

Seed Starting 101

WHY should I plant edibles from seed?

- More varieties are available as seeds than from full-grown plants.
- It's cheaper than store-bought groceries or container plants
- You control the quality & quantity
- Keeps yourself fed
- It's fun!

WHEN should I sow seeds?

When you're starting seeds indoors, timing is everything. The goal is to grow seedlings that are the ideal size for transplanting into the garden at the proper time. Sowing dates depend on:

- your average last spring frost date;
- whether the plant prefers cool or warm growing conditions;
- how quickly the seed germinates and grows.

Most seed packets suggest a planting time, such as "sow seeds indoors six weeks before your average last frost date." To calculate your planting date, start by determining your average last spring frost date, mark it on a calendar, and count back in one-week increments.

If you plant seeds indoors (seed starting), you transplant them into your garden later. Seeds are generally easier to start indoors than outdoors. You can more easily provide the perfect conditions for germination including ideal temperature, moisture, and fertility. In areas with a short growing season, you can have vigorous seedlings ready to go into the ground at the ideal time.

With direct seeding, you skip the indoor step and sow the seeds directly in your garden. Direct seeding is best for crops that dislike transplanting. These are usually cold-hardy vegetables, so you can direct seed them pretty early.

WHAT seeds are easiest to start indoors? Broccoli, Brussels sprouts, cabbage, cauliflower, celery, eggplant, head lettuce, leeks, onions, parsley, peppers, and tomatoes, basil, zinnia, marigold, cosmos. These all germinate and grow quickly.

DO I NEED:

..... special lights or heat lamps? You will get better results (stronger more compact seedlings) with a grow light that provides consistent bright light. Place the lights several inches above the tops of the seedlings for 14-16 hours a day. You will have to adjust the height as the seedling grow. Keep the newly seeded pots or trays in a warm spot where the temperatures average 65°-72° F. A heating mat will help.

.... special soil? Seed starting mix is lightweight and drains freely, yet retains enough moisture for seedling roots, plus these mixes are free of fungi and other disease-causing organisms that may be in regular garden soil.

.... special pots? Although you can start seeds in any container with drainage holes, seed-starting pots and trays provide optimal conditions. They let you start lots of seeds in a small space, and they drain freely to prevent rot. You can use biodegradable pots or reusable trays. Self-watering, all-in-one seed-starting systems are convenient and foolproof.

HOW should I water the seeds?

Bottom watering is usually preferable because it keeps the soil surface dryer, helping prevent disease problems. For small seeds or surface-sown seeds, top misting keeps the surface moist for better germination.

HOW do I thin seedlings?

It's time to thin when seedlings start crowding each other. Choose the strongest seedling and removing the others by snipping them off with a clean pair of snips at the soil line. You can try to separate seedlings and replant, but you'll damage some roots, setting back growth.

WHEN should I fertilize?

Begin fertilizing seedlings when they're 1"-2" tall, or when they have their second set of true leaves. Use a water-soluble fertilizer that's diluted to half-strength, applying weekly for the first few weeks. After that, you can go up to full strength applied weekly. (Be sure to follow the label directions for dilution rates.)

WHEN do I transplant?

Fast-growing plants may outgrow their pots before it's time to move them into the garden. About a month after sowing or when seedlings are about 4" tall, gently remove one of the seedlings from its pot. If the roots are beginning to fill the space, then it's time to transplant them into a larger pot. Avoid waiting too long, because root crowding can stunt plant growth and make it difficult for plants to recover after transplanting.

Plants need time to acclimate to their new environment outdoors. About a week before you plan to set the seedlings into the garden, start hardening them off. Place them in a protected spot outdoors (partly shaded, out of the wind like in a cold frame) for a few hours, bringing them in at night. Over the course of a week or two, gradually expose them to outdoor conditions for longer periods of time.

SEED PACKET JARGON: Here's a list of what the words and expressions mean.

Seeds are **sown**, plants are planted.

Transplants and **seedlings** are small, young plants.

Germinate = when the seed starts to grow and develop a root & stem.

In heat = a heated area for growing in. It helps seeds germinate. Most often needed for crops, such as tomatoes, that originate in warm countries.

Transplant = Move young plants from one growing spot to another. Sometimes from a pot to the garden, sometimes from one part of the garden to another. The young plants are often also called 'transplants'.

Harden off = acclimate young plants, growing in pots in a warm place, to outside conditions. It often means moving the plants outside during the day, and returning them inside at night for a few days/weeks.

Thinly = sowing thinly means not too many seeds all in one spot. When handling small seeds, mix them with a handful or two of dry sand. This automatically makes it easier to sow the seeds more thinly.

Thin = remove plants in order to allow more space for the remaining ones to develop. 'Thin to 1" apart' gives 1" space between each plant. You can often use the plants you've removed somewhere else in the garden, if you dig them out carefully when thinning.

Spacing = space between plants in a row, and distance between rows.