

# The Many *Benefits* of Tower Garden

Why should you use Tower Garden rather than another growing method, and not just plant a few seeds in the dirt? Why even garden at all when you can buy produce from the grocery store or farmer's market?

The advantages of Tower Garden can be summarized in three words: healthier, easier, and smarter.





#### **Bountiful Harvests:**

- · Grows plants 3x faster than traditional gardening
- Increases yields by an average of 30%



#### Convenience:

- No digging
- No weeding
- Cuts down on grocery bills (pays for itself in about 6-12 months)



#### Food, Nutrition & Learning:

- Clean food
- Control over your food
- Nutrient dense
- Colourful produce
- Tastier & better smelling
- Nurtures healthy habits
- · Educational resource tool



#### **Sustainability:**

- Minimal water usage.
   Uses as little as 2% of water as traditional gardening.
- Leaves a smaller CO<sub>2</sub> footprint.
   Reduce your carbon footprint by eliminating supermarket transit and storage.
- Uses only 10% of the land of traditional farming. The vertical design uses 90% less land normally required to grow produce.
- Recycles 100% of nutrients and water.

  Tower Garden uses a closed-system technology to recycle 100% of its nutrients and water.
- Reduces need for pesticides and herbicides.
   The pH-balanced ionic minerals and plant nutrients in the Mineral Blends produce strong, healthy plants that can better protect themselves from plant pests and disease—without pesticides.













# General Tower Garden Guidelines: How (and when) to Harvest

### Gathering *Goldenus* Greens

Most greens—such as lettuce, kale, collards and others—allow for two harvesting methods, so you may always have fresh ingredients on hand for salads and other healthy dishes.

- **1. Whole plant.** Remove the entire plant and net pot from your Tower Garden or cut all the leaves off at 2-3cm from the base of the plant.
- **2. Cut harvest.** This technique keeps the plant alive and encourages continued production. When there are plenty of mature leaves present:
  - Harvest only a few leaves at a time, from the bottom of the plant upward.
  - Allow 2-3 leaves to remain so the plant may keep growing.
  - Repeat every 2-3 days until the plant bolts or begins flowering.
  - After bolting, replace the plant with a fresh seedling.

### Picking perfect Produce

While tomatoes, squash, peppers and other fruit-bearing plants may be quite different, a few harvesting best practices apply to all. Do the following to improve your chances of record yields:

- · Harvest frequently to promote continued flowering and production.
- When harvesting, use a clean knife or shears to avoid injuring the plant.

### Harvesting healthy Herbs

It seems a little counter intuitive, but typically the more herbs you harvest, the more you will grow. And there's no such thing as too many herbs! Here are a few guidelines to remember when harvesting herbs:

- · Harvest frequently to encourage healthy, bushy growth.
- Harvest no more than 30% of the plant at a time.
- Once the plant bolts (or starts to flower), replace it with a fresh seedling.

## Saving Seeds

Harvesting seeds from your plants may not be something you've considered. But it's a great way to keep growing your favorite crops for free! The following seed-saving steps will apply to most plants.

- After flowering or fruiting, collect seeds from open-pollinated plant varieties.
- · Wash and dry seeds.
- · Store seeds in an airtight container, and place somewhere cool, dry and dark



















## How To Plan Your Tower Garden

Welcome to Tower Garden! We're so glad you're a part of our growing community and are here to help you have the best growing experience with Tower Garden, whether you have a green thumb or not! We've got you covered when it comes to planning your garden, so get ready to get planning and planting!

#### 1. Find the Ideal Location

With a 1 sq. meter footprint, Tower Garden fits almost anywhere. In addition to space, be sure to consider these factors when choosing a location for your Tower:



#### Liaht

Most plants need 6–8 hours of full sun or, 14–16 hours under Grow Lights indoors. Check seed packet labels for plant-specific light requirements. If you grow outside in a location with intense summer heat, keep in mind your plants may appreciate a little afternoon shade.



#### Water

Since Tower Garden uses a water + nutrients solution, a nearby source for clean water is critical. It's best to not use softened, heavily chlorinated or very hard water.

**Tower Tip:** To remove chlorine, fill a bucket with water and leave it out in full sun for 48 hours. Alternatively, add the water to your Tower Garden and run it for 48 hours before adding plants.



#### **Electricity**

You'll need electricity to run the pump (and lights if you're growing indoors).

#### 2. Pick Plants



#### **Food preferences**

What produce will you actually use? To answer this, consider what you use currently or what you typically bring home from the supermarket.

If you're new to gardening, stick with plants that are easy to grow on your first season like:

- Leafy Greens: lettuces, rocket, chard, kale, spinach, pak choi
- Herbs: basil, chives, coriander, dill, mint, parsley



#### **Plant Arrangement and Quantity**

Have your list of plants? The next step is to determine how many of each you need, and how you should arrange them. Here's a handy guide:

#### **Ideal Planting Locations:**

- Top: Small plants like lettuces, herbs, strawberries, chard, celery
- · Middle: Medium plants like peppers, eggplant, beans, kale, collards, sugar snap peas
- Bottom: Large plants like tomatoes, cucumber, zucchini, all squash (no more than 4 large or vine plants per Tower Garden is recommended)

For the average family, here is a guide to the number of each type of vegetable seedling we suggest planting (but of course it's up to you based on your preferences):

• Herbs: 1 of each (O, I) • Lettuces: 5-10 (O, I) • Bell Peppers: 1-2 (O) • Butternut Squash: 1 (O) • Aubergine: 1 (O)

• Green Beans: 4+ (O) • Spaghetti Squash: 1 (O) • Sugar Snap Peas: 4+ (O)

• Summer Squash: 1 (O)

• Tomatoes: 1 (O) Courgette: 1 (O)



#### 3. Supplies

Your Tower Garden comes with everything you need to get started, but if you're not a new Tower Gardener and starting a new harvest, make sure you have these items ready to go before you plant:

- **Seeds or Seedlings**
- Mineral Blend
- Net Pots
- Rockwool Cubes

Depending on what and where you're planting, you may want to consider LED Grow Lights for indoor growing, a water proof mat to protect flooring and some good quality shears and gardening gloves.











# Maintaining & Cleaning Your Tower Garden

Daily:	Check your plants. Look for any discolored leaves or pests.
	Check water level.
	<ul> <li>Keep enough nutrient solution in your reservoir so that the pump stays completely submerged at all times.</li> </ul>
	<ul> <li>Add nutrients to the water every time you fill your reservoir tank. You can mix water and the Mineral Blend in a bucket prior to adding it to the reservoir (20ml each of Mineral Blend A and Mineral Blend B for each 10 litres of water).</li> </ul>
Weekly:	Prune large and faster growing plants like lettuces, baby greens, herbs, tomatoes, etc. These plants must be pruned and harvested regularly to avoid encroaching on nearby plants.
	Check the pH after refilling the reservoir, follow the instructions to adjust your pH level. Yellowing leaves are an indication that your pH may have drifted out of the recommended range.
	Keep roots away from the pump. You can trim the roots that may be dangling in the reservoir.
Monthly:	Keep the shower cap holes clean and free from debris. You can use a toothpick to clean the holes if they get blocked up.
	Clean the pump by unplugging it, pulling it pump up through the access port and removing the pump cover. Clean with water to remove debris.
Semiannually:	After disassembling, clean the Tower sections, shower cap and lid, and the pump with warm soapy water and a sponge.

#### **Cleanup and Storage**

- 1. Remove the plants from the Tower Garden by pulling the net pots from the planting ports.
- 2. Disassemble the Tower grow pots, starting at the top. Do not remove the bottom section from the reservoir lid.
- 3. Compost or discard plant material. Clean and save net pots for future use. If net pots are damaged, you can order new ones.
- 4. Unscrew the blue swivel hose from the reservoir lid and pump. Rinse pump with clean water before storage.
- 5. After cleaning the Tower sections, you can store the parts of the Tower Garden in the reservoir until you are ready to grow again.











# What to *Grow* in a Tower Garden

All produce on a Tower Garden can be grown indoors (with LED Grow Lights) or outdoors (based on the season), but here is a list that will help guide your growing journey by plant for the best growing experience.

#### Indoor

Bok Choy • Celery • Chives • Coriander • Cress • Dill • Endive •

Kale • Leeks • Lettuce • Mint • Mizuna • Mu Oregano • Mustard •

Pak choi (and other Asian greens) • Parsley • Peas • Radicchio •

Rocket • Sage • Sorrel • Spinach • Swiss chard • Thyme • Mustard greens

#### Outdoor

Broccoli • Brussels Sprouts • Cauliflower • Cucumber • Aubergine • Endive •

Kale · Kohlrabi · Lavender · Leeks · Lettuce · Mizuna · Mustard · Parsley ·

Peas • Radicchio • Spinach • Swiss Chard

#### Both

Basil • Beans • Bok Choy • Cabbage • Chives • Collards • Coriander • Dill •

Endive · Kale · Kohlrabi · Lavender · Leeks · Lettuce · Mint · Mu Oregano ·

Mustard • Muzina • Pak Choi (and other Asian greens) • Parsley • Rocket •

Sage • Sorrel • Swiss Chard • Thyme









# How To Grow Strong, Healthy Seedlings



The key to a healthy garden starts with strong seedlings. After all, the overall success of your garden will depend on the quality and health of the seedlings used when starting the garden.. If you use weak seedlings, you'll probably end up with slow-growing, unproductive plants that invite pests and other problems.

In this guide, you'll learn seven techniques that professional growers use to cultivate hearty seedlings that become fruitful plants.

#### **Benefits of Starting from Seeds**

Why would you grow your own seedlings rather than buy them from a professional grower? There are a few advantages:

- You save money. A single seedling will typically cost you about the same amount as a full packet of seeds. So for minimal cost, you could either get one plant or if you choose seeds potentially dozens.
- You have more options. Seedling providers offer an array of plants. But you'll find that many varieties and often the most interesting ones come only in seed form.

Bonus benefit: If you're gardening with kids, starting from seed serves as a fun, educational experience. What better way to learn about a plant's life cycle than to watch it from the very beginning?

#### 7 Steps of Growing Spectacular Seedlings

With so many advantages, you may be wondering, "Why doesn't everyone start from seed?" Well, frankly, it's slower and a little more challenging. This guide will help you master the process. Let's dig in.

#### 1 Decide the best time to plant your seeds.

As with most gardening activities, seedling success has a lot to do with timing. Start your plants too early, and an unexpected frost might kill them. Start them too late, and they may not have enough time to mature.

Fortunately, seeds often come with planting schedules stamped on their packet. But if yours don't, there are also planting calendars you can reference online.

#### 2 Gather all the supplies you'll need.

Cultivating healthy seedlings requires only a few things. First and foremost, you'll need the seeds.

You can order high-quality seeds online or from seed catalogs. Local garden shops and seed swaps are also great sources. (A key benefit of buying online is that you can often see product reviews from other gardeners, which may give you an idea of what to expect.)

Wherever you get them, you'll want to use relatively fresh seeds. After a year or two, most seeds don't germinate as well, especially if they haven't been stored in a cool, dark place.

Besides seeds, it's helpful to have:

- A seedling tray (a food storage container or glass baking dish will also do)
- · Rockwool cubes and vermiculite
- Grow lights (fluorescent shop lights are an inexpensive, but effective option)
- A small fan
- · An outlet timer

**Tower Tip:** The Tower Garden Seedling Starter Kit comes with a seedling tray, plus rockwool cubes, vermiculite, and seeds.

If you've used any of your seed starting supplies before, make sure to clean everything well. You don't want to expose your seedlings to disease before you even transplant!

#### 3 Plant your seeds.

Many gardeners find that soaking seeds overnight in a shallow bowl of water improves and speeds germination rates. And this seems to work for most plants. (That being said, don't worry about soaking smaller seeds, such as those for lettuce and greens — they're too easy to lose, and they usually sprout well anyway.)

Before you plant your seeds, thoroughly soak your rockwool cubes for 30 minutes or so. Then plant the appropriate number of seeds based on crop type:

- For lettuces and greens, plant 6–12 seeds per cube.
- For herbs, plant up to 6 seeds per cube.
- For vegetables with larger seeds (e.g., tomatoes, cucumbers, peppers, beans), plant 1–2 seeds per cube.
- For other types of seeds, refer to the instructions on the seed packet.

Once you've planted the seeds, loosely fill each rockwool cube seed hole with dry, coarse-grade vermiculite. (For smaller seeds, fill the hole only half-full.) This will ensure seeds have enough moisture to germinate.

**Tower Tip:** Not all seeds must be sprouted before being transplanted. Some you can seed directly into your Tower Garden. These include plants that grow very quickly after germinating, such as beans, cucumber, and squash.

#### Provide the ideal conditions for germination.

Before your seeds sprout, temperature is a critical factor. Most leafy greens and herbs will germinate well in the 55–75° F/13-24° C range. But fruiting crops usually prefer the upper end of that range. If your propagation area is cooler than that, a heating mat may help.

Following successful germination, you'll want to turn off the heating mat.

#### **5** Keep your seedlings healthy.

It probably goes without saying that your plants need water. But how much? How often? Essentially, you want your rockwool cubes to stay moist but not oversaturated. Adding about 1cm of fresh water (replacing any existing water) to the seedling tray daily should do the trick.

As soon as you see something green peeking out of your seeds, you should give them lots of light. Keep in mind, despite what you might have heard, light from a window — even a big, southern-facing one — likely won't be enough, especially in the winter.

If it's too cold to move your plants outside in the sun, placing a Tower Garden grow light just inches away from your young plants will work well. Seedlings will typically grow best with 14–16 hours of daily grow light exposure. (This is where an outlet timer comes in handy.)

#### 6 Make your seedlings strong.

To get your seedlings ready for the great outdoors (assuming you're not planning to keep them inside), you need to toughen them up a little.

How? Routinely "pet" your new seedlings and/or set a fan to gently blow on them. This will make your plants stockier, which will help them better resist real wind and other outdoor elements. It also promotes air circulation around your plants, preventing plant diseases.

By the time your seedlings have a few pairs of leaves, weeding out the competition — that is to say, thinning some of your seedlings with a sharp pair of shears to leave only one plant per rockwool cube — can be wise.

The plants that benefit from thinning typically fall into the heartier, fruiting crop category (e.g., tomatoes, squash, peppers). For most herbs and greens, on the other hand, you can usually grow multiples per rockwool cube.

#### Transplant!

When your seedlings are over 7cm tall and have roots protruding from the bottom of the rockwool cubes, it's time to transplant.

If you started your seedlings indoors, it's a good idea to harden them off before placing them in an outdoor Tower. Do this by placing them outside in partial shade for a few days before adding them to the Tower.

**Tower Tip:** Hardening off prevents shock, which can delay your plants' development.

Finally, plug your new, happy, hardened seedlings into your Tower Garden and watch their growth explode!

#### **Common Seedling Problems (and Solutions)**

You should be closely monitoring your seedlings from the time that you plant the seeds. Here are a few common problems to watch for:

- **Seeds won't sprout.** How old are your seeds? (The fresher, the better.) Keep in mind that certain seeds may take up to two weeks to sprout. Also, see step four to verify you've created the ideal sprouting conditions.
- Seedlings grow tall and thin. Leggy growth likely means your plants aren't getting enough light. Confirm that they're either under grow lights for 14–16 hours per day or outside in the direct sun for 6–8 hours daily.











# Troubleshooting: Common Tower Garden Challenger (and How to Avoid Them)

#### **Maintenance Mistakes:**

Water leaks around growing ports or section seams. Let's begin with one of the easier problems to fix (or avoid altogether).

- To function properly, Tower Garden must be on a level surface. If your Tower Garden is leaking, make sure it's level.
- If you verify it is level, but it still leaks, you may need to simply push the grow pots together more tightly.
- If water is coming from the pump cable hole, tie a loose not in the cable and place inside the reservoir to catch drips.

#### The pump suddenly stops pumping.

- · Make sure the pump is plugged in properly.
- Check roots monthly through the growing season. If your pump stops working plant roots may have jammed it.
- To fix this:
  - o Unplug the pump.
  - Pull the pump up through the access port.
  - o Remove the pump filter cover.
  - Flush the filter with water to remove any debris.
- Trim roots that grow down into the reservoir to prevent clogging the pump.
- Trim roots up to half their length (this will not harm plants).

#### pH constantly drifts out of the recommended range.

Tower Garden grows plants with only minerals, oxygen and water, no soil. So, the quality of the water in your Tower Garden is very important.

Using heavy chlorinated water will most likely cause problems. Fluctuating pH is just one.

What to do if your pH is not balanced:

• For heavily chlorinated water, leave the water out in the sun for 48 hours. Alternatively, run the water through your empty Tower Garden for a day or two.

#### Algae growth on rockwool.

Algae growth is relatively common if it appears at the base of your plants on the rockwool. This is typically harmless to plants and not actually a problem.

#### Pests infest your indoor Tower Garden.

Your Tower Garden can be grown indoors or outdoors, but be aware that bringing a Tower inside from outside could come with unwanted pests. If you experience pests:

- Without natural predators indoors, pests multiply very rapidly and can become very troublesome, very quickly.
- Even if plants appear to be healthy and show no visible signs of problems, you should still think twice about bringing them inside. Aphids, small caterpillars and the eggs of certain pests can hide on the underside of leaves.
- Reducing the risk of an indoor infestation is accomplishable: start all your indoor plants fresh, and regularly check your plants for signs of trouble. The earlier you catch a pest problem, the easier it will be to control.

#### **Plant Problems:**

#### Seeds won't germinate.

Sprouting seeds can be a little tricky. There are a number of reasons seeds may not germinate. The three of the most common are:

- Poor seed quality. For best results, start with the best seeds. While the seeds that ship with Tower Garden are of top quality, if you're buying new seeds, make sure to source them from a reputable provider.
- **Old or expired seeds.** Some seeds have shorter shelf lives than others. So, when in doubt, try using new seeds.
- Temperature. Like plants, most seeds have temperature preferences. Generally, the seeds of warm season crops germinate best in warmer environments, while those of cool season crops prefer cooler ones. In fact, some gardeners refrigerate spinach seeds—which are notoriously stubborn—to encourage germination. (If you try that, just be sure to move the seeds out of the fridge as soon as they sprout.) For seeds of warm season crops, consider using a heating pad.

If you address these factors and still have problems, here are some more tricks to try:

- Soak your seeds. Initially soaking seeds overnight often speeds germination, as it helps moisture break through a seed's outer coating.
- Germinate using the "baggie" method. The process is simple: distribute seeds on a dampened paper towel placed in an open sandwich bag. (This creates a sort of miniature greenhouse.) Check the bag every few days—moistening the paper towel as needed— and, as soon as the seeds germinate, transplant them to rockwool cubes.

#### Seedlings wilt after transplanting.

Though wilting can be a symptom of various problems, one cause concerns Mineral Blend concentration. Keep these points in mind:

- When you're starting a fresh Tower Garden (i.e., one full of small seedlings), you should fill it with a half-strength nutrient solution. That ratio is: 10mL of Mineral Blend A + 10mL of Mineral Blend B per 10 litres of water.
- If you're using full-strength nutrients and your seedlings are wilting, try diluting the solution. Your plants should perk up.
- After you've been growing for a week or so, you can increase the solution to full-strength.
- Another time you should be using half-strength nutrients is in hot weather. Heat evaporates the water more quickly, resulting in a more concentrated solution.

#### Plants grow slowly.

As soon as your seeds sprout, they need light. Without it, they'll grow lanky and weak. That means they won't have the resources they need to develop strong root structures.

As a result, when you put them in your Tower Garden, your seedlings will likely struggle to grow (if they even survive).

So, for healthy, happy seedlings, give them light. And once they're about 7cm tall and have roots protruding from the rockwool, you can transplant.

But the need for light doesn't cease post-planting, of course. Outdoors, most plants require at least 6–8 hours of sun. Indoors, they'll need 14-16 hours of artificial light. Many people assume light from a south-facing window is all indoor plants need for proper development, but the light that filters through window panes is rarely enough.

To ensure your indoor garden grows to its full potential, use LED Grow Lights.

#### Tomatoes (or other plants) take over.

Given free reign, certain vining plants, like tomatoes, will probably overwhelm your Tower. They're voracious growers, sending out vines, tendrils and roots to help them ever expand.

This characteristic makes them pretty easy to grow. Unfortunately, it also makes them bad neighbors. So it can get crowded quickly. And when plants grow together so thickly like that, they create the ideal conditions for leaf fungus diseases.

To prevent all of the above, just do a little pruning here and a little harvesting there. This will help keep your plants' growth in check (with the added benefit of making them healthier and more productive).

#### Plants don't produce.

With declining pollinator populations, many gardeners are finding they must "be the bee" to ensure a consistently hearty harvest.

If you're growing indoors or if you don't see many bees or other pollinators around your garden, you'll probably want to consider hand-pollinating your plants.

#### Crops taste bitter (or turn black and die).

There's a time for everything, but it's not always time for everything. When it comes to outdoor growing, certain seasons are perfect for growing certain crops. Others? Not so much.

Lettuce is refreshing and delicious in the fall and spring. But try growing it in late July, and—depending on your growing zone—it will likely bolt.

Likewise, if you try to grow tomatoes in November, they may not even make it past the seedling stage. And as soon as a little frost hits, they won't make it.

So be strategic about what plants you decide to grow each season.











## Best Herbs to Grow in Tower Garden

Most herbs grow well indoors, but the following 15 in particular really thrive and require little attention. In addition to tasting great, many of these herbs will infuse your air with spirit-lifting aromas and your body with health-boosting nutrients.

**Note:** Tower Garden allows you to grow up to 20 plants at once. So you can grow every plant on this list — and then some.



#### **Basil**

Commonly used to make pesto, basil's sweet and spicy flavor complements a range of dishes, from Italian pastas to Thai curries. This herb also reduces inflammation and supports the digestive system.



#### Chamomile

When brewed as a tea, chamomile has a calming effect and can even diminish feelings of depression and anxiety. It also helps settle upset stomachs!



#### **Chives**

Related to onions and garlic, chives add a delicate onion-like flavor to everything from omelets to potato salad. And since it's most delicious when used fresh, it's a great herb to grow yourself.



#### Coriander

Coriander tends to have a polarizing effect. But for the fans, this herb is a delicious addition to spicy foods. (Think salsas and stir-fries.) It may also help inhibit blood vessel damage and support digestive health.



#### Dill

With a buttery flavor, dill elevates fish and egg dishes. Is it good for you? Well, let's just say its antioxidant count rivals superfoods, such as kale and pomegranates. The herb also supports digestive health.



#### Lavender

Lavender has calming properties and is good for your skin. It's often used to make teas and essential oils, but you can add the herb to salads and other dishes, too.



#### Lemongrass

Offering digestive tract support and anti-inflammatory benefits, you can use lemongrass to make a restorative tea or a satisfying soup.



#### Marjoram

A close cousin of oregano, marjoram is typically used to add light, zesty flavors to meat or potato dishes. It also offers digestive and antiseptic benefits.



#### Mint

Peppermint, spearmint, lemon balm, catnip — virtually all plants in the mint family flourish indoors. Whether you use it to brew tea or top off that cocktail, mint adds an unmistakable flair. And regularly consuming mint may guard against age-related diseases (as well as bad breath).



#### Oregano

Reportedly good for keeping your cholesterol in check, this herb is a staple in pasta sauces and as a pizza topping.



#### **Parsley**

More than garnish, parsley can add flavor to a variety of dishes from salads to pastas to soups. It's also a strong antioxidant.



#### Rosemary

With a minty, pine-like aroma, rosemary adds depth to chicken, bread, and potatoes. Steep it in hot water for a healing tea that eases inflammation and promotes brain function.



#### Sage

Though it's most famous in holiday dishes, sage can be used for so much more. Try adding it to potatoes or quinoa to enjoy its throat, skin, and hair health benefits.



#### Stevia

The healthy alternative to sugar, stevia is a surprisingly sweet herb that pairs well with beverages, fruit, and many other foods.



#### **Thyme**

Add this potent herb to vegetable and grain dishes, and you'll never want to go without it again! Containing antibacterial properties, thyme is useful for treating winter colds.













# Harvesting Herbs with Tower Garden

Nothing quite beats the aroma and taste of fresh herbs picked straight from your own garden. The perfect addition to everything from soups to stews, fresh herbs are packed with flavor and nutrients like calcium, iron, and antioxidants. While harvesting herbs is fairly straightforward, it's important to get the timing right. If left too long, herbs will start to flower and take on a bitter taste.

To ensure your crops retain all of their amazing flavors and nutrients, follow these harvesting best practices for 5 popular herbs that can be grown with Tower Garden:



#### Basil

- Frequent picking (up to twice per week).
- Pick roughly 6-8 leaves.
- Pinch or cut stem tips above where plant branches.
- If production slows, harvest the entire plant by cutting stems at its base.



- · Harvest frequently to encourage healthy, bushy growth.
- Harvest no more than 1/3 of the plant at a time.
- Once the plant bolts, replace it with a fresh seedling.
- · If you grow dill outside, consider letting it flower. Bees and other pollinators love it!



#### **Chives**

- · Harvest at 15cm tall
- · Use a sterilized pair of scissors to cut the plant's outside leaves two inches above the base of the plant.
- Harvesting half at one time will result in the same clump of chives producing multiple yields throughout the growing season.
- · Cut chive plants regularly to encourage new bulblets to develop and prevent leaves from becoming tough and flowers from forming.
- Chives dry and freeze well.
- Experience full flavor and optimal nutritional eating fresh.



#### Coriander

- Snip the bottommost leaves at the base of their stems.
- Remember to never take more than 1/3 of a plant at once.
- To save coriander seeds, cut them from the plant and place them in a paper bag until they fully dry and fall off the stems.
- · Coriander leaves lose most of their flavor when dried. So for tastiest results, use them fresh or freeze for later.
- And if you're cooking with coriander, add it last to preserve the herb's bright flavor.



#### **Parsley**

- Parsley can take up to 90 days before it's harvest ready.
- · Harvesting approximately one-third of a parsley plant at once will keep it healthy and productive. Snip off the stalks close to the base, beginning from the outside. (If just the tops are cut off and the leaf stalks remain, the plant will be less productive.)
- You should pick parsley throughout the growing season to ensure a continual harvest and prevent a leggy plant structure. It's also wise to trim unhealthy leaf stalks at the base of the plant and discard them.











## Harvesting *Greens* with Tower Garden

Did you know that most produce loses 30% of its nutrients within just three days of harvest? And in some cases, the nutrient loss is much worse. Spinach, for example, loses 90% of its vitamin C content only 24 hours after being picked! By eating a plant that you harvested from your garden the very same day, you're ensuring peak *freshness*, *flavor*, and *nutrition*.

To ensure your crops retain all of the amazing health benefits and flavor profiles, follow these harvesting best practices for 8 popular greens that can be grown with Tower Garden:



#### **Amaranth**

- Amaranth greens are usually ready to harvest 3-4 weeks after planting.
- Simply cut the bottommost, older leaves first, taking care to not damage the stems of the inner leaves.
- If you allow at least 2/3 of the foliage to remain, the plant will produce additional yields as frequent, moderate harvesting encourages new growth.



#### **Baby Greens**

- After you transplant your baby greens, your Tower Garden will do most of the work. And in two or three weeks, your crops will be ready to pick.
- Many people harvest baby greens as soon as the first true leaves (i.e., those that come after the cotyledon leaves that form inside the seed) appear. The drawback to this approach, however, is that you get only one harvest from each seed.
- If you let your baby greens grow a little longer to the point of qualifying as
  petite or baby greens you can actually harvest repeatedly from the same
  plants for weeks by taking only the older leaves and allowing the new growing
  tips to remain.



#### **Broccoli**

- After 80–100 days, your broccoli heads should be ready to harvest. But you can harvest leaves long before that time.
- Broccoli leaves are not only edible, but also highly nourishing and as versatile
  as broccoli heads. To harvest broccoli leaves, simply cut them from the plant,
  always allowing a few to remain and keep growing.
- When your broccoli plant produces heads that are firm and tight, harvest them quickly — before they flower — considering the following:
  - You should cut heads (along with about six inches of stem) at a slant to keep water from pooling in the main stalk and causing rot.
  - After the primary head is harvested, you can continue to harvest side shoots for several weeks.
  - If you don't enjoy your homegrown harvest right away, you can blanch and freeze your broccoli to preserve it.



#### **Brussel Sprouts**

- After about 90 days, you should start to notice little buds growing along your plant's main stalk above the base of each leaf.
- Once they reach about 3-4cm in diameter, harvest these by twisting until they snap off of the stalk.
- You can also remove them with a sharp knife.
- Cutting away leaves around the sprouts may make this process a little easier.



#### Kale

- Kale is one the fastest growing plants in your Tower Garden, and depending on the variety and growing conditions, may be ready to harvest in as little as one month.
- Pick or cut the bottommost kale leaves first, allowing at least three or four leaves to remain and keep growing.
- Frequent harvesting will foster new growth.



#### Lettuce

- About 45 days after starting seeds or whenever there are several mature leaves present — you may start harvesting your lettuce.
- There are two ways to harvest:
  - Periodically pick individual leaves, which allows the plant to continue to produce.
    - For the leaf harvest method, start from the bottom of the plant and pinch off or cut only a few leaves from each lettuce plant. Always allow two to three leaves to remain so the plant has enough energy to keep growing.
    - You can harvest like this every week until the plant shows signs of bolting. (In spring and fall, you can usually harvest for more than a month before bolting begins. In summer, this harvesting period will likely be a bit shorter.)
  - Harvest the entire plant once it grows to a full head. If you'd rather use the whole head harvest technique, simply cut or remove the entire plant once the lettuce head reaches the size you desire.



#### **Spinach**

- You can harvest spinach (starting with the outer leaves first) as soon as the leaves are big enough to eat.
- Harvest often to encourage continued production, prevent disease, and extend your plant's life cycle. If you notice signs of bolting (e.g. sudden vertical growth), harvest the entire plant to prevent the remaining leaves from becoming bitter.



#### **Swiss Chard**

- Swiss chard is sweetest and most tender during the cooler temperatures of spring and fall. And yields are most flavorful once the plant is 50 to 60 days old.
- Harvest leaves when they are four inches long by cutting leaf stalks near the base. (Be careful not to cut the stems of the inner leaves, as this will stunt additional growth.)
- Start with the mature leaves, picking three to five at a time. And don't be shy about harvesting often, as this will stimulate the production of new leaves.











# Harvesting Fruiting Plants with Tower Garden

To get the most out of your fruiting plants, like eggplant and tomatoes, it's important to harvest them at the right stage of maturity. This will ensure optimum *flavor*, *quality*, and *nutritional* value. The trouble is, knowing the signs of maturity and harvesting methods for each crop can be a challenge, even for more experienced gardeners. Not to worry, Tower Garden is here to help.

To ensure your fruiting plants are harvested at the right time and maintain all of their great flavors, follow these harvesting best practices for 8 popular fruiting crops that can be grown with Tower Garden:



#### **Cucumbers**

- Cucumbers will start producing fruit around 50 days after germination.
- Harvesting will produce 0.5-2KG of cucumbers a week for up to 10 weeks, with proper care.
- Most cucumber varieties are mature at eight inches in length, but can be picked at any size, as long as they don't get overripe (i.e., smooth, bloated, and yellow).
- Harvest by cutting the stem above the fruit twisting the fruit from the vine may damage the plant.
- Check at least twice a week, and harvest frequently to encourage additional fruit to develop.



#### Courgette

- Courgette may be ready to harvest as soon as one month after transplanting seedlings.
- Harvest courgette fruit when it is about 15cm in length.
- Cut just above its cap with a knife or shears to avoid injuring the rest of the plant.
- Courgette does not store as well as other produce. Cook immediately for the best flavor.
- Avoid leaving mature courgette fruit on the vine for very long. Once they grow too large, the fruit will become pithy and may taste bitter.
- As a visual cue, fruit that has lost its glossy sheen or lightened in color is
  probably past its prime. If this happens, remove the mature courgettes from the
  vine so that other fruit may develop.



#### **Green Beans**

- Green beans will be ready to harvest about a month to six weeks after transplanting seedlings.
- To harvest, snap or cut the beans from the stem, taking care to not damage the plant. For best taste, harvest before the beans show excessive swelling.
- Your first harvest might be just a few pods, but as the crop matures, harvests will be more plentiful. Regular harvesting will promote the production of new pods.
- When the plant's most mature leaves turn yellow or brown, your green beans will likely stop producing within a few weeks.



#### Peas

- You should expect to be harvesting your sweet green peas around 65 to 75 days after germination. Depending on the variety, peas may indicate that they are harvest-ready in other ways:
  - Pick English peas when they're firm but still succulent.
  - Pick snap peas when the pods are crisp and round.
  - Pick snow peas before the swelling seeds within the pod become too evident.
- Pea pods are firmly attached to the vine. To harvest, hold the vine in one hand and twist the pod off the vine with the other. This will protect the vine from injury. You should harvest your peas often to promote continued flowering and production.



#### **Peppers**

- Peppers are ready to harvest about 65 to 85 days after transplanting seedlings. Most change color from green to red, yellow, purple, or orange when they're ripe.
- As the color of the fruit changes, so does the flavor. But peppers don't continue
  to ripen once you remove them from the plant. So, you should leave them
  attached until they're as ripe as you want them.
- It's perfectly fine to harvest peppers before they reach full maturity the immature fruit of some varieties are more flavorful. (Jalapeños, for example, are commonly harvested when green, even though they aren't fully ripe until they turn red.)
- To harvest, use a knife or shears to make a cut above the cap of the pepper, leaving a portion of the stem attached.



#### **Strawberries**

- Everbearing strawberries planted in the spring should start producing fruit by early summer. And once berries are red, they're ripe and ready to eat!
- To harvest strawberries, cut the stem just above the fruit. (Don't pull the berries, as this may damage the plant.)
- You should enjoy your harvests as soon as possible because the natural sugar in strawberries converts to starch soon after the fruit is picked.



#### Squash

- · Most summer squash varieties will be ready to harvest about 60 days after planting.
- To harvest, simply cut fruits from the vine once they are 15-20cm long. If you wait much longer, they will become less tender and flavorful.
- In the winter, when the rind of a fruit is hard enough to resist being punctured with a fingernail, it's ready to harvest.



#### **Tomatoes**

- Tomatoes will always mature in the order that the tomatoes appear on the truss (i.e., the fruit closest to the branch stem will mature first).
- The time it takes for a tomato plant to produce fruit depends on an array of factors, such as the plant variety, weather, pollination, and more.
- But once you do see fruit, your first clue that a tomato is ripe and ready to pick is its color: It should be a deep red (or yellow or purple, depending on the variety).
- Your second clue is the fruit's hardness. The riper a tomato gets, the softer it will become. A perfectly ripe tomato has some give but is not mushy.
- A ripe tomato should easily "pop" off the truss when it's ready to harvest. But if you like, you can harvest the entire truss by cutting the stem attaching it to the main branch.









