

KNOWLEDGE GROWS HERE



Kickoff!

Ages 5 - 18 Supplies provided!

Participants will receive seeds to grow at home - free of charge!

We will share information about growing cucumbers.

Learn How to Make Pickles

We will come together as a group to make pickles, either with the cucumbers you have grown or ones that will be available. All of the pickling supplies for this project will be provided.

Share at the Fair

Hillsborough County Ag Fair New Boston, NH

Show off your hard work and new knowledge at the Hillsborough County Agricultural Fair in New Boston, NH. www.HCAFAIR.com



Questions? Contact: Jolee.Chase@unh.edu or 603-351-3843

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Growing Vegetables: When to Plant your Vegetable Garden

UNH Cooperative Extension Programs			
<u>S</u>	Community and Economic Development		
11	Food and Agriculture 🗸		
	Natural Resources		
iħ	Youth and Family		

The following chart will help you to determine the best time to start your seeds. First, determine the last frost date for your area. Do not seed or transplant frost-sensitive plants before this date. For central NH, Memorial Day is a conservative estimate for the last frost date.

Using a calendar, mark the date and count backwards the number of weeks the seed takes to grow from sowing. This will be the date you will start your seeds.

Example: Tomatoes take 6-8 weeks from sowing until transplant. If you want to plant in the garden on Memorial Day then count back 8 weeks and start seeds the first week of April.

- T Crops marked with a T should be started from seed indoors and set out as transplants.
- S Crops marked with an S have a relatively short harvest season, which can be prolonged by doing multiple smaller "sequence" plantings.

Crop	Time from seed to transplant	Safe to set out in garden	
Basil ^{T,S}	6-8 weeks	2 weeks after last frost	
Bean ^S	Direct Seed	After last frost	
Beet	Direct Seed	When soil warms to 45°F	
Broccoli ^S	4-6 weeks	2-4 weeks before last frost	
Brussels Sprout ^T	4-6 weeks	2-4 weeks before last frost	
Cabbage ^T	4-6 weeks	4 weeks before last frost	
Carrot	Direct Seed	When soil warms to 60°F	
Cauliflower ^T	4-6 weeks	2 weeks before last frost	
Celery ^T	10-12 weeks	After last frost	
Corn	Direct Seed	When soil warms to 60°F	
Cucumber	3-4 weeks	1-2 weeks after last frost	
	Direct seed	When soil warms to 70°F	
Eggplant ^T	8-10 weeks	2-3 weeks after last frost	
Kale	4-6 weeks	4 weeks before last frost	
Kohlrabi	4-6 weeks	4 weeks before last frost	
Leek ^T	8-10 weeks	4 weeks before last frost	
Lettuce ^S	4-5 weeks	3-4 weeks before last frost	
Melon ^T	3-4 weeks	2 weeks after last frost	

Onion ^T	8-10 weeks	4 weeks before last frost	
Parsnip	Direct Seed	After last frost	
Pea	Direct Seed	As soon as soil thaws	
Pepper ^T	8-10 weeks 2 weeks after last frost		
Potato	Use seed potatoes	1-2 weeks before last frost	
Pumpkin	3-4 weeks	2 weeks after last frost	
	Direct Seed	When soil warms to 70°F	
Radish	Direct Seed	2-4 weeks before last frost	
Rutabaga	Direct Seed	mid-June to mid-July	
Spinach	4-6 weeks	3-6 weeks before last frost	
Summer Squash	3-4 weeks	2 weeks after last frost	
	Direct Seed	When soil warms to 70°F	
Sweetpotato	Use slips (plants)	1-2 weeks after last frost	
Swiss Chard	4-6 weeks	2 weeks before last frost	
	Direct Seed	4 weeks before last frost	
Tomato ^T	6-8 weeks	1-2 weeks after last frost	
Turnip	Direct Seed	2-4 weeks before last frost	
Winter Squash	3-4 weeks	2 weeks after last frost	
	Direct Seed	When soil warms to 70°F	
Zucchini	3-4 weeks	2 weeks after last frost	
	Direct Seed	When soil warms to 70°F	
Parsley ^T	9-10 weeks	2-3 weeks before last frost	

April 2016

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The University of New Hampshire Cooperative Extension is an equal opportunity educator and employer. University of New Hampshire, U.S. Department of Agriculture and N.H. counties cooperating.

About the Author

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Education Center and Information Line

answers@unh.edu 1-877-EXT-GROW (1-877-398-4769) 9 am-2 pm M-F Search key words: "UNH Education Center"



Growing Vegetables In Containers

Growing vegetables in containers is an enjoyable and easy way of producing fresh food in limited space. Containerized plants can be kept indoors in bright light or outdoors on a patio, balcony, or doorstep - anywhere the plants will receive at least 6-8 hours of direct sunlight and sufficient water.

Containers

A wide variety of containers is suitable for vegetable production. Be sure to provide adequate drainage. Avoid containers that might contain toxic substances, e.g., treated wood or plastic buckets that may have stored chemicals.

Satisfactory containers include plastic or fiber nursery pots; wooden bushel baskets; plastic, metal or wooden buckets; milk cartons - even plastic bags and recycled cardboard boxes. If necessary, drill holes along sides near the bottom and put a ½ inch layer of coarse gravel in the bottom of each container for proper drainage.

Soil

A lightweight soil that holds nutrients and moisture, yet drains well, is essential for good results. Garden soil is too heavy for use in containers. Soil substitutes consisting of mixtures of peat moss and sand or perlite or vermiculite, amended with lime and fertilizer, work very well. One good recipe includes 1 bushel each of vermiculite and peat moss, 1¼ cups of dolomitic lime, ½ cup 20% superphosphate and 1 cup 5-10-5 fertilizer. A mixture like the one above may be used straight or mixed one-to-one with a good garden loam or finished compost. An organic alternative is equal parts of vermiculite, peat moss, and high quality compost; with 0.6 oz blood meal, 0.4 oz rock phosphate, and 0.4 oz greensand added to each gallon of potting mix. Soilless mixes can be very dry and difficult to wet. Therefore, soak the mix with water at least a day before using to insure adequate moisture absorption.

UNH Cooperative Extension Programs Community and Economic Development Food and Agriculture Natural Resources Youth and Family



Lettuce grown in wood boxes.

Did You Know?

A lightweight soil that holds nutrients and moisture, yet drains well, is essential for good results.



Mint grown in a pot.

Planting

Consider the size and shape of the mature plant when sowing seed or transplanting vegetables into a container. Thin seedlings or space transplants so the outer leaves of mature plants will just touch those of their neighbors.

Varieties

Though almost any vegetable can be grown successfully in containers, varieties of the "miniature" or "bush" type are best suited for container gardening. Because most container gardens are "kitchen gardens" whose harvests are intended for eating fresh (rather than freezing or canning), choose varieties that mature their crop gradually, to provide continuous harvests over a long season.

Sown into large boxlike containers and provided with adequate fertilizer and water, almost any variety of "cut and come again" crops, such as mesclun salad mixes, spinach, Swiss chard and arugula can be

cut every few days, providing bountiful salads and cooking greens over a long period. Space the plants only a couple of inches apart in the container and harvest individual leaves as soon as they reach edible size. To get continuous harvests of fast-growing crops like many herbs (cilantro, basil) and greens (lettuce, arugula, etc.), make new plantings every 3-4 weeks.

Care

Most vegetables require full sunlight, at least six hours a day. Leafy vegetables (herbs, lettuce, spinach, Swiss chard, cabbage) can tolerate less light than fruiting crops (tomatoes, peppers, cucumbers, eggplants, melons).

Because soil in containers tends to dry quickly, frequent watering is critical. Water thoroughly when soil dries to depth of 1/4 inch. Frequent watering washes salts from the soil mix and keeps it cool, preventing root injury.

Adding up to 50% compost to the potting mix before planting will provide some nutrients to get plants off to a good start. Once the plants have been growing for 3-4 weeks, then add liquid or water-soluble fertilizer once a week at dilute concentration (e.g., 1 ounce of 20-20-20 per 4 gallons of water, or 1-2 tablespoons of fish emulsion per gallon of water). Slow-release fertilizers can be incorporated into the potting mix or added during crop growth; a slow-release fertilizer applied at the recommended rate need be applied only once.

Crops that grow rapidly or bear fruit often become top-heavy. Stake them to prevent stem damage. Provide stakes or trellises for vining plants.



Extending the Growing Season

Container gardeners can extend the harvest season of many tender vegetables for several weeks by covering plants or moving them indoors when frost threatens. Some crops may even be carried through the winter indoors if plants receive adequate light.

Created: January 2000

Updated by: Becky Sideman, UNH Cooperative Extension Professor & Specialist

January 2018

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(http://smartyplants.com.au)

Cucumber 'Bush'

Cucumber grows best in summer which is ideal since it is mostly eaten raw in salads at picnics and barbecues.

Cucumbers grow on a vine which has large leaves which help to shade the fruit as they grow. The vine will spread over quite a large area or climb a trellis if one is available. The long, slender cucumbers will grow to around 15cm long and each vine will produce quite a few over many weeks so usually four seedlings is enough for the average saladloving family.

PLANTING

Cucumber seedlings can be planted directly into a garden bed that has been weeded and which has had lots of organic matter and compost dug through it. Make sure that there is an area that is at least 100cm x 100cm for each vine to grow into. This means that, if there are several



seedlings to be planted, quite a lot of space is needed as they will need to be planted about 100cm apart. Choose a spot in the garden that gets at least 6 hours of full sun every day and always water the seedlings lightly after planting.

Bush cucumbers can be grown in very large tubs filled with premium potting mix but there still needs lots of space for the vine to grow. They will grow up a trellis (http://smartyplants.com.au/2013/02/stakes-trellises-and-tripods/) if one is available.

CARE AND MAINTENANCE

Cucumbers grow very quickly and because of this they need lots of food. When they are planted they would have been given lots of compost and organic matter but as they grow, side dressings of fertiliser every four weeks or an application of liquid fertiliser will give them a much needed boost.

The leaves of cucumbers can get affected by mildew which is a white, powdery coating that it seen on the leaf surface. One of the causes is that the leaves are in shade or the plants being too close together so that they have to compete for sunlight. Mildew can be controlled but the best thing is to prevent it from even becoming a problem by making sure each vine has lots of space and lots of sunlight.

HARVESTING

Cucumbers are ready to harvest when they are around 15cm long. To do this, use secateurs to cut the stem, leaving some of it attached. Regularly harvesting the ripe cucumbers will encourage more to grow. Store the cucumbers in the fridge.

HOW TO EAT

By far the most popular way to eat cucumbers is raw in salads and sandwiches. It can be sliced, cubed or served in battons.

Cucumber can simply be washed and sliced with the skin on or this can be peeled off with a potato peeler. A clever tip is to run a fork along the length of the cucumber to make long ridges in the flesh before it is sliced. This is not only attractive but helps the salad dressing to stick to it. Plus, when you do this, a very refreshing spray can be felt on your face.

Some recipes such as Asian stir fries use cooked cucumber that has been sliced and deseeded. Find great recipes in the Smarty Plants Kitchen (http://smartyplants.com.au/category/recipes-kitchen/).

HOW THEY GROW

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Cucumber vines grow either along the ground or up a trellis (http://smartyplants.com.au/2013/02/stakes-trellises-and-tripods/) and eventually produce flowers. The female flower is pollinated by insects that have just visited the male flower to collect pollen. Then the female flower starts to produce the cucumber at its base which grows to a size ready to harvest.



(http://smartyplants.com.au /2012/09/cucumberbush/cucumber-seedling-2_web/)

Cucumber seedling.



(http://smartyplants.com.au /2012/09/cucumber-bush/cucumber-flower_web/)

Flower & baby cucumber.



(nttp://smartypiants.com.au /2012/09/cucumberbush/cucumber_growing_web/)

Cucumber growing.

FAST FACTS

Botanical Name: Cucumis sativus

Life Cycle: Annual

When to Grow: Spring

and summer.

Height/Width: 100cm x

100cm.

Requirements: Plant in full sun and make sure the vines have lots of space to grow into. Fertilise often and water regularly.

Nutritional Benefits: Cucumbers are very high in water which is why they are refreshing on a hot day.

Comments are closed.

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Growing Cucumbers



Cucumbers grown on a trellis are clean and easy to pick. Use a trellis slender enough for tendrils to grab. Cattle panels work beautifully for this purpose.

A tropical vegetable, cucumbers thrive when the weather is hot and water is plentiful. Growing cucumbers is for warmer weather: Plants are so frost-tender that they should not be set into the garden until soil temperatures are reliably in the 70-degree range (no less than 2 weeks after the last frost date).

Cucumber plants grow in two forms: vining and bush. Vines scramble along the ground or clamber up trellises, while bush types form a more compact plant. Generally, vining cucumbers yield more fruit throughout the growing season. Bush selections are especially suited to containers and small gardens. You can increase the season's yield of bush varieties by planting several crops in succession 2 weeks apart.

Soil, Planting, and Care

Set cucumber plants at the base of your trellis and mulch after planting unless the soil could use a little more warming. Cucumbers need warm, fertile soil. Plant seedlings 36 to 60 inches apart, depending on variety (check the stick tag). For vines trained on a trellis, space plants 1 foot apart.

In areas where spring is long and cool, you can warm the soil 3 to 4 degrees by covering the hill or row with black plastic. If you do not plant in black plastic, then



mulch with straw, chopped leaves or your favorite organic mulch shortly after planting. If the weather is unseasonably cool, you can wait a while to mulch until the sun warms the ground. Mulch is especially important to keep the fruit clean for bush types and vines not growing on a trellis. Straw mulch is also thought to be uncomfortable for slugs and creates an uneasy footing for cucumber beetles, helping to keep them at bay.

If you can, trellis your vines. This keeps the fruit clean and saves space. A 12- to 18-inch diameter cage made from 4- or 5-foot welded wire fencing or hog wire will support 2 or 3 vines. Wire is easy for the tendrils of climbing cucumbers to grab as the plant grows.

Cucumbers grow fast and do not demand a lot of care. Just keep the soil consistently moist with an inch of water per week (more if temperatures sizzle and rain is scarce). Inadequate or inconsistent moisture causes oddly shaped or poor-tasting fruit. If possible, water your cucumbers with a soaker hose or drip irrigation to keep the foliage dry. This helps prevent leaf diseases that can ruin the plant.

You can fertilize with a liquid food, every two weeks, applying it directly to soil around plant stems. Or you can use a granular, slow-release fertilizer worked into the soil when you plant or sprinkled around the plants later.

Troubleshooting

Cucumbers bear male and female flowers. Female blooms have a small swelling at the base, the makings of a fruit.

If vines bloom but do not fruit, something is probably interfering with pollination. First, make sure that you see both male and female blooms. Male blooms usually appear first and then drop off, so do not be alarmed if this happens. Within a week or two, female flowers will also appear; each one has a small cucumber-shaped swelling at the base that will become a cucumber. If you are still not seeing those swellings turn into fruit, you may need to do a bit of hand-pollination.

Several pests bother cucumbers. Squash bugs may attack seedlings. Slugs like ripening fruit. Aphids can colonize leaves and buds. Straw mulch helps keep slugs at bay, as can trellising vines to get the fruit off the ground. Vines are also bothered by cucumber beetles, which chew holes in leaves and flowers and scar stems and fruits, but worse than that, they spread a disease that causes the plants to wilt and die. Powdery mildew is a disease that leaves white, mildew-like patches on the leaves. Apply fungicides at the first sign of its presence. To minimize disease spread, avoid harvesting or handling vines when leaves are wet.



Harvest and Storage

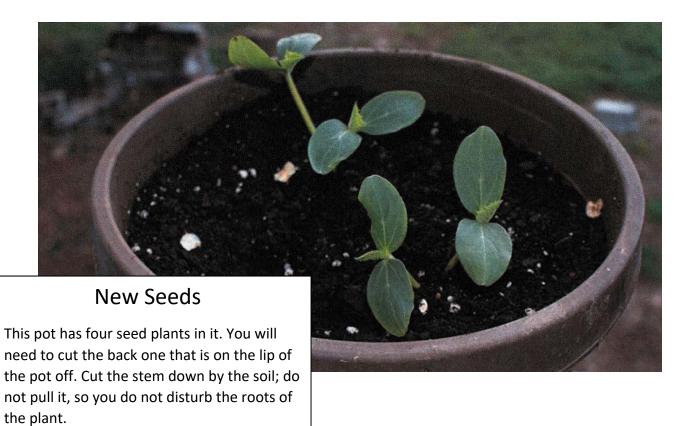
You can pick cucumbers whenever they are big enough to use. Check vines daily as the fruit starts to appear because they enlarge quickly. Vines produce more fruit the more you harvest. To remove the fruit, use a knife or clippers, cutting the stem above the fruit. Pulling them may damage the vine. Do not let the cucumbers get oversized or they will be bitter, and will also keep the vine from producing more. Yellowing at the bottom (blossom end) of a cucumber signals over ripeness; remove the fruit immediately.

You can keep harvested cucumbers in the refrigerator for 7 to 10 days, but use them as soon as possible after picking for best flavor. If you do not eat a slicing cucumber all at once, cover the unused portion in plastic wrap to prevent dehydration in the refrigerator. In fact, it is a good idea to wrap your whole cucumbers in plastic or store them in a zipper bag in the fridge to keep them crisp.

Questions:

- 1. I read that cucumbers can be planted in hills. How do I do this? Make a hill before planting the cucumber. Just a small rise in the ground is adequate. Build the hill, or mound, about a foot in diameter and about three inches high; this is to drain water from around the stem. Plant the cucumber in the mound.
- 2. Should you stake cucumbers? Stakes or cages hold plants up from the ground. Cucumber vines have little tendrils that will grab a string or wire and climb up a wire cage or trellis. Staking makes it easier to pick the cucumbers and keeps them cleaner than if they are on the ground.
- 3. My cucumbers bloomed but failed to set fruit. Why does this happen? This is a pollination problem. The flowers must be pollinated to set fruit. Did you use a pesticide that might have killed bees that pollinate the flowers? Look to see if any bees are visiting your plants in the morning. This is when they are most active.
- 4. Why do my cucumbers taste bitter? Some varieties grown under stressful conditions weather that is too warm or too cool, poor soil fertility, or disease can develop a bitter flavor. The same thing will happen to fruit that is left on the vine too long and is over mature.
- 5. How often should I water my cucumbers? Water often enough to keep the soil slightly moist all the time. Cucumbers will be small and can taste bitter if they are stressed for water. Mulch the soil around the plants to keep in moisture. It also keeps the fruit clean.
- 6. When should I harvest pickling type cucumbers? Pickling cucumbers should be harvested when the fruit reaches 3 to 4 inches in length; for big pickles let them get 6 to 7 inches long if they are still tender.

Source: https://bonnieplants.com/growing/growing-cucumbers/





Plant Needs Water

This cucumber plant needs water badly. Do not let this happen to your plant.





See all of the different ways folks grow cucumbers in their garden



A nice
Cucumber
patio plant
with tree
limbs &
string used
as staking.





A nice example of stake Cucumbers.



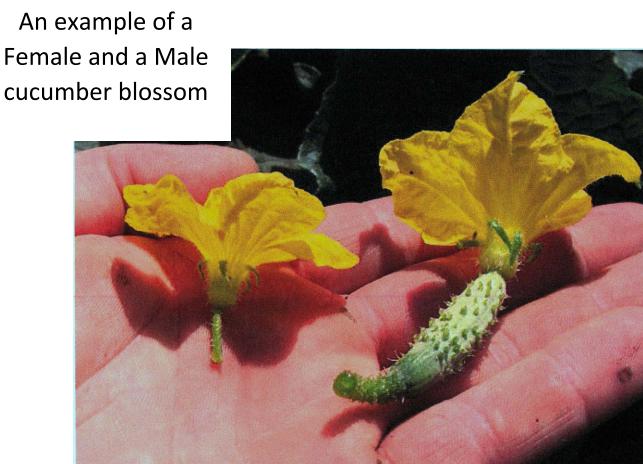
Unstaked Cucumber Plants.

- Plant #1 stems are dying and so will the plant.
- Plant #2 is up off the ground and does look healthy.
- Plant #3 takes up floor space, which is fine if you have the room. I think staking your plant will work best.

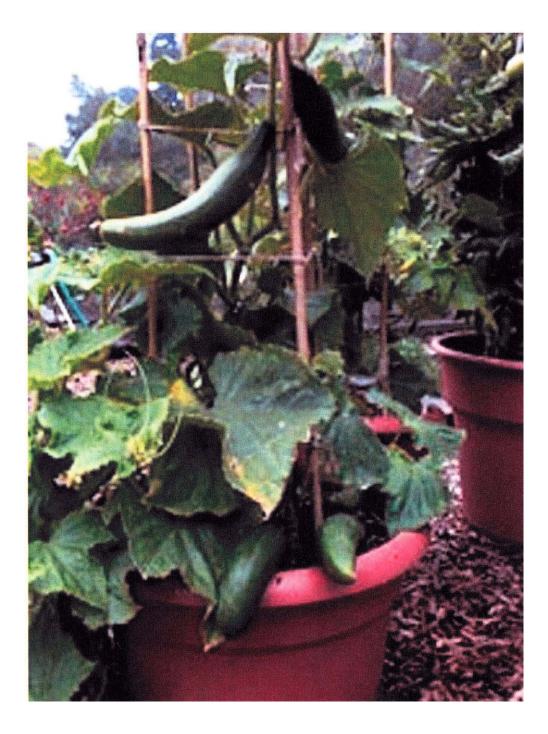


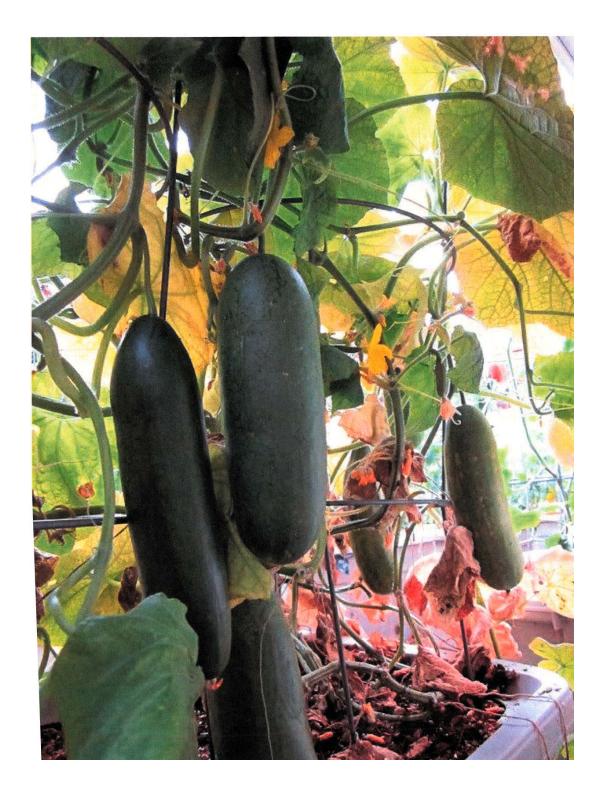






This cucumber plant needs water. That is why the cucumbers are misshapen and the leaves are turning yellow.





These Cucumbers are over ripe and need to be picked. Over ripe cucumbers can have a bitter taste. See how the cucumbers in the back are beginning to turn yellow.



How to Grow Cucumbers in Pots

Staff Reviewed

Three Parts:

Getting the Pot Ready

Planting Seeds and Seedlings

Caring for Your Cucumbers

Cucumbers can be tricky to grow in pots since they require a lot of vertical space. It can be done, however, if you select a bush variety instead of a climbing variety or you provide room for the cucumber to spread out by adding a stake or trellis. Use well-draining, nutritional soil and keep it moist throughout the growing season to help your potted cucumber plant grow.



Getting the Pot Ready

- Choose a bush variety of cucumber for containers. In general, bush varieties are easier to grow in pots than vine varieties, which need a trellis to climb and spread out on. Picking a variety suited to a container will give you a higher chance of success.^[1]
 - Varieties that are well-suited for container growing include the Salad Bush Hybrid, Bush Champion,
 Spacemaster, Hybrid Bush Crop, Baby Bush, Bush Pickle, and Potluck.
- **2** Select a pot that is 10 in (25 cm) wide for your cucumbers. Your pot should be at least this wide in diameter, as well as that deep, too. If you want to grow more than 1 plant in a single pot, try a container that is at least 20 inches (51 cm) in diameter and holds 5 gallons (19 L).^[2]
 - When using a container outdoors, go for a larger container if you can. It will retain moisture more
 effectively.^[3]
 - You can even use a rectangular planter box if you add a trellis for the cucumbers to grow on.
- Add holes if your container doesn't have them. While cucumbers love water, standing water can cause root damage. Look for a pot that already has drainage holes, if possible. Just flip it over to see if it has holes in the bottom.^[4]
 - If your pot doesn't have drainage holes, use a drill to make holes. Choose a masonry drill bit for soft, unfinished terra cotta or a tile and glass drill bit for glazed surfaces. Pick a ½ to ½ in (6.4 to 12.7 mm) bit.
 - Place painter's tape over the bottom of the pot where you want to drill holes. Painter's tape helps steady
 the bit. Press the bit lightly into the tape, and turn the drill on at a slow speed. Slowly and steadily apply
 light pressure to the taped area until the drill goes through the pot. Repeat for at least 1 other hole.
 - If you press too hard or try to drill too fast, you may break the pot. [5]
- 4 Clean your pot thoroughly with hot water and soap. Pots can contain bacteria that may cause your plant to rot. If you've used the pot for another plant, it may have hidden insect eggs that will hatch and attack your cucumbers.
 - Scrub it down thoroughly with a rag or dish brush and soapy water. Rinse it out several times to make sure you get all the soap out.
- **5 Prepare a stake.** Vine cucumbers require a trellis or stake to grow. Even though bush cucumbers do not require staking, they do benefit from it. To make one yourself, start with 3 long stakes or bamboo poles. Gather them together at the top, and tie them together with a cord or even yarn. Spread the bottoms of the stakes out to create the teepee shape.
 - Consider a teepee-style metal staking system, available at most hardware and garden supply stores.
 - A staking system encourages the cucumber to climb along it from the start.
 - Place the stake in the pot with the stakes spread out on the inside. The legs of the stake should touch
 the bottom of the pot. The stake itself should stand straight without needing additional support. If it's
 wobbly, adjust the legs so that they're even.

Fill the pot with a well-draining soil mix. If you want to mix your own soil, try mixing 1 part sand with 1 part

- 6 compost and 1 part peat moss or coco coir. Otherwise, you can choose a pre-mixed potting soil designed for growing vegetables.^[6]
 - Pack the mix into the pot, carefully patting it in around the stake. Do not make it too compact, however, since your cucumber plant's roots need loose soil to grow in. Leave approximately 1 inch (2.5 centimeters) of empty space between the surface of the soil and the rim of the pot.
 - Check the stake. Try to wiggle it around in the pot. If it still moves around a lot, pack more potting mix in the pot to stabilize the stake.
 - Find potting soil mixes and the ingredients for potting soil at your local garden store.
 - Do not use garden soil, which may be contaminated by bacteria and pests.
- **Boost nutrition by mixing a good fertilizer into the soil**. Use either a 5-10-5 fertilizer or a 14-14-14 slow release formula. Mix it into the soil in the proportions suggested on the label directions, as fertilizers vary widely by brand and type.^[7]
 - Alternatively, use a potting soil that already has fertilizer mixed in.
 - The numbers on a bag of fertilizer indicate how much nitrogen, phosphorus, and potassium the fertilizer contains, respectively. Each element nourishes a different part of the plant.
 - A 5-10-5 fertilizer gives your cucumbers a mild dose that focuses on improved vegetable yield. A
 14-14-14 fertilizer, on the other hand, keeps the health of your plant balanced, making it safer to give
 your cucumbers the slightly higher concentration.
 - Choose an organic fertilizer for an environmentally safe alternative.

Part 2

Planting Seeds and Seedlings

- Sow your seeds once the weather warms up to 70 °F (21 °C). Cucumbers need the soil to reach at least 70 °F (21 °C) in order to grow. In many areas, you can start a crop in July and expect a harvest in September. If you live in a warmer area, you may be able to start earlier. Wait until at least 2 weeks after the last frost.^[8]
 - If you're planting inside, you can begin the seeds whenever you want.
- Poke a ½ in (1.3 cm) hole into the center of the soil. Make the hole about equal in depth and width. You can create it by using your pinky finger or the rounded end of a pencil. [9]
 - If you have a larger planter, place the holes evenly around the edge of a circular planter or evenly across a rectangular planter, depending on the size and shape.
- **3** Plant 5-8 seeds in the hole about ½ in (13 mm) deep. Plant more seeds than necessary so that you guarantee success. Planting this many seeds may mean you need to thin once the plants come up, but you're more likely to end up with as many plants as you want.[10]
 - Cucumber seedlings don't like being taken out of a container or handled. Choosing seedlings with
 organic containers, such as coco coir or peat, allows you to plant them in the soil, container and all,
 without handling the seedlings too much. The roots will grow through the organic container.
- **4** Cover the hole with more of your soil mix. Loosely drop soil over the seeds. Do not squish the soil into the hole, since doing so may damage the seeds. You can gently pat it down when you're done.
 - If you're using a seedling, fill in the hole around the container, and pat it down from the top.
- **5** Use an old water bottle as plastic collar. If it's still cool outside, you can protect your plants by creating collars for each one. Cut the tops and bottoms off of large plastic bottles. Wash them thoroughly with hot soap and water. Place one around each sprouting plant. Press it into the ground so it doesn't blow away.^[11]
 - These collars provide warmth and wind protection. They may also protect against some pests.
- **6** Water the seeds or seedlings directly after planting them. The soil should be thoroughly and noticeably moist after you water the seeds or seedlings. Do not supersaturate the soil, however, since puddles of water may end up scattering the seeds.

• Use a fine sprayer so you don't stir up the seeds.

7 Spread peat moss or straw over the soil after watering. Lightly apply a thin layer of peat moss or mulch over the seeds or seedlings and soil. The mulch helps prevent the soil from drying out too quickly so the seeds and seedlings have a chance to grow.

- Place your pot in a bright location with at least 8 hours of sunlight. Cucumbers thrive in warm conditions, and the extra sunlight will keep the soil nice and warm. More than 6 hours of sunlight is even better.^[12]
 - If you are growing cucumbers indoors, make sure they are in a sunny room where they get plenty of light. If you don't have a sunny corner, you can buy a grow light instead. Place it above the plant, and keep it on at least 6 hours a day.
 - Placing your pot near the side of your house or by a fence can minimize potential wind damage. A little
 wind is fine, but strong wind can be damaging.

Part 3

Caring for Your Cucumbers

- Thin your cucumbers out once the seedlings sprout 2 sets of true leaves. Identify the 2 tallest seedlings from each grouping to keep. Snip the other seedlings down to the surface of the soil. Do not yank the other seedlings out, since doing so will disturb the soil and may cause damage to the seedlings you're leaving in the ground.^[13]
 - Use garden shears or scissors to snip the extra seedlings off at the soil.
- **2** Thin to 1 plant per hole once the plants reach 8 to 10 inches (20 to 25 cm). Examine the plants in each group, and look for the tallest one. It should also have the most leaves and look the healthiest. Snip the other one down to the soil.
 - Now you should have 1 plant growing in each grouping you've made in the pot. In some cases, that may
 mean you have just a single plant, if you used a small container.
- Water your cucumbers daily. If the surface of the soil seems dry, it's time for re-watering. Give mature plants enough water so that a little extra drains out from the drainage holes at the bottom of the pot. Never allow the soil to dry out, since dry soil will inhibit growth and lead to a bitter crop.^[14]
 - To check the soil, stick your finger in it. If it's dry, it's time to water.
 - Lift the pot up to see how heavy it is. The heavier the pot, the more saturated the soil is with water.

 Check the pot throughout the day to get a feeling for how heavy or light the pot gets when you water.
 - Adding mulch around your plant will help it retain more water.
 - If your area is especially dry or hot, you may need to water twice a day.[15]
- Add a balanced fertilizer once a week. Drench the soil first before adding the fertilizer. Adding the fertilizer when the plants are dry may create problems. Use a water-soluble fertilizer, and apply as much as the label directs you to use. Fertilizers vary widely by brand and type, so always read the label.^[16]
 - Pick a 5-10-5 or 14-14-14 fertilizer.
- **5** Eliminate garden pests with neem oil or other organic pesticides. Aphids, pickle worms, mites, and cucumber beetles will all target your cucumber plant. You can make your own organic pesticide with neem oil:
 - To make a spray with neem oil, mix 1 to 1.5 cups (240 to 350 mL) of water with a few drops of dishwashing soap and about 10-20 drops of neem oil.^[17]
 - With pests like cucumber beetles, you can simply pick them off by hand using gloves covered in petroleum jelly. Drop them into a bucket of water with a few drops of dishwashing liquid.
 - You can also use a bug vacuum designed for the purpose of sucking insects off plants.^[18]
- **6** Use an anti-mildew spray on fungal diseases. Mildew and bacterial wilt are especially common. Many anti-fungal products will rid your plants of mildew, but bacterial diseases are more difficult to get rid of. In

fact, if your plants develop bacterial wilt, which can be carried by cucumber beetles, the plants will likely die. Fungal infections are often characterized by a white, powdery substance on the leaves.^[19]

- Bacterial wilt starts with the leaves turning dull, wilting in the day, and recovering at night. Eventually, the leaves will turn yellow and die.
- To make an anti-mildew spray, try mixing 1 tablespoon (14 grams) of baking soda into 1 gallon (3.8 L) of water. Add a dash of dishwashing liquid, and shake it up. Spray it on the plant once a week if you notice a white, powdery mildew on the leaves.^[20]

A Harvest your cucumbers about 55 days after planting. Bigger cucumbers are more bitter, so harvest cucumbers when they're young. Snip the stem about 1/2-inch (1.27 centimeters) above the cucumber. If the cucumber has reached the yellowing stage, it's probably too mature to eat.^[21]

• Most cucumbers are ready to harvest 55 to 70 days after planting.

Community Q&A

I am growing bush pickling cucumbers in a 17-gallon tub container that is 20 inches deep. I planted 8 seeds with the intent of keeping 3 plants. Is this a good plan?

Laurr LK 'rtz A 17-gallon container will be a sufficient size to grow 2 or 3 cucumber plants.

What causes cucumbers to curve and curl at the tip?

wikiHow Staff Typically, it's due to gravity, as the weight of the cucumber rests on the ground. If you use a trellis, they're are less likely to curve.

How tall do I need to make the trellis?

wikiHow Staff Make the trellis 3 to 4 feet at least, as vine cucumbers like to spread out a lot.

How long do cucumber seeds take to sprout?

wikiHow Staff Cucumber seeds will usually sprout 3 to 10 days after being planted. If yours haven't sprouted after a week and a half, you may have old seeds that won't germinate.

Why do you have to snip the smaller one of the stems?

wikiHow Contributor

Because it'll be the weaker one. You want to keep the strongest one, as it'll stand a better chance of thriving.

Can the cucumber seeds be started in a pot and then be transferred to the ground?

Yes, just don't forget to harden your plant first, though (prepare it for outdoor conditions) if it has been indoors. Plus, make sure you use the organic potting containers that you can plant directly into the ground, as seedlings don't like be handled.

How do I make pickles that are small?

wikiHow Contributor You can pick the cucumbers at the desired size. There are certain types of cucumber seeds that only grow to pickling size. Read the package of seeds to see if they're the type you want.

What type of plants can keep bugs away?

wikiHow Mulch tomato plant leaves extremely fine and soak them in water for a day. Spray the water all over the cucumber plant to keep bugs away.

Why do I need to harvest them when they are still young?

wikiHow Cucumber need be harvested when they are still young because they tend to be sweeter. Also, your cucumbers may get stolen by pests and animals if you leave them too long.

Tips

- If you want to start your cucumbers earlier in the season, start them in an organic plantable pot indoors first, and then move them outside once it gets warmer.
- Cucumbers require a lot of water, so keep them moist throughout the growing season. [22]

Warnings

Be mindful of any pesticides you spray your cucumbers with. Many chemical pesticides can be harmful if
consumed, and ideally, you or someone else will consume the cucumbers from your plant. Always check label
warnings before applying a chemical to your plant. Wash your crops before consuming them to rid them of chemical
traces, dirt, and bacteria.

Sources and Citations

1. http://www.vegetable-gardening-online.com/grow-cucumbers.html

- 2. https://www.gardeningchannel.com/cultivate-cucumbers-in-containers/
- 3. http://www.vegetable-gardening-online.com/grow-cucumbers.html
- 4. http://www.vegetable-gardening-online.com/grow-cucumbers.html
- 5. http://www.bystephanielynn.com/2013/06/drill-drainage-holes.html
- 6. http://www.vegetable-gardening-online.com/grow-cucumbers.html
- 7. http://www.vegetable-gardening-online.com/grow-cucumbers.html
- 8. http://www.balconycontainergardening.com/plants/224-grow-cucumbers-in-containers
- 9. https://www.gardeningchannel.com/cultivate-cucumbers-in-containers/
- 10. https://www.gardeningchannel.com/cultivate-cucumbers-in-containers/
- 11. https://pigletinportugal.com/2017/05/27/growing-cucumbers-in-pots-is-so-easy/
- 12. https://www.gardeningchannel.com/cultivate-cucumbers-in-containers/
- 13. http://www.balconycontainergardening.com/plants/224-grow-cucumbers-in-containers
- 14. https://www.gardeningchannel.com/cultivate-cucumbers-in-containers/
- 15. http://www.vegetable-gardening-online.com/grow-cucumbers.html
- 16. http://www.vegetable-gardening-online.com/grow-cucumbers.html
- 17. http://www.naturallivingideas.com/9-clever-ways-use-essential-oils-garden/
- 18. https://www.almanac.com/pest/cucumber-beetles
- 19. http://www.extension.umn.edu/garden/yard-garden/vegetables/diseases-of-cucurbits/bacterial-wilt/
- 20. https://www.youtube.com/watch?v=yFD97jAdtKU&feature=youtu.be&t=41
- 21. https://secure.caes.uga.edu/extension/publications/files/pdf/C%201034_4.PDF
- 22. http://www.balconycontainergardening.com/plants/224-grow-cucumbers-in-containers

RECIPES

On the following pages are some Cucumber Recipes

Source: https://www.foodnetwork.com/recipes

See if you can find some of your own favorites.

Mixed Green Salad

Recipe courtesy of Catherine Scorsese

Show: Sara's Secrets | Episode: Shortcut Supper



Total: 10 min Prep: 10 min

Yield: 4 to 6 servings

Level: Easy

Ingredients

- 1 head romaine lettuce
- · 1 cucumber, peeled and sliced
- 2 to 3 plum tomatoes, cored and cut into small wedges
- . 1 small red onion, sliced thin
- · Olive oil and red wine vinegar, to taste
- · Salt and pepper

Directions

Tear the lettuce leaves into bite-sized pieces and transfer them to a large salad bowl. Add the cucumber, tomatoes, and onion. Sprinkle with the oil, vinegar, and salt and pepper, and toss to combine.

Recipe courtesy Catherine Scorsese, Italianamerican, Random House, 1996



Cold Cucumber Salad Recipe | Trisha Yearwood | Food Network

https://www.foodnetwork.com/recipes/trisha-yearwood/cold-cucumber-s..

Cold Cucumber Salad



Recipe courtesy of Trisha Yearwood From: Food Network Magazine



"Like many Southern gardeners, we usually have tons of cucumbers each summer. This cool summer salad will keep in the fridge for days."

Total: 8 hr 35 min

Prep: 30 min

Inactive: 8 hr

Cook: 5 min

Yield: 4 to 6 servings

Level: Easy

Ingredients

- 1 cup white vinegar
- 1 1/2 cups sugar
- 1 teaspoon celery seeds
- 1/4 cup vegetable oil
- Salt
- 5 small Kirby cucumbers, sliced (5 cups)
- 1 medium sweet onion, thinly sliced in rings
- 1 large red or yellow bell pepper, thinly sliced

Directions

In a medium saucepan over high heat, bring the vinegar, sugar, celery seeds, vegetable oil and 1 teaspoon salt to a boil, then remove the pan from the heat and allow to cool, about 20 minutes.

In a large bowl, toss the sliced cucumbers, onion and bell pepper with the liquid mixture and refrigerate overnight. Serve cold.

Photograph by Sarah Anne Ward

Courtesy of Food Network Magazine



Watermelon-Cucumber Salad



Recipe courtesy of Food Network Kitchen From: Food Network Magazine



Total: 15 min
Prep: 15 min
Level: Easy

Ingredients

Directions

Toss 3 cups diced seedless watermelon, 1 1/2 cups diced cucumber, 1 bunch sliced scallions, 1/2 cup chopped cilantro, 1 seeded and minced jalapeno, the juice of 2 limes, 1 1/2 tablespoons olive oil and a pinch of salt. Serve on a bed of watercress and sprinkle with feta cheese. Drizzle with olive oil and sprinkle with pepper.



Recipe courtesy Food Network Magazine



Cucumber-Infused Water Recipe | Food Network Kitchen | Food Network

https://www.foodnetwork.com/recipes/food-network-kitchen/cucumber-i...

Cucumber-Infused Water



Recipe courtesy of Food Network Kitchen



Total: 4 hr 5 min

Prep: 5 min

Inactive: 4 hr

Yield: 2 quarts

Level: Easy

Ingredients

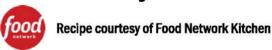
Directions

Place 1 thinly sliced English cucumber in a pitcher. For still infused water, add 2 quarts of water. For sparkling water, add 1 quart of seltzer during prep and a second quart just before serving. Refrigerate 2 to 4 hours to allow the cucumber to infuse. Stir well and strain, discarding the cucumber. For serving, add fresh cucumber slices for garnish and plenty of ice. The infused water will keep refrigerated for up to 2 days.

Recipe courtesy of Food Network Kitchens



Strawberry-Cucumber Water





allrecipes

Total: 4 hr 10 min Prep: 10 min Inactive: 4 hr Yield: 2 quarts Level: Easy

Ingredients

Directions

Place 8 ounces stemmed and thinly sliced strawberries and 1/2 thinly sliced English cucumber in a pitcher. For still infused water, add 2 quarts of water. For sparkling water, add 1 quart of seltzer during prep and a second quart just before serving. Refrigerate 2 to 4 hours to allow the ingredients to infuse. Stir well and strain, discarding the solids. For serving, add fresh strawberries and cucumber slices



for garnish and plenty of ice. The infused water will keep refrigerated for up to 2 days.

Recipe courtesy of Food Network Kitchens

Mona's Easy Refrigerator Pickles - Printer Friendly - Allrecipes.com

https://www.allrecipes.com/recipe/230227/monas-easy-refrigerator-pickl...



Mona's Easy Refrigerator Pickles



Ready In Prep 20 m 2 d 20 m

Recipe By: Chris & Chenell

"I got this recipe from an old family friend. She used to make us these pickles when we were kids. It is a really simple recipe, and the hardest part is not eating the pickles before they are ready. You can add pimentos, sliced bell peppers, or whole garlic cloves to the vinegar solution as alternative options."

Ingredients

1 1/3 cups white sugar 2 tablespoons salt 1 cup white vinegar

6 cups peeled and sliced cucumbers

2 cups sliced onion

Directions

Stir sugar, salt, and vinegar together in a plastic container with a lid until sugar is mostly dissolved. Place cucumbers and onion in the vinegar solution; stir to coat. Cover container and refrigerate for at least 2 days, stirring occasionally.

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Easy Dill Lovers Refrigerator Pickles

Prep Time 10 mins Total Time 10 mins

When you have a surplus of cucumbers, look no further than this easy recipe for refrigerator pickles. You can make them with just 10 minutes of prep and 6 hours to brine. You don't even need to turn on the stove! I used the 1/8-inch slicing disc of my food processor to slice these, which I highly recommend. A mandoline would also work well as would a sharp knife.

Ingredients

2 cups thinly sliced cucumber

1 tablespoon kosher salt

2 tablespoons chopped fresh dill

I/2 cup white vinegar

2 clovers of garlic

Instructions

Add cucumber slices to a clean I-pint jar.

Add salt, dill, garlic and vinegar. Close the lid and shake to distribute ingredients. (Liquid will not cover cucumber slices. Don't worry. The salt will draw liquid from the cucumbers in a couple of hours.)

Place the jar in the refrigerator and rememb er to shake it once or twice in the next few hours.

In about 6 hours, you'll have delicious, crispy pickles.

Servings: 2 cups

Last up to 2 to 3 weeks.



Aunt Roses Refrigerator Pickles

https://www.allrecipes.com/recipe/228245/aunt-roses-refrigerator-pickles/

Check all ingredients before making your pickles.

- 3 long pickling cucumbers, thinly sliced
- 1 red bell pepper, finely chopped
- 1 sweet onion, finely chopped
- 1 tablespoon salt
- 2 teaspoons celery seed
- 3/4 cup white sugar
- ½ cup white vinegar
- 5 half pint canning jars with lids and rings

Place cucumber slices, red bell pepper, and onion into a large bowl. Mix in salt and celery seed and let the vegetable stand at room temperature for 1 hour, stirring occasionally.

Mix sugar and vinegar in a bowl, stirring until the sugar dissolves, and pour the mixture into the vegetables. Stir again.

Spoon the pickles into the canning jars and pour any excess liquid over the pickles. Cover the jars with lids and rings. Refrigerate at least 24 hours; pickles will keep in refrigerator for 3 weeks.

Prep Time One Hour Makes 5 half pint





Hillsborough County Cucumber to Pickle Challenge Record

Na	ame: Age:	
Го	own:	
1.	Did your cucumber grow in a container or a garden?	_
2.	The people who helped me were	-
3.	List some of the insects or animals you found in your cucumber plants. How did y control them?	
4.	Please share one or two things you learned while growing your cucumber plants. Also something you would do differently if you do this project again.	
5.	Did you have fun doing this project and would like to do something like this next year?	
6.	Would you invite others to participate in the cucumber to pickle challenge?	

Thank you. I hope you had fun and learned something about cucumbers.

Questions? Contact: Jolee.Chase@unh.edu or (603) 351-3843

