

A BEGINNER'S GUIDE TO GARDENING

ONTARIO

INDOOR EDITION





Welcome to Reconnect Oakville

Welcome to our growing community, where, together, we build positive connections and experience enriching events! We collaborated with our partners at Ecosource to craft this exclusive indoor gardening guide just for you! By the end, you will be equipped with what you need to embark on your indoor gardening adventure this season.

Indoor gardens add texture, color, and help create a beautiful oasis right inside your home. Whether you are a green thumb or a novice, this guide will provide you with what you need to embark on your indoor gardening journey.

Visit **ReconnectOakville.ca** to learn about the many other ways you can get involved with nature and your community.

Happy gardening!

Sincerely,



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What do my Plants Need?

Gardening nurtures our bond with nature, acknowledges our impact on the environment, and offers a chance to actively participate in our local food systems.

By choosing to garden indoors, you are joining the passionate urban gardeners who defy the common belief that gardens must be outdoors. Kudos to you for your openness to experimentation and learning! Your courage and perseverance will reward you with a superpower to overcome space constraints and have a year-round harvest!

An indoor garden needs a special kind of love and this guide will provide you with the tools you need to create the perfect growing conditions for success. To master the art of gardening, you need to lay the foundation by discovering each plant's needs to thrive. Key factors such as sunlight, water, air, soil, and space play pivotal roles. Let's delve deeper into these factors and set ourselves up for a bountiful indoor garden!

• **Sunlight**: Plants rely on sunlight for their growth and survival. The amount of sunlight needed varies among different plant species. Complete the sun-shade map activity below to learn if your indoor growing space gets enough sun. For individuals with mobility issues, investing in plant stands with wheels can facilitate moving plants to sunnier spots, while those with time constraints or who work away from home may opt for the convenience of growing lights.



What do my Plants Need?

- Water: Water is essential for transporting nutrients from the soil to the plant. Different plants have varying water needs. Always check the soil's moisture level at least 2 inches deep to gauge watering requirements accurately. In addition, proper drainage is essential to avoid overwatering or underwatering. Ensure your growing containers have adequate drainage holes to maintain a balanced water level.
- Space: Just like people, plants dislike overcrowding. They come in various shapes and sizes and require adequate space to thrive.
 Understanding the space available for your indoor plants will help you determine which ones are most likely to flourish. Don't let limited space hold you back—small spaces can still accommodate thriving gardens! Get creative with solutions such as vertical gardening using shelves or stacked pots, or hanging baskets from your ceiling. With creativity and resourcefulness, even the smallest of spaces can be transformed into lush green havens.



What do my Plants Need?

- Soil: Soil serves as the foundation for plants to anchor their roots and provides a habitat for crucial microorganisms, nutrients, and water essential for plant growth. Different plants thrive in various types of soil. Sometimes, adding extra nutrients like compost are necessary to meet the specific needs of your plants. When gardening indoors, it is important to avoid using outdoor soil, as it can lead to pest and disease issues within containers. Instead, opt for soil mixes from your local garden center that offer excellent soil texture and balance. You can also experiment by adding organic compost sourced from a local garden or using household waste, such as eggshells, green tea and coffee grounds.
- Air: Air is vital for all plants! They absorb carbon dioxide and release oxygen which are essential for their survival. Moreover, air circulation and wind movement play a crucial role in maintaining plants' health and managing pests and diseases. Incorporate daily practices such as opening nearby windows or utilizing indoor fans to create a gentle breeze. This is especially important for plants that rely on wind pollination, as mimicking natural airflow becomes crucial for successful reproduction.

An interesting review showed that indoor plants can improve your home's air quality. According to several studies, indoor plants can lower pollutant levels, increase humidity and have a natural cooling effect!

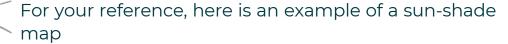


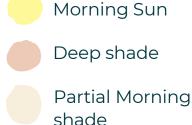
Select My Indoor Space?

Excited to start planning?

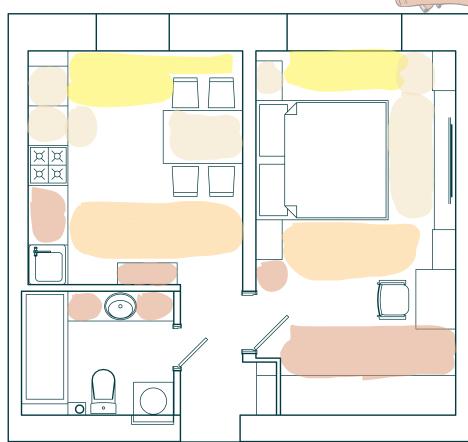
How to make a small space work for your indoor garden?

Before hanging a pot or installing a grow shelf, it's crucial to study your indoor space and determine the optimal locations for growing vegetables. You can achieve this goal by creating seasonal sun-shade maps that track the movement of sunlight through your apartment. Sketch your indoor space including windows, furniture, and other obstructions. Throughout each season, mark the locations of sunlight and shade spots during the morning, afternoon, and evening. Use your sketch to strategically place your indoor plants so they meet their sunlight requirements.





All day shade



How do I

Select My Indoor Space?

Pot Size

Now that you've selected your garden spots around the house, it's time to choose the appropriate size of containers for your plants. The right pot will provide enough width and depth for your plant to flourish. While we encourage experimentation to find what suits you best, here are some guidelines to get you started:

Pot Size (Inch)	Plants								
10 (7 - 11 litres)	Leaf lettuce, arugula, salad greens, baby raddish, baby turnips, green onions, chives, parsley, mint, sage and other small herbs.								
14 (22-26 litres)	Cabbage, swish chard, kohlrabi, turnips, beets, carrots, peas, lavender, rosemary and other large herbs.								
16 (34-37 litres)	Pole beans, compact varieties of raspberry and tomatoes								
18 (52-56 litres)	Cauliflower, eggplant, hot and sweet pepper, tomato, okra								
24 (90-94 litres)	Tomato, cucumber, zuchini. melon, mouse melon, squash								

Did you know? Opting for eco-friendly pots such as terracotta and ceramic instead of plastic ones will reduce your environmental impact. There are a variety of options available for you in the market that come in different sizes and aesthetic forms.

How do I

Select My Plants?

Selecting plants is the most thrilling aspect of the planning process for most gardeners. There are so many varieties of each vegetable to choose from to suit your space, environment, and personal preferences.

Here are few tips to consider:

- If there's a vegetable that you love, but struggle to find at the market, growing it at home can be a fun and rewarding solution.
- Find clever space solutions for vegetable you're keen to try that might be less compatible with a smaller space:
 - a. You can opt for smaller varieties such as compact tomato, leaf lettuce, spinach, arugula, and small herbs.
 - b. You can consider vertical climbers, like Malabar spinach or mouse melon. They require sturdy supports but they offer efficient space utilization and easier pest control.
- Fast-growing vegetables which have a shorter growing period, such as mizuna and turnips, are lower maintenance and a great choice for beginners! For vegetables needing a longer growth period like okra and bittermelon, you need to either transplant, or to ensure they receive adequate warmth and sunlight/growing lights when you plant them in March and April.
 - Fun Fact! Studies show indoor plants can improve relaxation, cognitive function, lower blood pressure, and enhance academic performance! International Journal of Environmental Research and Public Health



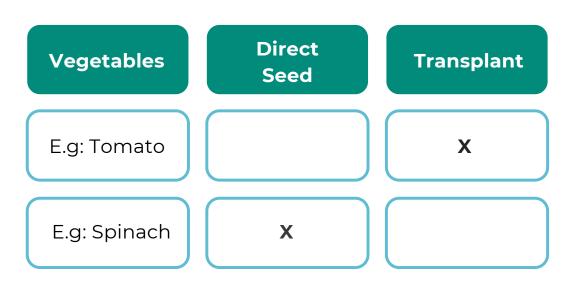
My **Growing Calendar**

Now that you have the basics down and your plants picked out, it's time to plan your growing calendar. Knowing when to plant and how long it takes for your plants to grow will make your garden more productive.

Step 1:

Consult the chart on the next page or search online for guidance to decide which of your chosen plants can be sown directly and which ones need transplanting.

The chart below is an example on how you can record your findings.



Did you know? Growing your own food reduces your exposure to pesticides which can harm our health.

- Environmental Defence Canada

My **Growing Calendar**



Use this chart for a more informed decision.

Plant	FROST TOLERENT/ COLD HARDY	BEST GROWN IN SHADE	REQUIRE FULL SUN		TRANS- PLANT	FAST GROWING (<40 DAYS)	MEDIUM GROWING (45-65 DAYS)	SLOW GROWING >70 DAYS	REQUIRE LOTS OF SPACE	MIGHT REQUIRE TRELLIS/ STAKING
Beans			•	•			•			•
Tomato			•		•			•		•
Pepper			•		•			•		
Eggplant			•		•			•		
Cucumber			•	•	•		•		•	•
Zucchini			•	•	•		•		•	
Winter Squash			•	•	•			•	•	
Melon			•	•	•			•	•	
Beets	•			•			•			
Spinach	•	•		•			•			
Lettuce/ Greens	•	•		•	•	•				
Broccoli	•			•	•		•			
Bok Choy	•			•	•		•			
Kale	•			•	•		•			
Raddish	•	•		•		•				
Turnip	•			•		•				
Peas	•			•			•			•
Garlic	•		•	•				•		
Leeks	•		•	•	•			•		
Onion	•		•	•	•			•		
Green Onion	•		•	•	•		•			
Basil			•		•		•			
Cilantro			•	•			•			

My **Growing Calendar**

Step 2:

Growing calendars serve as invaluable tools for visualizing and organizing garden tasks efficiently. In your calendar, assign distinct colors or symbols for each activity and outline them in the legend. Follow these steps:

- 1. Begin by listing the vegetables you intend to grow in the first column.
- 2. Using the table you just created, assign relevant colors based on plants' requirement for direct seeding or transplanting. If you are cultivating your own seedlings indoors, note the start date for growing them.
- 3. Use the information from this guide and other sources to establish the month when each vegetable will be ready for harvest.

Here is an example to use as a reference:

Direct Seed	Growth/maintenance
Transplant	Harvest

Plant	J	F	М	A	М	J	J	A	S	0	N	D
					Frost-free days (average growing season)						V	
E.g: tomato						20		49)			6,0	
E.g: Spinach				4	20	180		,e				

My **Garden Plan**

Creating the optimal garden plan requires patience and attention to details, much like solving a puzzle. As beginner gardeners, it is common to set high aspirations and to overplant. Start small, learn from your mistakes, and build on your successes.

Consult seed packages and other resources to note down the space requirements for each plant, and how many you want to grow.

You're getting there!

Remember your initial sketch for selecting your indoor garden space? Now we want to map it with accurate measurements. Your plan should be specific. Here are some clarifying tips:



Measure your space: Ensure your plan includes accurate measurements of your growing space. Consider the amount of space you have, any vertical levels you can create and the number and size of containers.

Plan your layout: Refer to your list of vegetables. Draw where each plant will be grown based on compatibility and spacing. For containers that can hold multiple plants, you'll need to determine spacing between each plant and each row. For containers with a single plant, note the space each container will occupy. Knowing how your plants grow will help you to plan your garden strategically. For instance, zucchini plants produce large leaves and flowers before bearing fruits, so you'll want to avoid planting them next to something that won't thrive in their shade.

Plan over time: For example, plants like arugula and spinach complete their life cycles quite early in the season, enabling you to replant or start another crop afterward.

Let's **Harvest!**

Harvesting your vegetables is one of the most rewarding aspects of gardening. Knowing when and how to harvest your vegetables ensures you can enjoy the bounty of your efforts. During the summer, harvests can occur quickly. Regular harvesting not only encourages continuous production but also prevents overripe vegetables from attracting pests and disease.



Not sure if it's time for harvest? Try a sample and let your taste buds judge! While your growing calendar provides guidelines for harvest times, flexibility is key as gardening often diverges from plans.

Increase your harvest:

To maximize your garden's productivity, it is important to understand the lifecycle of each plant. If we left all plants untouched, they would mature, develop seed and give way to the next generation.

However, as gardeners, we have the ability to interrupt this lifecycle at any point to enjoy the edible parts of the plant for longer. For instance, we halt the life cycle of a tomato plant at the fruiting stage, while for a basil plant, we stop it once it develops the mature leaves we want to pick. knowing this information will help you plan to replant or start another crop afterwards.



Let's **Harvest!**

Additionally, regular maintenance such as pinching, pruning, thinning, and trellising are essential:



• **Pinching** herbs encourages continual growth of stems and leaves by preventing seed production.



 Pruning garlic scapes and tomato side-shoots redirects the plants energy toward producing flavorful bulbs and fruits.





• **Trellising** supports vertically climbing plants like peas and tomatoes, simplifying harvesting and pest management.

These habits not only boost harvest yields but also provide insights into plant needs and will help you create realistic growing calendars. Keeping a garden log helps you to monitor your progress and may even give you a greater appreciation for homegrown produce!

thank

As you turn the final page of the Beginner's Guide to Indoor gardening, we hope you feel inspired and prepared to begin your gardening journey.

Share your progress with us! Simply send a photo to the email on the first page and we may even share it in our next newsletter or social media.

Stay tuned for future editions of our guides, and we hope to Reconnect with you in our newsletter, soon!

Happy harvest!

Special thanks to our partners at Ecosource. This content was adapted from Ecosource's "Grown in Mississauga Training Manual" available at www.ecosource.ca/publications

