



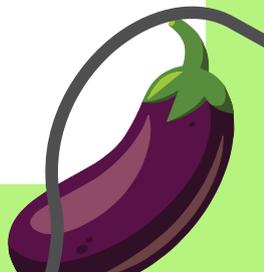
How to Start

Seeds

Indoors

with the

**Regional
Environmental
Council**





Why Start Seeds Indoors?

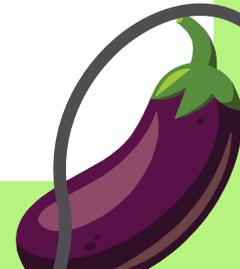
A lot of seeds benefit from being started indoors and grown into seedlings in a warm, consistent environment opposed to directly seeding them into the final growing place outside. There are a lot of variables outside, like pests, inconsistent weather, weeds and plant diseases in the soil.

Allowing your seeds to be started in stable conditions will set them up to be strong and healthy plants.

Should I Start all my Seeds Indoors?



Not all veggies want to be started indoors, some prefer being directly seeded into your garden instead. Some of those plants, like carrots, beets and radishes, have larger tap roots which are difficult to transplant. Others that benefit from direct seeding are greens, such as lettuces and spinach, that thrive in cooler temperatures with very shallow root systems and are also hard to move into their final growing spaces.





Let's Get Started!

1. Soil

You want to use a loose compost-based, organic potting soil with good aeration and moisture holding capacity. You don't want to use soil you would find in your garden bed just yet because it may have bugs, weeds, or plant diseases that may make it difficult for your seedling to grow strong and healthy.

2. Container

The containers that you use are important! You have to keep the size and depth of your container in mind as well as the material.

- Keep in mind the size of your plant's root system. Some seedlings will have a larger root system than others and therefore would do best in a deeper container, or may have to be "potted up" (transferred into a larger container to grow more) before being transplanted to their final growing space.
 - It's always good to start seeds in seed trays but you can also use recycled food safe containers like egg cartons and yogurt/deli containers too. The latter are helpful if you need to pot up!
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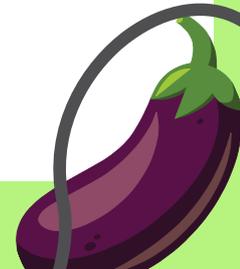
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- All containers should have proper drainage - you can use a nail and hammer or an electric drill to add a few holes to the bottom of your containers that may be lacking.

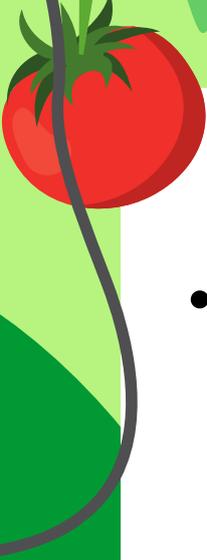
Important: Before planting your seeds, to avoid any disease to your seedlings, you should always disinfect your growing vessels. You can make a 10:1 ratio of water to bleach to soak your containers in to ensure they're ready to use.

3. How to plant

- Fill the container of choice with lightly moistened soil
- Sprinkle or place seeds in the soil, then lightly cover with more soil - you may want to reference the seed packet on how much to cover with soil.

TIP: The general rule of thumb is to bury the seed twice as deep as the seed is wide/long (e.g if the seed is 1/16 inch thick, it should be planted about 1/8 inch deep).

- Use a spray bottle to moisten soil with water
 - Label and date all your seeds and place the plastic dome on the trays.
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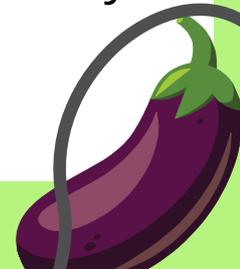


4. Care Before Germination

- **Moisture:** Keep the soil moist but not soggy - You do not want the soil to dry out, but also do not want it to be so wet that the seeds mold or drown. Using a spray bottle ensures even moisture.
- **Temperature:** The optimal temp to keep the germinating seeds is between 65 - 75 degrees Fahrenheit. The plastic dome provided helps keep the temperatures up.
- **Light:** The amount of the sunlight depends on the seed (see seed packets) but most need about 6-8 hours minimum.



5. Care After Germination

- **Moisture:** Once you start to see your seeds start to sprout, remove the plastic dome to allow for more air flow. Continue to maintain even moisture.
 - **Temperature:** You'll want to move your trays to a slightly cooler location (ideally 55 - 70 degrees Fahrenheit) with more air flow.
 - **Light:** The seedlings will now require more consistent bright light. It's best to place your trays in a sunny, south facing window, or 4-6 inches away from grow light bulbs, for 16 hours a day.
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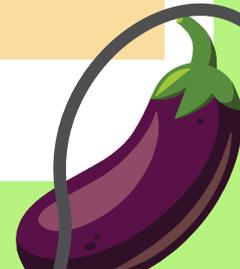
6. Hardening Off Your Seedlings

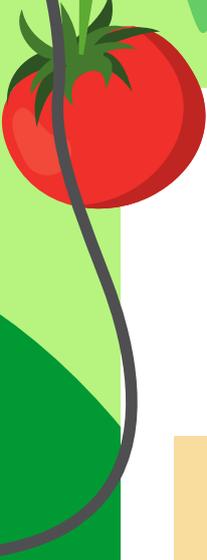
Because your seedlings have been growing indoors, and won't be used to the varying temperatures of outdoor weather yet and things like fluctuating nighttime temperatures and wind, this can make them weak and more prone to disease and pests.

Therefore it is crucial to harden them off by gradually acclimating your indoor-grown seedlings before transplanting them into your outdoor garden.

- You should start placing your seedlings outside everyday for 7 to 14 days before you plan on planting them. The first day you start hardening off your seedlings should be on the warmer side (45 degrees or above). Place your seedlings outside for one hour, but make sure that they're out of direct sunlight because the direct rays can harm the tender leaves. Bring them back to a warmer spot inside after one hour of outside time.
- Increase the amount of outdoor time by one hour each day to get your seedlings used to wind and variegated sunlight that they are exposed to.

Make sure you keep your seedlings inside on an especially windy day or if the degrees are below 45 degrees fahrenheit.



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- After two to three days of being in partial shade, you can start placing them in a location that gets morning sunlight, gradually exposing them to more direct sunlight over time.

Make sure to keep your seedlings well watered as the temperatures start to rise.

- Once both the temperatures during the day and night remain over 50 degrees, you can leave your seedlings out overnight.
- After the 7 to 14 days of hardening off your seedlings, you will be able to transplant them into their new outdoor homes!

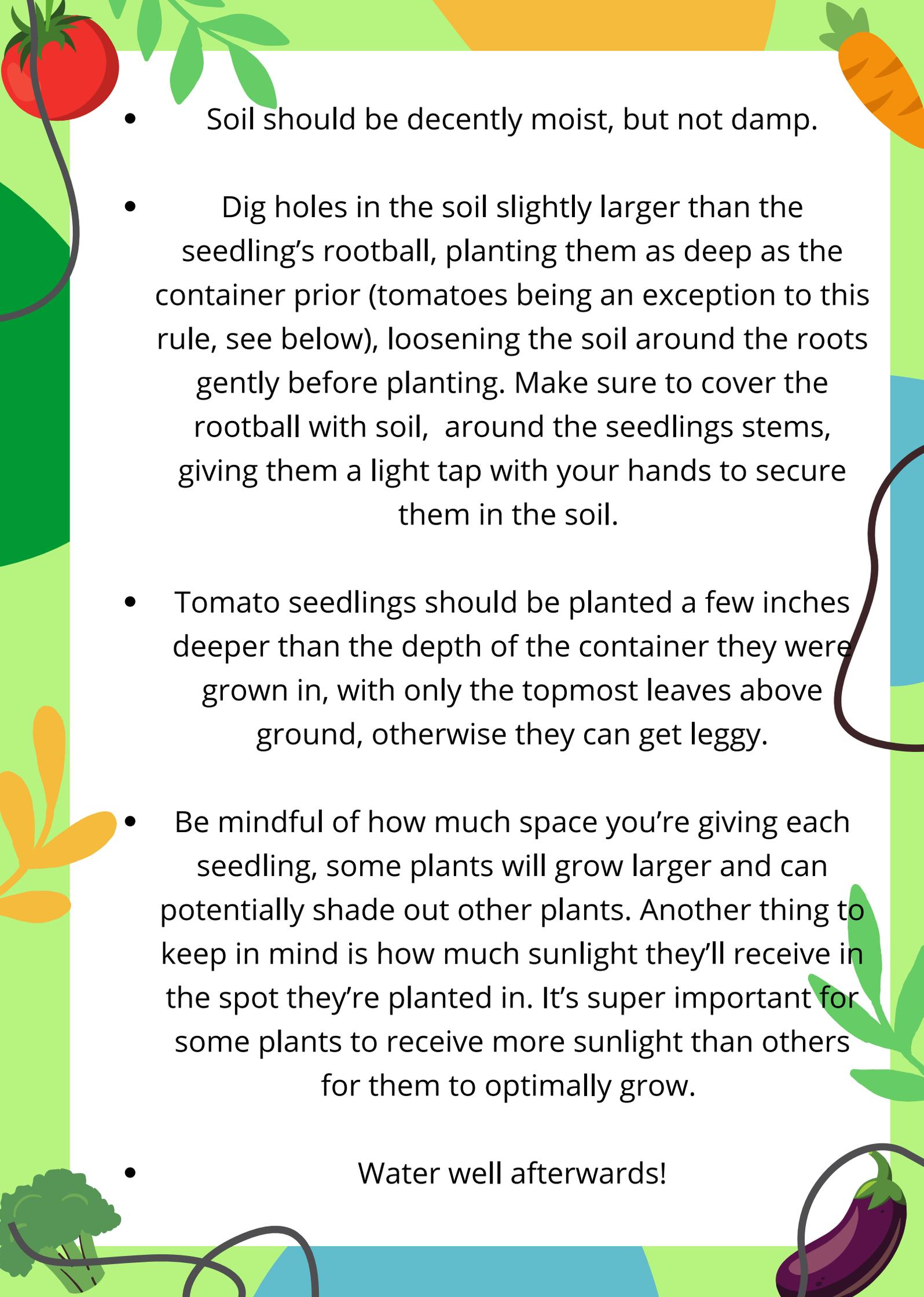
7. Transplanting Your Seedlings:



Once the weather is consistently over 50 degrees during the day and evening, and your seedlings are properly hardened off, you can begin to transplant them outdoors! Tomatoes, peppers and eggplants are especially sensitive to temperatures, so even though you might want to get them in the ground as soon as possible, wait until it is warm enough to do so!

A general rule of thumb for a lot of veggie growers is waiting to transplant your seedlings until Memorial Day or the third week of May after all danger of frost is gone.



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- Soil should be decently moist, but not damp.
 - Dig holes in the soil slightly larger than the seedling's rootball, planting them as deep as the container prior (tomatoes being an exception to this rule, see below), loosening the soil around the roots gently before planting. Make sure to cover the rootball with soil, around the seedlings stems, giving them a light tap with your hands to secure them in the soil.
 - Tomato seedlings should be planted a few inches deeper than the depth of the container they were grown in, with only the topmost leaves above ground, otherwise they can get leggy.
 - Be mindful of how much space you're giving each seedling, some plants will grow larger and can potentially shade out other plants. Another thing to keep in mind is how much sunlight they'll receive in the spot they're planted in. It's super important for some plants to receive more sunlight than others for them to optimally grow.
 - Water well afterwards!

2022 Timetable for starting seeds/direct seeding:

Start your seeds 4-12 weeks before they need to be transplanted.

First frost free date in 2022: 4/28

Information for other varieties can be found online. We like the Vegetable Planting Timetables at Johnny's and Fedco.

	<u>Earliest to start inside:</u>	<u>How long to grow:</u>	<u>When to start putting out according to first frost free date:</u>
Collards	March 1st	4 to 6 weeks	April 1st
Cuke	April 1st - 14th	3 to 4 weeks	May 1st - 14th
Peppers	March 15th - April 1st	8 weeks	May 7th - May 15th
Muskmelon	April 15th - April 22nd	3 to 4 weeks	May 7th - May 15th
Zucchini	April 15th - April 22nd	3 to 4 weeks	May 7th - May 15th
Pumpkin	April 15th - April 22nd	3 to 4 weeks	May 7th - May 15th
Broccoli	March 1st - March 15th	4 to 6 weeks	April 15th
Eggplant	March 1st - March 15th	8 to 10 weeks	May 15th - May 22nd
Okra	April 15th - May 1st	4 to 6 weeks	May 15th - May 28th
Habanero	April 15th	8 weeks	May 15th
Calendula	March 1st - March 15th	6 to 8 weeks	April 28th
Marigold	March 7th - March 21st	6 to 8 weeks	May 7th
Tomatoes	April 1st - April 15th	6 to 8 weeks	May 7th - May 15th