

# Growing Vegetables in Containers



## What can I grow?

Just about any vegetable or herb! Popular container crops include salad greens, peppers, eggplant, tomatoes, beans, chard, beets, radish, squash, cucumbers, basil, parsley, and cilantro.

Look for "bush" or "dwarf" varieties of the crops you want to grow.



Potatoes  
harvested from a  
grow bag

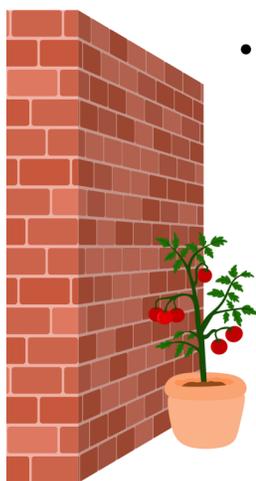


## Where can I grow?

- Any level surface — decks, balconies, and along driveways and sidewalks. You can also set containers on bare ground and allow the plant roots to grow into the soil or place them on top of a mulched area.



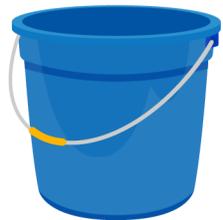
- Southern and western exposures will be the sunniest and warmest, while northern and eastern exposures will be shadier and cooler. Brick, concrete, and reflective surfaces increase temperatures in and around containers.



- You'll need 6-8 hours of direct sun for warm-season crops (tomato, pepper, eggplant, squash) and 3-6 hours for cool-season crops (lettuce, spinach, radish, leafy greens).
- Containers can be moved to sunnier/warmer or shadier/cooler spots depending on plant needs.

## Types of containers

- Hanging baskets, window boxes, wooden crates, repurposed plastic containers, and 5-gallon buckets (food-grade only). Avoid reusing joint compound, paint, and detergent containers.
- Containers made from porous materials, such as clay, ceramics, concrete, and wood, will dry out more quickly than containers made from plastic or metal.
- Bags of potting soil placed on the ground with holes poked in the bottom for drainage.
- Containers should have holes or gaps in the bottom, except for self-watering types, to allow water to drain.
- Self-watering containers, like the EarthBox, need less frequent watering and fertilizing.



### Minimum Container Size

4 inches deep 4 inches between plants	Asian greens Green onions Lettuce Radish	2 gallon container 1 plant each	Chard Collards Kale
6 inches deep 2 inches between plants	Beans Peas	3 gallon container 1 plant each	Cucumber Patio Tomatoes
8 inches deep	Basil (8 inches between plants) Carrots (2 inches between plants) Garlic (6 inches between plants) Parsley (8 inches between plants) Spinach (4 inches between plants)	5 gallon container 1 plant each	Broccoli Summer squash Peppers Tomatoes Eggplant

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## Potting soils

The roots of vegetable plants grown in containers depend on a relatively small volume of potting soil (also called growing media or soilless mixes) for water and nutrient needs. Many commercial potting mixes are available and vary in composition and quality.

Sphagnum peat moss, compost, bark fines, coconut coir, perlite, vermiculite, composted bark, and small amounts of lime and fertilizer are some of the ingredients of commercial potting mixes. Select those that are lightweight and drain well. Avoid products that contain sedge peat, feel heavy or gritty, or appear dusty or clumped.



Fill containers with potting soil, compost, or an equal mixture of potting soil and compost. Garden soil is too dense for growing plants in containers. It can slow water drainage and drown plant roots. Dry potting soils tend to repel water. Work water into the potting soil with your hands until it is thoroughly wetted. You can save money by reusing it the following year. The volume will be reduced, so add fresh potting soil or compost to top off containers.



## Plant Care

- Keep containers together to increase humidity, slow water evaporation, and ease watering.
- Give them support. Vertical support will benefit cucumbers, pole beans, peppers, tomatoes, and eggplant.
- Check and see if you need to water. Press a finger into the soil. If it is dry, water it; if not, wait until it feels dry to the touch.
- Avoid shallow watering. Instead, water containers until water starts to run out of the drainage holes.
- Regardless of the growing media used, plants need to be fertilized regularly. Nutrients not used by the plants are lost through drainage holes.
- The amount of fertilizer needed will depend on the plants grown, the size of the container, how often it's watered, and the type of fertilizer used. Use fertilizers that contain nitrogen, phosphorous, and potassium, and follow label directions.
- Long-season vegetable crops such as tomatoes, cucumbers, eggplant, and pepper may need to be lightly fertilized every two weeks to produce a continuous harvest.
- Conserve water and nutrients by placing saucers under containers or using self-watering containers like the Earthbox or a DIY 5-gallon bucket planter.



### Learn more:

Web pages- [go.umd.edu/FoodGardening](https://go.umd.edu/FoodGardening)

Blog articles-

<https://marylandgrows.umd.edu/?s=vegetables>

Videos- <https://www.youtube.com/UMDHGIC>

Get answers to your gardening questions-

[go.umd.edu/AskExtension](https://go.umd.edu/AskExtension)