enjoy some cool weather crops after the heat of the summer fades away. Some vegetables love cooler weather! In Ohio, it is not unusual for the cool weather plants to grow and be harvested (picked) in the springtime and early summer and then be replanted and harvested again in late summer and fall.

It is important to know the average number of days to harvest for each crop, the cold temperature tolerance of the vegetables, and the average anticipated date of the first frost in your area (around October 15th for Northwest Ohio).

For more details on planting a fall garden, visit go.osu.edu/fallveggarden

WHEN TO PLANT THE FALL GARDEN

Vegetable Crops (SEEDS)	Time to Plant (Seeds)	Average Days to Maturity
Bush beans	Mid July – mid August	50 -65
Beets - roots, (leaves)	Mid July – mid August (early Sept)	60-75 (30-40)
Carrots	Early July – early August	80-90
Chinese cabbage	Mid July – early August	50-70
Chard	Mid July – mid August	50-60
Cilantro	Mid July - late August	45-75
Collards	July	80-90
Kale	Early July – early August	70-80
Kohlrabi	Mid July – mid August	60-70
Lettuce (leaf)	July – late August	40-60
Mustard greens	Mid July – mid August	50-60
Radish	July – mid September	30-40
Snow Peas	Late July – early August	50-70
Spinach	All August	50-60
Summer Squash	Mid July – early August	80-100
Turnips – roots, (leaves)	Early July – mid August	40-75 (30-45)

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Serving Fresh Produce

PRODUCE	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	STORAGE 1
Apples										Cold ²
Asparagus										Cold
Beans, Horticultural					_					Cold
Beans, Lima				_						Cold
Beans, Pole Beans, Snap										Cold
Beets										Cold
Blackberries										Cold
Blueberries										Cold
Broccoli										Cold
Cabbage										Cold
Cantaloupe										Cold
Carrots										Cold
Cauliflower										Cold
Cherries, Sweet										Cold
Cherries, Sour/Pie										Cold
Cilantro			-					_		Cold
Collards										Cold
Concord Grapes Cucumbers										Cold
Currants										Cold
Dill, Dry										Cold
Dill, Seed										Cold
Eggplant										Cold
Elderberries										Cold
Endive & Escarole										Cold
Gooseberries							, and			Cold
Grapes, Table				-						Cold
Kale							1			Cold
Leeks										Cold
Leafy Lettuce										Cold
Mushrooms, Wild										Cold
Mustard Greens Nectarines								_		Cold Warm
Okra										Cool
Onions, Dry										Cool ³
Onions, Green										Cold
Parsley, Herbs										Cold
Parsnips										Cold
Paw Paws										Cold
Peaches										Hard-Warm, Ripe-Cold
Pears										Hard-Warm, Ripe-Cold
Peas, Green				_						Cold
Peppers, Bell					_					Cool
Peppers, Hot Peppers, Sweet/Cubanel					_			_		Cool
Potatoes 4					_					Cool ³
Pumpkins					_					Warm
Radishes							100			Cold
Raspberries, Black										Cold
Raspberries, Purple										Cold
Raspberries, Summer, Red										Cold
Raspberries, Fall, Ever-Bearing, Red/Yell	ow									Cold
Rhubarb										Cold
Spinach Caracteristics										Cold
Squash, Summer/Zucchini Squash, Winter										Warm
Strawberries										Cold
Strawberries (Everbearing)										Cold
Sweet Corn										Cold
Swiss Chard										Cold
Tomatoes										Mature Green-Warm, Ripe-Cool
Turnip Greens										Cold
Turnips, Fall										Cold
Watermelon										Cool
GREENHOUSE/HYDROPONIC										
Cucumbers, Long, Seedless										Cool
Herbs Lettuce										Cool
Mushrooms										Cool
Peppers					- COMMONS	MODIFICATION.				Cool
Tomatoes										Mature Green-Warm, Ripe-Cool



Ohioline Produce Fact Sheets

Ohioline is an information resource produced by Ohio State University Extension. The fact sheets on Ohioline provide cutting-edge, scientifically-based information generated via research conducted by Extension and other Ohio State faculty and staff, often in collaboration with other land-grant university colleagues.

Visit https://ohioline.osu.edu/ and enter the Fact Sheet Number to find any of the resources below.

Fact Sheet Name	Fact Sheet Number
Selecting, Storing, and Serving Ohio Apples Ohioline (osu.edu)	HYG-5507
Selecting, Storing, and Serving Ohio Asparagus Ohioline (osu.edu)	HYG-5508
Selecting, Storing, and Serving Ohio Beans Ohioline (osu.edu)	HYG-5509
Selecting, Storing, and Serving Ohio Beets Ohioline (osu.edu)	HYG-5510
Selecting, Storing, and Serving Ohio Blueberries, Blackberries, and Raspberries Ohioline (osu.edu)	HYG-5511
Selecting, Storing, and Serving Ohio Cherries Ohioline (osu.edu)	HYG-5515
Selecting, Storing, and Serving Ohio Eggplant Ohioline (osu.edu)	HYG-5517
Selecting, Storing, and Serving Ohio Grapes Ohioline (osu.edu)	HYG-5518
Selecting, Storing, and Serving Ohio Greens Ohioline (osu.edu)	HYG-5519
Selecting, Storing, and Serving Ohio Kohlrabi, Rutabagas, and Turnips Ohioline (osu.edu)	HYG-5521
Selecting, Storing, and Serving Ohio Melons Ohioline (osu.edu)	HYG-5523
Selecting, Storing, and Serving Ohio Onions Ohioline (osu.edu)	HYG-5524
Selecting, Storing, and Serving Ohio Peaches Ohioline (osu.edu)	HYG-5525
Selecting, Storing, and Serving Ohio Pears Ohioline (osu.edu)	HYG-5526
Selecting, Storing, and Serving Ohio Peas Ohioline (osu.edu)	HYG-5527
Selecting, Storing, and Serving Ohio Peppers Ohioline (osu.edu)	HYG-5528
Selecting, Storing, and Serving Ohio Potatoes Ohioline (osu.edu)	HYG-5529
Selecting, Storing, and Serving Ohio Strawberries Ohioline (osu.edu)	HYG-5531
Selecting, Storing, and Serving Ohio Squash and Pumpkin Ohioline (osu.edu)	HYG-5530
Selecting, Storing, and Using Fresh Herbs Ohioline (osu.edu)	HYG-5520



This material was funded by USDA's Supplemental Nutrition Assistance Program -- SNAP.





Fresh, Safe Garden Produce

Preventing contamination is the most important part of food safety in fresh produce and it starts in the vegetable garden. Follow these steps to promote food safety with fresh, garden produce.

In the Garden

Be familiar with the water source for the garden. If using well water, test the water at least once a year to make sure it meets the Environmental Protection Agency (EPA) standards.

Use compost safely. Don't add animal waste, including pet waste, meat scraps or dairy product waste to the compost bin or soil.

Try to keep wild and domestic animals out of the garden.

When harvesting or picking food, check to make sure the fruits and vegetables are not bruised or diseased.

Brush, shake or rub off extra soil in the garden when harvesting. It will still need to be washed in the kitchen, but there won't be extra dirt in the home.

Transporting Produce

Use clean, food grade containers for harvesting fresh produce.

If there is a short travel time between the community garden to the kitchen, the produce may be transported at room temperature. For longer trips or when it is very hot outside, consider using a cooler to transport produce.

Prepare & Serve

Always wash hands with warm soap and water for at least 20 seconds before preparing and eating food.

Keep all kitchen surfaces and tools clean. Utensils can be cleaned with hot water and soap.

Rinse fruits, vegetables and herbs under clean running water. Using soap, detergent or bleach to wash food is not necessary. Types of fresh produce vary widely, from sturdy root vegetables to delicate berries. The recommended methods of washing depend on the type and characteristics of the produce, such as using a vegetable brush to scrub root vegetables and a strainer to gently rinse berries. The best time to wash produce is just before eating or cooking.

Remove and throw away bruised or damaged portions of fruits and vegetables when preparing to cook them or before eating them raw.

Refrigerate all cut, peeled or cooked fresh fruits and vegetables within two hours. Refrigerated foods need to be stored at 40°F or cooler.

Throw away any fruit or vegetable that will *not* be cooked if it has touched raw meat, poultry or seafood.

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Home Food Preservation

Use only reputable, up-to-date sources like the National Center for Home Food Preservation or OhioLine factsheets for recipes that are validated for safety.

Canned food must be properly processed the correct amount of time.

It is important to remember that many vegetables must be pressure canned. Water bath processing is generally used for high acid fruits, tomatoes, and pickles.

Following a recipe from the sources above will help ensure the correct process is used.

Sharing the Harvest

Share only high-quality fresh produce. If it is too ripe for you to use, it will not be useful to others.

Home preserved foods should not be accepted by food banks or food pantries. Fresh produce may be accepted.

When sharing fresh produce, follow all food safety recommendations including using food safe containers and following the food transportation tips.

Following these steps will help with safely enjoying fresh vegetables, fruits and herbs grown in Ohio!

Useful References

Live Smart Ohio is written by Family and Consumer Sciences educators from The Ohio State University.

Learn more about Food, Mind & Body, Money, and Family & Relationships at

livesmartohio.osu.edu



Handling Fresh Produce in Classrooms*

Guidance for School Nutrition Staff

- Wash hands thoroughly with soap and water prior to handling or serving fresh fruits and vegetables to students.**
- Pre-package cut produce into single-serve, closed or covered containers or individually sealed bags.
- Consider packaging whole produce, such as oranges, apples, plums, etc, in bags or wrap.
- Provide condiments, such as ranch or yogurt dip, in single-serve portions to minimize cross-contamination.
- Provide wrapped, disposable utensils to students, if needed.
- Deliver produce to classrooms immediately prior to service.
- Use a clean, sanitized, and calibrated thermometer to check food temperatures. Cut produce should be 41°F or below. Record produce temperatures when delivered to the classroom.
- Use coolers with ice, ice packs, or mobile refrigerated carts to keep produce cold if holding it in classrooms prior to service.
- Return to classrooms to pick up leftover produce after service.
- Discard all leftover cut produce, such as veggie sticks, sliced apples, sliced oranges, or melon.
- Train classroom teachers and staff at the beginning of each school year about hand-washing, controlling time/temperature, and preventing cross contamination.





^{*}These best practices are based on the FDA Food Code. Follow the food code for your local or state jurisdiction. Consult with your local health department if you have any questions. https://www.fda.gov/food/retail-food-protection/fda-food-code

^{**}For hand washing information refer to the Wash Your Hands: Educating the School Community resource, available at: https://professionalstandards.fns.usda.gov/content/wash-your-hands-educating-school-community.



Handling Fresh Produce in Classrooms, continued

Guidance for Teachers and Aids

- Wash hands thoroughly with soap and water prior to handling or serving fresh fruits and vegetables to students.*
- Allow time for students to wash their hands with soap and water prior to eating fresh produce, if possible.
- Use hand sanitizers if soap and water are not available. Hand sanitizers alone kill most, but not all, types of germs.
- Keep produce cold, or serve produce as soon as possible after it is delivered to the classroom.
- Do not serve any cut produce that has been held at room temperature for more than 2 hours or above 90 °F for more than one hour.**
- Distribute produce or allow students to select pre-packaged produce to minimize potential contamination.

Follow the Food Code for your local or state jurisdiction. Consult your school district's food safety plan for appropriate actions when temperature standards are not met. Ask your local health department if you have any questions.

*For hand washing information refer to the *Wash Your Hands: Educating the School Community* resource: https://professionalstandards.fns.usda.gov/content/wash-your-hands-educating-school-community.

**Source: The Partnership for Food Safety Education. https://www.fightbac.org/.

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Teacher Tips for Taste Tests

Being a Positive Role Model

- Always have a portion of the Taste Test or Food Experience recipe.
- Students will be more willing to try the recipe if you are eating with them and model how to try new foods.
- Offer a second helping once the student has finished the first portion.
- Be a positive role model and be adventurous about trying new things.
- Encourage the student to do the same. The goal is for all children to at least try one bite of the recipe.
- However, no child should be forced or criticized if they prefer not to try the recipe.
- If you like the recipe, share your enthusiasm and positive comments.



- Remember that it takes multiple tries of a new food to become accustomed to it.
- Give yourself and the food a chance.
- If the students participated in the food preparation, compliment the students on the recipe

 they may have participated in making the snack. Thank them for their hard work and for making delicious food (if they did this)
- Ask the children to explain how they made the food (ingredients, stirring, measuring, etc.). They will be eager to talk about their hard work and the recipe.
- Keep the table conversation pleasant. Talk about positive things and discourage the children from talking about unpleasant topics or openly criticizing the food offerings.
- Remind them to respect the feelings of their friends and teachers who prepared the food for them.

Source: Farm to Preschool Training Manual, Occidental College (2013).



This material was funded by USDA's Supplemental Nutrition Assistance Program -- SNAP.





Teacher Tips for Taste Tests

Introduce the fruit or vegetable

- 1. Give its name in English, in Spanish (or other language appropriate to the class). Ask the children if they know of the item name in other languages.
- 2. Share any other general information about the fruit or vegetable.
- Ask students to use their senses to describe the fruit or vegetable. Talk about the color, the outside texture and the inside texture (if it's something you can cut open), the smell. Ask for predictions about the sound it will make when they it the food.

Taste the produce

- 1. After distributing the food sample to students, allow them time to look, touch, smell, taste and listen to the food.
- 2. Questions to ask: How does this taste? What is the texture like when you eat it? Have you eaten this before? Was it crunchy or quiet? Was it sweet? Spicy? Sour?

Record the responses

- 1. Create a chart to record the students' reactions to the food. Below is an example of a chart you can create with the help of the class.
- 2. Red= No Thank You, Yellow=Maybe Next Time, Green= Yum!
- 3. Have students put a sticker in the appropriate column of the "Taste Test" sheet.
- 4. Encourage all students to keep trying new foods.

5			
4			
3			
2			
1			
	No Thank You	Maybe Next Time	Yum!

Source: Farm to Preschool Training Manual, Occidental College (2013).

This material was funded by USDA's Supplemental Nutrition Assistance Program -- SNAP.





Start simple with MyPlate

Vary Your Vegetables



Healthy eating is important at every age. Eat a variety of fruits, vegetables, grains, protein foods, and dairy or fortified soy alternatives. When deciding what vegetables to eat, choose options that are full of nutrients and limited in added sugars, saturated fat, and sodium. Start with these tips:



Start your day with vegetables

Add leftover cooked vegetables to your omelet or breakfast wrap. Or, add spinach to a morning smoothie and enjoy a burst of flavor and nutrition!



Add variety to salads

Make your salad pop with color and flavor by including corn kernels, radish slices, or diced red onions. Include seasonal vegetables for variety throughout the year.



Try a stir-fry

Stir-fry vegetables like carrots, shredded cabbage, greens, and low-sodium jarred mushrooms for a quick meal. Add some tofu as a protein source.



Spruce up your sandwich

Add spinach or some thinly sliced sweet onions to your favorite sandwich or wrap for extra flavor and a little crunch.



Go for a dip or a dunk

Enjoy baked potato wedges, cucumber slices, or cauliflower pieces with a homemade Italian dressing or dunked into a low-fat dip or hummus.



Take vegetables on the go

Carry along some crunchy carrot, celery, or jicama sticks. A small container of cherry tomatoes or sugar snap peas also makes an easy snack.





Focus on Whole Fruits



Healthy eating is important at every age. Eat a variety of fruits, vegetables, grains, protein foods, and dairy or fortified soy alternatives. When deciding what fruits to eat, choose options that are full of nutrients and limited in added sugars, saturated fat, and sodium. Start with these tips:



Include fruit at breakfast

Top cereal with your favorite seasonal or frozen fruit, add bananas or chopped apples to pancakes, or mix raisins into hot oatmeal.



Take fruit on the go

Fruits like oranges, bananas, and apples are great portable snacks. You can also bring along a can of mandarin oranges or pineapple chunks packed in water.



Make your own trail mix

Combine one or two favorite breakfast cereals with dried cranberries and raisins. Bring for a snack in a small sealable bag or container.



Enjoy fruit as a snack

Make fruit kabobs using melon chunks, bananas, and grapes. Top with a light yogurt sauce for a fruity snack or side dish.



Add fruit at dinner

Chop up a combination of tropical or seasonal fruits to make a fruit salsa to top fish or chicken, or add fruit like grapefruit sections, apple wedges, or grapes to a tossed salad.



Keep fruit on hand

Cut up fruit and place in a bowl in the refrigerator. Put the bowl at the front of the shelf so that it's the first thing you see when you open the door.



Recipes



Creamy Vinaigrette

PREP TIME: 10 minutes SERVES: 4

EQUIPMENT NEEDED

Jar with lid, or small bowl Fork or whisk Measuring spoons Measuring cups

INGREDIENTS

½ cup olive oil ¼ cup white or red wine vinegar, or fresh lemon juice 2 tablespoon plain, low fat yogurt 1/2 teaspoon kosher salt 1/4 teaspoon kosher salt

INSTRUCTIONS

- 1. Add all ingredients in jar, closing the lid tightly- shake it up! OR Add all ingredients to a bowl- and whisk away!
- 2. Taste test! Test a small amount on a piece of lettuce. Add additional ingredients if needed.
- 3. Use right away or cover and refrigerate for up to one week.

Recipe Source: Chop Chop Family Magazine



This material was funded by USDA's Supplemental Nutrition Assistance Program -- SNAP.





Green Goddess Dressing

PREP TIME: 10 minutes SERVES: 4

EQUIPMENT NEEDED

Cutting board
Lidded container
Knife (ask Adult for help)
Measuring spoons
Measuring cups
Blender of food processer (ask Adult for help)

INGREDIENTS

1/2 ripe avocado (pitted, peeled and chopped)

1 garlic clove

2 scallions (roots trimmed off; green and white parts chopped)

2 tablespoons white wine vinegar or fresh lemon juice

1/4 cup plain low fat Greek yogurt 1/4 cup fresh parsley or basil, chopped

1 tablespoon chopped fresh tarragon leaves or

dried tarragon 1/4 cup olive oil 1/2 teaspoon salt

INSTRUCTIONS

- 1. Put avocado, garlic, scallions, vinegar or lemon juice to blender/food processor and blend until smooth (with Adult help)
- 2. Add parsley/basil and tarragon; blend until smooth.
- 3. Add olive oil and salt; process until completely blended. Taste test on lettuce. Add more vinegar or salt as needed.
- 4. Use right away or refrigerate for up to three days.

Recipe Source: Chop Chop Family Magazine



This material was funded by USDA's Supplemental Nutrition Assistance Program -- SNAP.





Ranch Dressing

PREP TIME: 10 minutes SERVES: 4

EQUIPMENT NEEDED

Cutting board
Medium sized bowl
Knife (ask Adult for help)
Measuring spoons
Measuring cups
Spoon for mixing

INGREDIENTS

1/2 cup plain low-fat Greek yogurt
2 tablespoons olive oil
2 teaspoons white vinegar or lemon juice
½ teaspoon mustard (your choice!)
1 teaspoon finely chopped onion or ½ teaspoon onion powder
1 small garlic clove minced or ¼ teaspoon garlic powder

parsley leaves or chives; or 1 teaspoon dried dill

1-2 tablespoons finely chopped fresh dill,

INSTRUCTIONS

- 1. Put all ingredients in bowl and mix well.
- 2. Taste test! Use a small carrot stick to taste. Need more vinegar or salt? Add as needed.
- 3. Use right away or cover and refrigerate for up to three days.

Recipe Source: Chop Chop Family Magazine



This material was funded by USDA's Supplemental Nutrition Assistance Program -- SNAP.





Honey Mustard Dressing

PREP TIME 5 minutes Serves 7

EQUIPMENT NEEDED

Measuring Cups and Spoons Jar with lid

INGREDIENTS

1/4 cup vegetable oil 1/4 cup vinegar 2 tablespoons honey

2 teaspoons mustard (2 Tablespoons)

2 teaspoons lemon juice 1/4 teaspoon black pepper

INSTRUCTIONS

- 1. Put all the ingredients in a jar or bottle with a lid.
- 2. Put on the lid. Shake well.
- 3. Chill in the fridge for at least 1 hour before serving.

Notes: Try this dressing on cold cooked pasta and vegetables. After serving, keep any leftover dressing in the fridge.

Recipe Source: USDA MyPlate Kitchen

https://www.myplate.gov/recipes/supplemental-nutrition-assistance-program-snap/honey-

mustard-dressing



This material was funded by USDA's Supplemental Nutrition Assistance Program -- SNAP.





Cuban Salad

PREP TIME 20 minutes Serves 4

EQUIPMENT NEEDED

Measuring Cups and Spoons Jar with lid Knife Cutting Board Bowl Serving Tongs or Spoons

INGREDIENTS

For the Dressing:

3 tablespoons vegetable oil 1/4 cup Fresh lime juice (1 large or 2 small limes) 1 teaspoon garlic (peeled and minced) 1/4 teaspoon Kosher salt 1/4 teaspoon black pepper

For the Salad:

1 head Romaine lettuce (washed, patted dry with paper towels, and torn into bite-size pieces)

2 large tomatoes (diced) 1 red onion (finely diced) 6 radishes (thinly, sliced)

INSTRUCTIONS

To make the dressing:

1. Put the oil, lime juice, garlic, salt, and pepper in the small bowl and mix well. Lemon juice can be used instead of lime juice.

To make the salad:

- 1. Put the lettuce, tomatoes, onion, and radishes in the mixing bowl and toss to combine. White onion can be used instead of red onion.
- 2. Pour the dressing over the lettuce mixture and toss. Serve right away.

Notes: For protein, add low-sodium canned tuna or salmon on top of the salad.

Recipe Source: USDA MyPlate Kitchen https://www.myplate.gov/recipes/myplate-cnpp/cuban-salad



This material was funded by USDA's Supplemental Nutrition Assistance Program -- SNAP.





All Kale Caesar

PREP TIME: 30 minutes SERVES: 4

EQUIPMENT NEEDED

Cutting board
Sharp knife (adult needed)
Blender or food processor (adult needed)
Measuring spoons
Measuring cups
Grater
Large mixing bowl
Lidded container
Tongs or salad servers

INGREDIENTS

2 garlic cloves, peeled
2 anchovy fillets
1/2 cup fresh lemon juice (about 2 lemons)
1/2 cup olive oil
1/4 teaspoon kosher salt
6 cups kale leaves, stripped off of their stems
1 cup croutons

INSTRUCTIONS

- 1. Make the dressing: Put the garlic cloves, anchovies, mustard, and lemon juice in the blender or food processor fitted with the steel blade and process until thoroughly combined. While the machine is running, very, very gradually add the olive oil through the feed tube, at first 1 tablespoon at a time, then gradually increasing the amount until you've added it all. Add the salt and add pepper to taste. Use right away, or pour into the container, cover, and refrigerate up to 2 weeks.
- 2. Stack and bunch the kale leaves together on the cutting board and use the knife to cut across the stack so that you end up with skinny slivers of kale.
- 3. Put the kale, croutons, and cheese in the bowl and drizzle with about a quarter of the dressing. Toss and taste the salad and add more dressing if it needs it, then toss again.



This material was funded by USDA's Supplemental Nutrition Assistance Program -- SNAP.





Cucumber Salad

PREP TIME 10 minutes Serves 2

EQUIPMENT NEEDED

Measuring Cups and Spoons Knife

Kniie

Cutting Board

Bowl

Serving Tongs or Spoons

INGREDIENTS

- 1 cucumber (large, peeled and thinly sliced)
- 2 tablespoons yogurt, low-fat
- 1 tablespoon vinegar
- 1 tablespoon vegetable oil
- 1 tablespoon water
- 1 teaspoon dill weed (optional)
- 1 dash pepper (optional)

INSTRUCTIONS

- 1. Peel and thinly slice cucumber.
- 2. Mix all other ingredients in the mixing bowl.
- 3. Add cucumber slices and stir until coated.
- 4. Chill until serving.

Recipe Source: USDA MyPlate Kitchen

https://www.myplate.gov/recipes/supplemental-nutrition-assistance-program-

snap/cucumber-salad



This material was funded by USDA's Supplemental Nutrition Assistance Program -- SNAP.





Spinach Salad with Apples & Raisins

PREP TIME: 10 minutes SERVES: 6

EQUIPMENT NEEDED

Large bowl
Small bowl
Measuring spoons
Measuring cups
Spoon for mixing

INGREDIENTS

Pinch of garlic powder

2/3 package (10oz) baby spinach or kale/other greens
1 ½ apples, chopped (1-2 apples)
1 cup raisins
½ cup canola oil
¼ cup apple cider vinegar
½ cup sugar

INSTRUCTIONS

- 1. Combine spinach, apples and raisins in large bowl.
- 2. Mix all dressing ingredients and pour over salad just before serving.

Recipe Source: USDA MyPlate Kitchen

https://www.myplate.gov/recipes/supplemental-nutrition-assistance-program-snap/spinach-salad-apples-and-raisins



This material was funded by USDA's Supplemental Nutrition Assistance Program -- SNAP.





Sunshine Salad

PREP TIME: 20 minutes SERVES: 6

EQUIPMENT NEEDED

Large bowl
Small stockpot
Measuring spoons
Measuring cups
Sharp knife (ask adult for help)
Cutting board
Large serving spoon or salad tongs

INGREDIENTS

5 cups spinach (packaged, washed, dried well) ½ red onion, sliced thin ½ red pepper, sliced
1 whole cucumber, sliced thin
2 oranges, peeled and chopped into bite sized pieces
1/3 cup vinaigrette dressing

INSTRUCTIONS

- 1. Wash hands
- 2. Toss all ingredients in large bowl. Add dressing. Toss again.
- 3. Serve immediately.

Recipe Source: USDA MyPlate Kitchen

https://www.myplate.gov/recipes/supplemental-nutrition-assistance-program-snap/sunshine-salad



This material was funded by USDA's Supplemental Nutrition Assistance Program -- SNAP.





Gazpacho Soup

PREP TIME: 20 minutes SERVES: 6

EQUIPMENT NEEDED

Cutting board Knife (ask Adult for help) Measuring spoons Measuring cups

INGREDIENTS

1 tomato

1 cucumber

2 green peppers

1/4 teaspoon garlic powder

1 ½ cups water

2 tablespoons vegetable oil

3 tablespoons red wine vinegar

1/4 teaspoon black pepper

INSTRUCTIONS

- 1. Chop tomato, cucumber, and green pepper in small pieces (with Adult help!)
- 2. Put all ingredients in large glass or plastic bowl.
- 3. Stir well with wooden or plastic spoon
- 4. Chill in fridge 1-2 hours before serving.

Source: USDA MyPlate; Pennsylvania Nutrition Education Network



This material was funded by USDA's Supplemental Nutrition Assistance Program -- SNAP.





Tabbouleh

PREP TIME: 20 minutes SERVES: 6

EQUIPMENT NEEDED

1 Medium and 1 small bowl Small stockpot Measuring spoons Measuring cups Sharp knife (ask adult for help) Cutting board

INGREDIENTS

1 cup water

½ cup bulger, uncooked

1/4 cup fresh cucumber, peeled and diced

3/4 cup fresh tomatoes, diced

2 tablespoons chopped parsley

2 tablespoons chopped fresh mint leaves

2 tablespoons chopped green onion, include

tops

1 clove fresh minced garlic

½ tablespoon olive oil

2 tablespoons lemon juice, fresh or bottled

1/4 teaspoon salt

1/4 teaspoon ground black pepper

INSTRUCTIONS

- 1. Bring water to a rolling boil in small stockpot.
- 2. Add bulger; cover and turn off heat. Leave stock pot covered on hot burner for 20 minutes. Drain any excess liquid and fluff with fork. Set aside and allow bulger to cool to room temperature.
- 3. In medium bowl, mix together bulger, cucumber, tomato, parsley, mint, green onion, and garlic.
- 4. Prepare dressing in small bowl; whisk together olive oil, lemon juice, salt, and pepper.
- 5. Combine dressing with other ingredients and mix well.
- 6. Refrigerate. Chill for at least 2 hours to allow flavors to fuse.

Recipe Source: USDA Food and Nutrition Service

https://fns-prod.azureedge.us/sites/default/files/resource-files/MCRTabbouleh.pdf



This material was funded by USDA's Supplemental Nutrition Assistance Program -- SNAP.







Herbed Garden Pizza

Servings 3 | Prep time 30 mins. | Total time 40-50 mins.

Equipment:Large mixing bowl, Measuring cups and spoons, Towel, 12-inch pizza pan or large baking sheet, Cutting board, Small mixing bowl

Utensils: Whisk or fork, Knife

Ingredients

For the crust

- 1 1/3 cups whole-wheat flour
- 1 teaspoon baking powder
- 1/2 cup fat-freemilk
- 2 tablespoons olive or vegetable oil

For the pizza

½ cup tomato sauce

- 1 clove garlic, minced OR ½ teaspoon garlic powder
- 2 teaspoons Italian seasoning
- 2 tablespoons olive or vegetable oil
- 2 cups thinly sliced vegetables (sliced tomatoes, spinach, red onion, bell pepper, mushrooms, chopped broccoli, etc.)

¾ cup low-fat grated mozzarella cheese

Nutritional Information:

Calories 470 Total Fat 25g Sodium 580mg Total Carbs 48g Protein 17g

Instructions

For the crust

- 1. Before you begin wash your hands, surfaces, utensils, and vegetables.
- 2. Preheat oven to 400°F.
- 3. In a large bowl, whisk together flour and baking powder.
- 4. Add milk and oil. Stir until a dough forms. If dough is too dry, continue to add milk, 1-2 teaspoons at a time, until the dough comes together in a ball.
- 5. Remove dough from bowl. Knead, using your hands, about 10 times. Form into a ball and return to bowl.
- 6. Cover bowl with a towel and allow the dough to rest for 10 minutes.
- 7. Remove dough from bowl onto a lightly floured clean counter surface. Roll dough into a 12-inch circle and place on a nonstick baking sheet or pizza pan.
- 8. Use a fork to poke the dough 8-10 times. Bake in preheated oven for 8 minutes.
- 9. Remove from oven and allow to cool for a few minutes before adding toppings.

For the pizza

- 1. In a small bowl, mix the garlic or garlic powder and Italian seasoning with oil.
- 2. Use your fingertips or a pastry brush to spread the oil mixture over the pizza crust.
- 3. Spread spaghetti sauce evenly over the pizza crust leaving a 1-inch border around the edges.
- 4. If using sliced tomatoes, spread them on top of the tomato sauce first.
- 5. Distribute remaining vegetables evenly across the pizza
- 6. Sprinkle grated cheese over the vegetables.
- 7. Bake 15-20 minutes until cheese is melted and the crust has browned.





Supreme Veggie Grilled Cheese

Servings 2 | Prep time 10 mins. | Total time 20 mins.

Equipment: Cutting Board, Measuring Cups

and Spoons

Utensils: Chef Knife, Butter Knife, Spatula

Ingredients

1 medium pepper (red, yellow, or green), sliced

1/2 onion, sliced

4 slices whole wheat bread

1/4 tablespoon butter or margarine

1/8 teaspoon garlic powder

4 slices low-fat cheddar cheese

1 cup spinach, rinsed

Instructions

- 1. Before you begin, wash your hands, surfaces, utensils, and produce.
- 2. Lay out 4 slices of bread. Spread the outside of each slice of bread thinly with butter or margarine.
- 3. Lightly sprinkle outside of bread with garlic powder on top of butter or margarine. These sides of the bread will be placed down to be grilled in the pan.
- 4. Place a slice of cheese on bread. Add in layers of spinach leaves, peppers, and onions on two slices of bread. Add the second slice of cheese. Top with another piece of bread, keeping garlic powder and butter or margarine on the outside.
- 5. Heat a skillet to medium-low. Lay sandwiches in skillet. Cover with a plate, lid, or aluminum foil.
- 6. Heat sandwiches until cheese melts and bread is toasted, 2-3 minutes. Flip and toast other side until golden.

Nutritional Information:

Calories 370 Total Fat 13g Sodium 660mg Total Carbs 40g Protein 23g





Vegetable Quesadilla

Servings 4 | Prep time 10 mins. | Total time 25 mins.

Equipment: Cutting board, Measuring cups and spoons, Can opener, Skillet, Plate to hold vegetables Utensils: Knife, Spatula

Ingredients

Non-stick spray

2 teaspoons olive or vegetable oil

2 cups chopped vegetables (Choose any vegetables that are in season or whatever you have on hand. We suggest: zucchini, broccoli, bell pepper, onion, or spinach)

Cooking spray

4 8-inch whole-wheat tortillas

1 cup canned black beans, drained and rinsed

1 cup reduced-fat shredded cheddar cheese

1/2 cup salsa, for serving

Nutritional Information: Calories 320 Total Fat 10g Sodium 870mg Total Carbs 43g Protein 17g

Instructions

- 1. Before you begin wash your hands, surfaces, utensils, and vegetables.
- 2. Add oil to skillet and heat over medium until the oil is shimmering.
- 3. Add vegetables to pan and cook for 4-6 minutes, stirring occasionally, until tender. Remove from pan and set aside.
- 4. To prepare quesadillas, place tortillas on a clean surface. Cover half of each tortilla with 2 tablespoons of cheese, 1/4 cup black beans, and 1/4 of the cooked vegetables. Sprinkle with an additional 2 tablespoons of cheese. Fold the empty halves of the tortillas over the fillings to create a half-moon.
- 5. Lightly coat the same pan with cooking spray. Place 2 quesadillas back to back in the center of the pan, with the folded sides touching. Cook on medium for 2-3 minutes, or until the bottom of the tortillas begin to brown.
- Carefully flip each quesadilla. Cook for an additional 2-3 minutes, or until cheese is melted and bottoms of tortillas are browned.
- 7. Repeat steps 5 and 6 to cook the remaining 2 quesadillas.
- 8. Cut each quesadilla into four triangles. Serve warm with salsa.





Veggie Pizza Bites

Servings 4 | Prep time 10 mins. | Total time 20 mins.

Equipment: Cutting board, Baking sheet **Utensils:** Knife, Measuring spoons and cups

Ingredients

1 large zucchini or eggplant sliced into ¼-inch slices 1/8 teaspoon salt 1/8 teaspoon pepper ½ cup low sodium tomato sauce 3/4 cup shredded part-skim mozzarella cheese 1/2 cup miniature pepperoni slices (optional) Minced fresh basil (optional)

Instructions

- 1. Before you begin wash your hands, surfaces, utensils, and vegetables.
- 2. Preheat broiler. Line baking sheet with aluminum foil and/or spray with non-stick vegetable oil spray.
- 3. Arrange zucchini or eggplant slices in a single layer on baking sheet.
- 4. Broil 3-4 inches from the heating element for 2 minutes per side.
- 5. Remove from oven and sprinkle zucchini or eggplant with salt and pepper. Top with tomato sauce, cheese and pepperoni (if using).
- 6. Broil 3-4 minutes or until cheese is melted.
- 7. Remove pizzas from oven and sprinkle with basil (if using).

Nutritional Information:

Calories 110 Total Fat 4.5g Sodium 220mg Total Carbs 12g Protein 7g



Infused Water with Ohio Local Foods

HYG-5363

Family and Consumer Sciences

Date: 11/07/2017

Patrice Powers-Barker, Extension Educator, Family and Consumer Sciences, Lucas County

Infused water is a healthy alternative to beverages that are high in sugar. It is as simple as adding some clean, rinsed and sliced produce and herbs to your glass or pitcher of water. There is no right or wrong way to make infused water, but these tips might enhance the flavor experience:

- Depending on the added ingredients, either slice, chop or lightly mash fruits or vegetables, and either tear or julienne fresh herb leaves.
- Although the flavored water will be served in a single-sized glass, it could be made in either a drinking glass or a larger amount in a water pitcher.
- No special kitchen equipment is needed, although there are pitchers and water bottles designed to contain the produce so those ingredients are not floating in the water when it is time to drink it.
- Infused water could be served immediately after it is mixed, but it will not have the maximum amount of flavor. It's very nice chilled. It is recommended that the water is chilled in the refrigerator from 30 minutes to overnight for optimum flavor. Often, the longer it is chilled, the more flavor it will have.
- As in any food or beverage preparation, do not forget to wash hands with soap and water before handling the food, as well as wash all produce with clean running water. Use clean containers and sanitize preparation surfaces before starting.
- For food safety, treat the infused water as you would treat any other refrigerated food. The water can be enjoyed today, stored in the refrigerator until tomorrow or freeze it for longer storage. Do not take a batch of infused water from a previous day and add to it—go ahead and make a fresh pitcher!
- The produce used in infused water is often thrown away in the trash or down the disposal. Don't forget, the kitchen compost is always a great option for these waterlogged ingredients.
- Please remember that to gain the most nutrition benefits from fruits and vegetables,
 it is recommended that you eat the produce. While infused water is a great way to
 stay hydrated, these will not count as your servings of fruits or vegetables for the
 day. The next time you are slicing Ohio produce to eat, consider adding a handful to
 your water pitcher. Infused water can be low-cost by using ends and pieces of
 produce that are not going to be used for meal preparation. Because it's so easy to

make, and there is not a right or wrong recipe to try or invent, get the entire family involved!





There is nothing wrong with purchasing lemons and limes at the grocery store, but Ohioans are fortunate to have many options of flavors growing in containers, backyards, community gardens, school gardens and farms across the state.

OHIO FRUITS TO FLAVOR WATER

- Berries strawberries, raspberries, blackberries, mulberries, blueberries
- Melons cantaloupe, honeydew, watermelon
- Apples, pears, peaches, grapes

OHIO VEGETABLES

While vegetables are not as common as fruits in infused water, it is not unusual to use cucumber. Some additional vegetables to add color and flavor include: celery, red or yellow peppers, spinach or zucchini.

FROM THE OHIO HERB GARDEN

Mint is a common flavor to infuse water and there are many varieties of mint beyond the traditional peppermint and spearmint. Try pineapple mint or grapefruit mint for a tropical taste. While this list is not exhaustive, the following herbs can maximize options for water flavor combinations: basil, rosemary, sage, lavender and lemon balm.





A SAMPLE OF LOCAL FOOD COMBINATIONS FOR INFUSED WATER

- Strawberry melon (choose any variety of melons)
- Pear blackberry
- Pear rosemary
- Watermelon rosemary
- Peach sage
- Strawberry basil
- Match mint with any of the following: cucumber, cantaloupe, watermelon or blackberry

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- Infused water. (2014, July 9). [Blog post] Retrieved from blogs.extension.iastate.ed u/wellness/2014/07/09/infused-water.
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Ohioline

https://ohioline.osu.edu

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Curriculum and Activities



123 Peas by Keith Baker

A Farmer's Alphabet by Mary Azarian

A Harvest of Color: Growing a Vegetable Garden by Melanie Eclare

A Place to Grow by Stephanie Bloom

A Seed is Sleepy by Dianna Hutts Aston

And The Good Brown Earth by Kathy Henderson

And Then It's Spring by Julie Fogliano

Bitter Bananas (Picture Puffins) by Isaac Olaleye

Brilliant Bees by Linda Glaser

Bugs and Us by Patricia Murphy

Carrot Soup Hardcover by John Segal

Carrots Grow Underground by Mari Schuh

Corn (What's for Lunch) by Pam Robson

Creepy Carrots by Aaron Reynolds

Cucumber Soup by Vickie Krudwig

Dirt by Steve Tomecek

Eating the Alphabet Fruits and Vegetables from A to Z by Lois Ehlert

Eddie's Garden and How to Make Things Grow by Sarah Garland

Farmer's Market by Paul Brett Johnson

First Peas to the Table by Susan Grigsby

From Seed to Plant by Gail Gibbons

Grandma's Gardens by Hillary Clinton and Chelsea Clinton

Green Bean! Green Bean! by Patricia Thomas







Gregory the Terrible Eater by Mitchell Sharmat Growing Vegetable Soup by Lois Ehlert How a Seed Grows by Helene J. Jordan I Will Never Not Ever Eat a Tomato by Lauren Child I'm a Seed (Hello Reader! Science, level 1) by Jean Marzollo In Our Backyard Garden by Eileen Spinelli In the Garden with Dr. Carver by Susan Grigsby Insects Are My Life by Megan McDonald Jack's Garden by Henry Cole Leaves by Vijaya Bodach Lettuce Grows on the Ground by Mari Schuh Little Honey Bee by Katie Haworth Little Pea by Amy Krouse Rosenthal Lola Plants a Garden by Anna McQuinn Monsters Don't Eat Broccoli by Barbara Jean Hicks Muncha! Muncha! By Candace Fleming Oliver's Vegetables by Vivian French One Bean by Anne Rockwell and Megan Halsey Our Community Garden by Barbara Pollak Our School Garden by Rick Swann Over in the Garden by Jennifer Ward Peppa Pig and the Vegetable Garden by Candlewick Press Pick, Pull, Snap by Lola Shaefer







Potato Joe by Keith Baker

Potatoes (What's for Lunch) by Claire Llewellyn

Pumpkin Circle by George Levenson

Pumpkin Day, Pumpkin Night by Anne F. Rockwell

Pumpkin Fiesta by Caryn Yacowitz

Rah, Rah, Radishes! by April Pulley Sayre

Roots by Vijaya Bodach

Round the Garden by Omri Glaser

Seeds by Vijaya Bodach

Sophie's Squash by Pat Zietlow Miller

Soup Day by Melissa Iwai

Squash Pie by Wilson Gage

Sylvia's Spinach by Katherine Pryor and Anna Raff

The Boy Who Loved Broccoli by Sarah A. Creighton

The Cantaloupe Cat by Jan Yager

The Carrot Seed by Ruth Krauss

The First Strawberries: A Cherokee Story (Picture Puffins) by Joseph

Bruchac

The Grey Lady and the Strawberry Snatcher by Molly Bang

The Honeybee Man by Lela Nargi

The Perilous Pit by Orel Protopopescu

The Seasons of Arnold's Apple Tree by Gail Gibbons







The Seasons of Arnold's Apple Tree by Gail Gibbons

The Surprise Garden by Zoe Hall

The Tiny Seed by Eric Carle

The Ugly Vegetables by Grace Lin

The Vegetables We Eat by Gail Gibbons

The Year at Maple Hill Farm by Martin Provensen, Alice Povensen

This Year's Garden by Cynthia Rylant

Too Many Carrots by Katy Hudson

Tops & Bottoms by Janet Stevens

Up in the Garden and Down in the Dirt by Kate Messner

Up, Down, and Around in the Garden by Katherine Ayres

We're Going to the Farmers' Market by Stefan Page

Where Butterflies Grow by Joanne Ryder

Winnie Finn, Worm Farmer by Carol Brendler

Wonderful Worms by Linda Glaser

Zora's Zucchini by Katherine Pryor







Take a trip

Check with your local nurseries, orchards, and farms to plan field trips to see as many farm-grown fruits and vegetables as possible.

APPENDIX B

Green Thumb Guide

WHEN TO START THE PLANTING ACTIVITIES: TIMING FOR PEAK SEASON

Generally speaking,

- Strawberries and spinach are spring and early summer crops;
- Cantaloupe, crookneck squash, and peaches are summer and late summer crops;
 and
- Sweet potatoes are early fall and fall crops.

Growing all or some of the fruits and vegetables in *Grow It, Try It, Like It!* provides children with fun-filled growing seasons. Check with local garden experts to determine the right month to start each plant indoors or for when small starter plants are available at nurseries. You can also find more information at:

- USDA Extension Service (https://nifa.usda.gov/partners-and-extension-map)
- USDA Plant Zone Map (https://planthardiness.ars.usda.gov/PHZMWeb/)

TYPES OF GARDENS

There are three types of gardens that are most adaptable to home gardening needs: in-ground gardens, raised beds, and container gardens. Which one you select is influenced by how much space is available, the quality of the soil on your property, and your preference.



In-ground garden

Here are the basics on each garden type:

An **in-ground garden** is a plot of land on your property. Depending on its size, its advantages are that you can grow a large quantity of different vegetables and many children can work in the garden at the same time. The larger the garden plot, the more labor will be required to build and maintain the garden.

The soil available in your in-ground garden is important. First, you will want to test the soil. Soils can be acidic, alkaline, or neutral as measured by the pH level. Vegetables prefer soils with a pH reading of 6.0 to 7.0, which means slightly acidic to neutral. When you find out what the pH level of your soil is, you can determine what kind of amendments, such as fertilizer, that you may need. You also want to test for contaminants, such as lead, to make sure that the food you grow in the garden is safe to eat. You can ask your local Cooperative Extension agent (https://

nifa.usda.gov/land-grant-colleges-and-universities-partner-website-directory) who can provide you with sampling materials for a lab in your State.

Secondly, soil type plays an important role in whether the fruits and vegetables you plant in an in-ground garden will thrive. There are three types of soil: sand, clay, and loam. Sandy soil is loose and helps the roots of plants breathe because it lets the air pass through easily. Clay soil absorbs water faster and keeps it inside longer, so a soil composition that has more clay particles in it would be ideal for places that are too hot and the soil dries up quickly. Loam is a mixture of about 40 percent sand, 40 percent silt (quartz particles), and 20 percent clay. You can amend your soil to make it easier for your garden to grow. Again, your Cooperative Extension agent or Master Gardener can help guide you.

A **raised bed garden** is one built on top of your plot of land. Raised bed gardens can be contained, (e.g., with wood boards to keep the bed intact) or they can be more free form, with soil and amendments merely piled several inches high. Raised bed gardens offer several advantages:

- They allow you to compensate for poor soil in the ground by using new soil.
- They warm more quickly in spring, allowing you to work the soil and plant earlier.
- They drain better.

T

 They may be easier to work because you don't need to bend as low to the ground.

Container gardening is the practice of growing plants in containers instead of planting them in the ground. Containers may include terracotta or plastic pots of different sizes, as well as half-barrels and other large containers. The advantages to growing plants in containers include:

- There is less risk of soil-borne disease because you provide the soil.
- Containers eliminate most weed problems.
- Movable pots allow more control over moisture, sunlight, and temperature.
- Container gardens are possible for most homes.

The disadvantage, of course, is that you can grow only a small quantity of fruits and vegetables in a container garden.

If you opt for a container garden, make sure there is a hole in the bottom of the pots to allow water to drain out.



Raised bed garden



Container garden



Farm to Preschool Activities



The following websites have resources and activities to engage preschool students in gardening and Farm to School activities:

- Ohio State University Farm to School https://farmtoschool.osu.edu/
- National Farm to School Network Guide to Using The Creative Curriculum® to Support Farmto-ECE Models https://www.farmtoschool.org/resources-main/a-guide-to-using-the-creative-curriculum-to-support-farm-to-ece-models
- Appalachian Sustainable Agriculture Program Growing Minds https://growing-minds.org/preschool-lesson-plans/
- The Edible Schoolyard Project https://edibleschoolyard.org/resource-search
- The Institute for Agriculture and Trade Policy Farm to Childcare Curriculum Package https://www.iatp.org/sites/default/files/2014_07_16_F2CC_Curriculum_f.pdf
- Occidental College Farm to Preschool Harvest of the Month https://www.oxy.edu/about-oxy/community-engagement/uepi/programs/food/farm-preschool
- Portland State University and Mt. Hood Community College Harvest for Healthy Kids http://www.harvestforhealthykids.org/
- Renewing the Countryside Pint Size Produce https://www.renewingthecountryside.org/pint_size_produce
- USDA Grow it, Try it, Like it https://www.fns.usda.gov/tn/grow-it
- Vermont Harvest of the Month http://www.vermontharvestofthemonth.org/









SNAP Gardens

What is the SNAP Gardens program?

SNAP EBT benefits (food stamps) can be used to purchase food-producing plants and seeds (vegetables, herbs and fruits) for use in home or community gardens.

Where can I use my EBT card to purchase plants and seeds?

Any authorized SNAP retailer can sell food-producing plants and seeds, but not all do. The following authorized SNAP retailers may sell food-producing plants or seeds in Lucas County:

- Toledo Farmers Market (open year-round) www.toledofarmersmarket.com 525 Market St, Toledo, OH 43604
- Toledo Westgate Farmers Market (Open Mid-May to October) 3301 Secor Rd, Toledo, OH 43606
- Big Lots, Family Dollar, Dollar General, Dollar Tree, Food for Less, Kroger, Meijer, Save-a-Lot, Seaway Marketplace, Walmart grocery stores (call your local store for availability)

I have some plants or seeds, now what?

OSU Extension has a wealth of information to help gardeners.

- Visit our Lucas County website for multiple gardening resources online. https://lucas.osu.edu/vegetable-gardening
- *Ohioline* provides fact sheets on food, gardening and so much more! http://ohioline.osu.edu
- Ask a Master Gardener Volunteer Online Submit your landscape, yard, and garden questions. go.osu.edu/askmgv





 Lucas County Master Gardener Horticulture Hotline is available to answer your questions from April through October.

Mondays & Wednesdays, 10 am -1 pm. 419-578-6783

Email: lucascountymastergardener@gmail.com

What other resources are available?

You can find many books in the Toledo-Lucas County library system on gardening and cooking fruits and vegetables. Here are some suggested titles:

- All New Square Foot Gardening by Mel Bartholomew
- Beginner's Illustrated Guide to Gardening by Katie Elzer-Peters
- The Kitchen Garden Cookbook by Caroline Bretherton

USDA's MyPlate Kitchen has thousands of low-cost recipes for SNAP participants.

https://www.myplate.gov/myplate-kitchen

Contact your local extension office for more recipes and nutrition information:

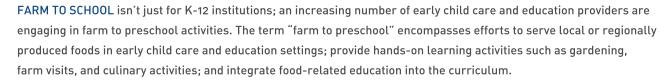
> **OSU Extension Lucas County** One Government Center Suite 550 Toledo, OH 43604 419-574-0985 saggese.1@osu.edu

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FARM TO PRESCHOOL

Local Food and Learning in Early Child Care and Education Settings



Why Farm to Preschool?

Serving local foods and offering related hands-on activities can increase children's willingness to try new foods. In fact, farm to preschool is recognized by the Centers for Disease Control and Prevention as an opportunity to increase access to healthy environments for improved early eating habits and obesity prevention in early care and education. With daily opportunities to serve local products through the Child and Adult Care Food Program (CACFP), farm to preschool benefits local and regional farmers, ranchers, and fisherman, as well as food processors, manufacturers, and distributors by providing another market for their products. Incorporating seasonal and locally produced foods is included as a best practice in the CACFP meal pattern final rule.

Buying Local in the Child and Adult Care Food Program

Institution versus facility

When buying food for CACFP, the federal procurement rules differ for "institutions" versus "facilities." "Institutions" must follow federal procurement rules; whereas "facilities" do not enter into a direct agreement with a state agency and thus are not required to follow federal procurement regulations. If unsure whether your program operates as an institution or a facility, check with your administering state agency.

What is the Child and Adult Care Food Program?

The Child and Adult Care Food Program is a federallyfunded program that provides aid to child care institutions and facilities for the provision of nutritious meals and snacks that contribute to the wellness, healthy growth, and development of young children.

Sourcing local foods

Local foods span the entire meal tray, from produce to dairy, grains, meat, eggs, and beans. CACFP providers can define "local" however they choose. Definitions vary widely depending on the unique geography and climate, as well as the abundance of local food producers, in the region. CACFP operators can find local products through the same sources that K-12 schools use to source locally: directly from producers, or through food hubs, distributors or a food service management company. In many preschool settings, purchasing volumes are small, opening the door to purchasing seasonally from farmers' markets, community supported agriculture programs, or local producers that may not have the volume to meet the needs of a typical school district. Preschools may also be able to grow enough in a garden to meet some of their food needs.





Tips for Growing Your Program

Start small

Special events are a great way to start serving local foods. Consider starting with one local item each month and grow from there. Create a monthly newsletter to celebrate the harvest and share with children, parents, and caregivers.

Tap into parents

With robust parental involvement during the early child care years, tap into parents to help model healthy eating at meal time, lead an activity, or organize a garden to enhance your farm to preschool program.

Invest in an edible garden

CACFP funds can be used to purchase items for gardens such as seeds, fertilizer, watering cans, rakes, and more as long as the produce grown in the garden will be used as part of the reimbursable meal and for nutrition education activities. Centers using garden produce in their CACFP reimbursable meals should document the weight and/or volume of the produce.

Dig into menu planning

Find out what grows in your region and allow flexibility in the regular menu cycle to spotlight seasonal items and incorporate them into healthy recipes. When you serve local foods, be sure to highlight them on your menu for parents to see! Reach out to your local cooperative extension agency or department of agriculture for help with synching your menu with seasonal availability.

Learn More

We're here to help! Visit USDA's Office of Community Food System's **Farm to Preschool page** to learn more about farm to preschool policies and FNS and partner resources that will help you bring the farm to preschool.

The National Farm to School Network (NFSN) supports the work of local farm to preschool programs all over the country by providing free training and technical assistance, information services, networking, and support for policy, media and marketing activities. NFSN's **Farm to Early Care and Education page** features facts sheets and links to farm to preschool e-news and archives.

For federal procurement regulations and guidance on local purchasing and allowable costs in CACFP, check out the following resources:

- CACFP Financial Management Instruction
- Local Foods in the Child and Adult Care Food Program with Questions and Answers [CACFP 11-2015]
- Procuring Local Foods for Child Nutrition Programs



For more information, and to sign up for the bi-weekly e-letter from the Food and Nutrition Service's Office of Community Food Systems, please visit www.usda.qov/farmtoschool.

Questions? Email us at farmtoschool@fns.usda.gov.

OFFICE of
COMMUNITY
FOOD SYSTEMS



GETTING STARTED WITH FARM TO EARLY CARE AND EDUCATION

Stay Informed

Join our network: FarmtoSchool.org

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Network

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GROWING STRONGER TOGETHER

The National Farm to School Network is an information, advocacy and networking hub for communities working to bring local food sourcing, school gardens and food and agriculture education into school systems and early and education settings.

What is farm to early care and education?

Farm to early care and education is a set of strategies and activities that offer increased access to healthy, local foods through local procurement, gardening opportunities, and food and agriculture education activities to enhance the quality of educational experience. These same core elements as farm to school adapt well to all types of early care and education settings (e.g., preschools, child care centers, family child care homes, Head Start/Early Head Start, programs

in K-12 school districts). In addition to promoting health, wellness, and high quality educational opportunities, farm to early care and education also expands healthy food access, encourages family and community engagement, provides additional market opportunities for farmers, and supports thriving communities.



Getting started

Farm to early care and education offers multiple strategies to improve the health of children, increase the quality of educational experiences, and promote valuable family engagement opportunities, aligning with goals of the early care and education community. This list provides easy first steps to develop a lasting initiative in your community:

- Assess where you are and where you'd like to be. Are your goals centered on:
 - Purchasing healthy, local foods to be served in meals or snacks?
 - Establishing a garden or offering gardening experiences?
 - Enhancing the learning environment with other food and agriculture related activities (e.g., field trips to farms or farmers markets, cooking lessons, etc.)?
 - Engaging families in local food access and education?
 - All of the above?
- **Proof** The state of the state
- **2 Establish one or two attainable goals to get started.** Some ideas include:
 - Identify snack or meal items that you would like to transition to local.
 - Find a farmer, farmers market, grocery store, or wholesaler to connect you to local foods. Search LocalHarvest (localharvest.org) or reach out to the National Farm to School Network for help making these connections.
 - Identify curricula, activities or books related to gardens, preparing and eating healthy, local foods or learning about where food comes from and how it grows.
 - Plan a local foods meal, snack, day, or special event.
 - Reach out to a local nursery or hardware store for donations or other support for starting an edible garden.
 - Plan a farm or farmers market field trip, a farmer or chef visit to the classroom, or host a tasting of local produce.

WHY FARM TO EARLY CARE AND EDUCTION?

KIDS WIN

Farm to early care and education provides all children access to nutritious, high quality, local food so they are ready to learn and grow. Farm to early care and education activities enhance classroom education through hands-on learning related to food, health, agriculture and nutrition.

FARMERS WIN

Farm to early care and education can offer new financial opportunities for farmers, fishers, ranchers, food processors and food manufacturers by opening the doors to an institutional market worth billions of dollars.

COMMUNITIES WIN

Buying from local producers and processors reduces the carbon footprint of food transportation while stimulating the local economy. Educational activities such as school gardens and composting programs help to create a healthy environment around the community.

The National Farm to School Network has a wide variety of resources and information about farm to school in early care and education. For more information visit farmtoschool.org/ECE.

Learn from others. If you are running into an obstacle, it is likely that there is someone who has run into it before! Some places to connect and learn from others include:

- The **National Farm to School Network** website (farmtoschool.org). Find resources and contact information for people in your state and region who are working on farm to school and farm to early care and education. Sign up for our e-newsletter to receive regular communication about news, resources and opportunities. Search
 - our resource database for tools and materials to support every facet of farm to early care and education.
- Your county or state's Child Care Resource and Referral agency. These agencies can provide resources and ways to learn about and connect with other early care and education programs and sites that are implementing farm to early care and education activities. Find your local agencies at www.usa.childcareaware.
- The Child and Adult Care Food Program (CACFP) staff in your state. Learn how CACFP can help you make local food more economical and can free up resources for other farm to early care and education activities. CACFP state agency contacts can be found at www.fns.usda.gov/ cacfp.

Promote farm to early care and education in your community. Ideas

include sharing information and recipes in parent newsletters, posting garden or field trip photos to a website or on social media, or inviting local media to your activities.

Opportunities in early care and educaton settings

A few key characteristics of early care and education settings make them ideal for local food procurement, gardening, and food and agriculture education:

Local foods procurement: Early care and education programs tend to purchase at smaller volumes and generally do not

offer a la carte choices or multiple meal options. Small purchasing volumes can be a good fit for small farmers who may not have enough volume to work with an entire school district.

Curriculum: Experiential education is highly encouraged in early care and educaton settings. This is a great fit with many farm to early care and education activities such as gardening, cooking, and taste tests. Farm to early care and education activities align well with existing early care and education curricula and support achievement of early learning standards.

Family involvement: Family involvement tends to be strong during the early childhood years, which can be a huge asset for farm to early care and education programming. Families can engage in farm to early care and education activities in the early care and education setting and children take home what they learn, influencing family food choices in the home.

FARM TO EARLY CARE AND EDUCATION IN EVERY SETTING

Farm to early care and education adapts to all kinds of settings. Here are two examples:

Family child care as the perfect platform for experiential education

Family child care providers across the country are providing valuable hands-on education opportunities to children through backyard gardens, cooking activities, farm field trips and more. Farm to early care and education is a great fit for family child care because activities can adapt to all the different age groups and abilities that may be served in one family child care setting.



Farm to early care and education supports Head Start success

Head Start offers vital, high quality early care and education opportunities to low-income families across the country. Farm to early care and education offers benefits that align with Head Start priority areas, including an emphasis on experiential learning, family and community engagement, and life-long health and wellness for children, families and caregivers.