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5 Tips for Successful Indoor Seed-Starting

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Think of a seed in the same way that you would a prematurely born baby and you're likely to have excellent seed-starting results. In a premie's first hours of life, it's critical that he or she be given air and be kept warm, hydrated, fed and disease free. Sowing indoors allows you to control all aspects of a seed's life in the same way that a doctor uses an incubator to give a premature baby the best possible conditions for surviving and thriving. The tips below will help you guide your plants from seed to healthy seedling.

1) Start with quality, viable seed



Flickr: MyNeChimKi

Good, high-quality food starts with high-quality seed so be sure to source your seeds from a reputable supplier. Although ideally you would sow fresh seed each year, you can get away with using last year's seed for certain crops whose seeds are known to store well. These include beets, cucumbers, squash and tomatoes. Other crops like lettuce, onion, parsnip and corn are much less forgiving. Their germination rates drop steadily after 1-2 years. To find out which seeds store the best, check out [this seed longevity chart](#) [1].

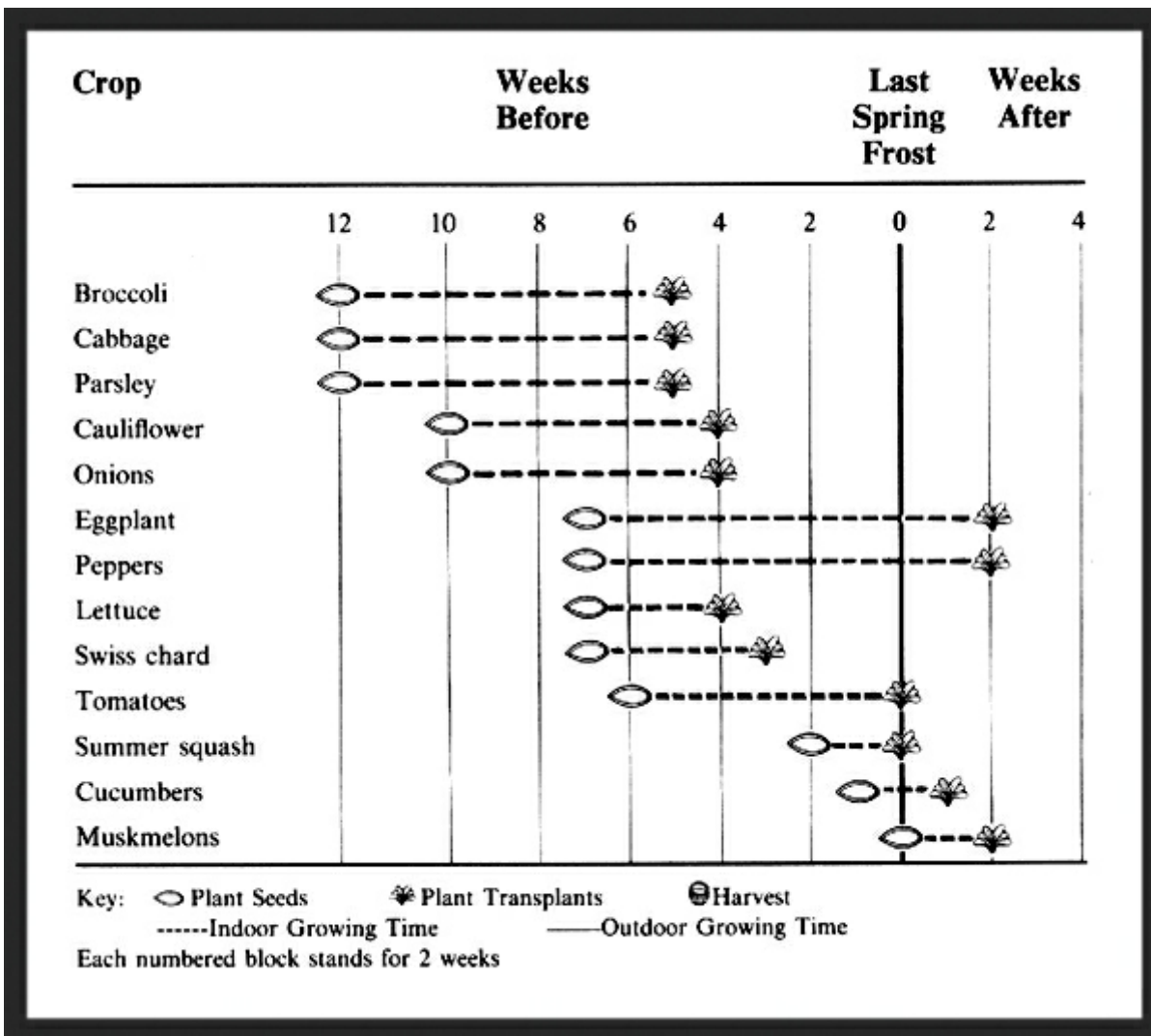
2) Create a seed starting area



[2]

One of the toughest parts of seed starting like many other projects in life is just getting everything you need together to start the job. One way to make the process less daunting is to set up a seed-starting area in your house where you can have all the materials you need ready. In Martha Stewart's world, we would all have a lovely, hand-crafted potting bench to work at in warm, sunny room. In the real world, though, we can get by with much less, for example, a work table in basement or even your kitchen table. If you don't have spot you can temporarily dedicate to seed-starting, you can consider investing in some plastic storage tubs or bins where you can keep your materials, i.e. seeds, starting mix, trays, etc. This way you can move them easily from one place to another when the time is right.

3) Get your seed-sowing timing right



So when exactly is the right time for seed-starting? The answer to that question depends on the average last frost date for your area which [US gardeners can check here](#) [3]. Once you know the date for your area, you can calculate when your seeds need be sown relative to that date either by checking the instructions on your seed packet or using [an online calculator like this one](#) [4]. Alternatively, you can leave all these seed-sowing calculations to us. [KGI offers an online garden planner](#) [5] that takes into account your frost date and gives you weekly reminders about what needs to be sown when.

4) Use the right starting medium and containers



Flickr: Micheline

The ideal seed starting mixture is one that is disease-free and holds both water and air. You can either buy a premade mix or make your own. Most of them contain a mixture of peat moss, perlite or vermiculite (natural mineral amendments that prevent soil compaction) and sterilized compost. Note that a seed-starting mix and potting soil are two different products with different purposes so don't try to get one to do the other's job. As for containers, a seed will often sprout in the tightest and most adverse spaces (think of the dandelions you've seen growing in concrete cracks), but that doesn't mean it will survive and thrive. You either need to pick containers that your seedlings can grow into or have a plan to replot them into something larger. I start most of my seeds in 36-cell and 72-cell plug flats, but am not against sowing seeds in a repurposed milk carton or yogurt pot if that's what is handy. It's when you're sowing seeds or transplanting seedlings that you'll want to have some type of labelling system in place. You can buy small wooden stakes or, if you want to try my method, draw a diagram of your planting trays in a garden journal with each cell labeled with the crop or variety it contains.

5) Provide water, heat, light and food when needed



[6]

These four things are non-negotiable and must be provided at the right time and in the right way for your seeds to germinate and grow. Water softens and loosens the hard skin surrounding a seed called the seed coat. It's for this reason that your starting mix needs to be moist but not soaking wet. Heat is the next key condition and different crops have different minimum and maximum seed germination temperatures. Most vegetable seeds will germinate well at 70 F (20 C) while some warm weather crops like melons, tomatoes and peppers will appreciate slightly warmer conditions. There are different ways to get your starting mix to the right temperature. You can buy a heating mat that is placed under your seed trays or find a toasty spot somewhere in your house, for example, on top of a water heater. Light comes next. As soon as a plant breaks the surface, it wants to be greeted with light and a lot of it. Setting your seedlings on a south-facing windowsill might work if you live in a very sunny area, but most gardeners will want to start them under artificial lights. If you happen to have just won the lottery, you can buy a three-tier shelving system on wheels with the lights built in for "only" \$600 plus tax and shipping. If you didn't have the winning ticket, you'll probably want to come up with a cheaper, DIY system using a standard 4-foot two-tube fluorescent light fixture. As for food, your starting mix will have enough nutrients to keep your seedlings growing for the first 2-3 weeks, but after that point you'll need to provide some type of fertilizer. Concentrated, kelp or fish emulsions in liquid form are your best bets but be sure to dilute them because they're too strong and too expensive to use at full strength.

By following these steps, you should be well on your way to having healthy, vibrant seedlings that can be planted out once the threat of last spring frost is behind you.

Image (optional):

