



Do's, don'ts & timing for starting seeds indoors

The dark winter days are starting to get longer. Everyone starts getting the yearning to plant seeds, looking towards spring and their gardens. Anxiety triggered by the pandemic has increased the urge to grow one's own food. When done right, starting your own seeds indoors is very satisfying, but it can be frustrating when results are not what you expect. In New Brunswick, starting indoors is also necessary for warm season crops if you want a good harvest (tomatoes, peppers, eggplant, etc.)

Not everyone has access to a heated greenhouse. For the home gardener, you can successfully grow your own seeds at home, but it requires more than just a sunny window.

This is what you need for success:

WARMTH: Seeds will germinate in a wide range of temperatures, but most prefer 21°C (70°F) to 27°C (80°F). This is warmer than can be provided in the average room temperature of a Canadian house in winter. Lettuce prefers cooler temperatures; spinach won't germinate if the soil is too warm ie during the summer. Locate your seedlings in a warm area, near a stove or heater, use a heat mat, the top of the fridge used to work except with modern fridges. My indoor growing area is a set of glass shelves - each shelf has fluorescent lights mounted under the shelf. The light shines down on the seedlings leaving the shelf above the light warm - this is where I place the seed for germination. When germinated, I use boxes to raise the seedlings to within a few inches of the lights.

MOISTURE: Seeds grown inside in our dry winter homes need to be somewhere with easy access to watering and where no one minds the mess of water and/or soil. Over watering can cause disease and under watering will quickly kill the fragile seedlings. Water enough to dampen the soil. Coupled with watering is the importance of good air circulation. I keep my ceiling fan on most of the time, or you can turn on a small fan to lightly blow the air around your plants.

LIGHT: Extra light is needed when starting seeds indoors. A sunny window alone is not enough. Try a sunny south facing window coupled with extra fluorescent lights. Or grow anywhere convenient under fluorescent lights. Even standard lamps with the highest wattage bulbs you can find will work or any shop-light fluorescent fixture. You don't have to have expensive grow bulbs. Run your lights at least 12-18 hours per day. Use a timer where possible. Keep them within an inch or two of the plants.

SOIL: A good quality sterile soil mix combined with warmth, light, and water can get your seeds off to a good start. This is not the time to skimp; good potting soil is needed, not garden soil. Seedlings don't need 'feeding' until the second set of leaves appear, these are the 'true leaves'

CONTAINERS: If you are re-using containers, make sure they are clean to prevent spreading disease. They don't need fancy domes; you don't need a 'mini greenhouse' to start your seeds. The containers need to be deep enough for root development (approx. 5 cm/2 in). You can start with shallow containers, once they get their true leaves, transplant them to deeper containers.

SOWING: Don't compact the soil into the containers; loosely pack the soil to make sure seeds have contact with the soil. Press tiny seeds onto the soil surface and lightly cover, bigger seeds need to be buried 2-3 times their width. Always plant more seeds than you need. If you don't plan to transplant into bigger containers, plant 2- 3 seeds per pot (more if the seeds are old), and cut off the weaker plants once they are growing to allow room for growth.

TRANSPLANTING: Handle young seedlings by their leaves, gently loosen the roots and transfer to new container. Most seedlings can be buried up to their first leaves - this stops some of the legginess and more importantly allows more root growth.

But when is the best time to sow?

Spring Sowing Calculator: <https://awaytogarden.com/when-to-start-seeds-calculator/>
(this is very useful but for starting indoors, I prefer my plants to be bigger, so add a few weeks to the earliest suggested date for starting (Pepper in late Feb, Tomato in March, Brassica in April)

New Brunswick's frost dates: <https://www.almanac.com/gardening/frostdates/NB>

HARDENING OFF: Most seedlings won't survive the shock from moving from a house to the great outdoors. They need to be 'hardened' off to prevent this. Take up to a week to gradually let your plants get acclimatized to the natural elements. Start in the shade sheltered from wind for short periods, gradually provide direct sunlight and full exposure for longer periods of time. When transplanting to the garden, this is best done on cloudy days.

References:

<https://awaytogarden.com/when-to-start-seeds-calculator/>
<https://www.almanac.com/gardening/frostdates/NB>