

Seed Starting on a Budget

Series: Watering your Seedlings



Plants need water to survive. There's no doubt about it. Moisture is a requirement throughout a plant's lifecycle. Some are better at handling drought conditions than others, but seedlings are especially sensitive to significant fluctuations in moisture levels. Too much variation will stress your baby plants.

Proper watering will produce sturdy seedlings and prevent loss. If you don't water enough, drown your seedlings or wait too long between waterings, you may just watch all your effort go down the drain.

Tips for keeping your thirsty seedlings happy

Everyone has a different way of approaching the seed starting process, but here are some tried and true tips for watering your seedlings.

- **Water from below.** My seed starting setup includes sturdy, deep trays where I set flats or coco coir pellets. Once seedlings have popped through the soil, I shallow-fill the tray with water. Watering from below helps prevent disease development, and I've found it encourages strong root growth. I'm also less likely to drown the tiny plants this way.
- **Watch the temperature.** Don't water with scalding hot or ice cold water as it can stress your seedlings. Opt for lukewarm or room temp water for watering.
- **Soak the soil.** Before planting seeds in soil mix, make sure the soil is wet. Watering once you've popped in seeds is tougher and may cause small seeds to migrate to other cells in a flat.

Check on seedlings often

Keep to a schedule and make it part of your routine to take a peek at your seedlings at least once a day. You'll notice right away if there's anything wrong and you're more likely to remember to water consistently.

Thankfully, proper watering doesn't require any additional spending. Consistency and diligence will get your plants where they need to be!

Seed Starting on a Budget Series: Choosing What to Grow



Browsing a seed catalog or shopping at a local plant nursery can be overwhelming. Especially for a new gardener! I still have a tough time making selections. With so many choices, it's hard not to go overboard. When I'm purchasing seeds, I try to consider my space and needs so I can maximize returns. I also often fill up my basket and walk away from my computer before finalizing my order. It's easy to get caught up in the moment and overestimate both my garden's capacity and the amount of room I have for seed starting. Have you found yourself stressing about what to plant? Today I want to try to make the planning process easier for you.

Make a plan

Before buying your seeds or starter plants. Make a rough

[garden plan](#). You'll have an estimate of the amount of space available for planting. I use the Square Foot Gardening method, so I always have an idea of how many square feet are available. I sketch out my beds, divide them into square feet, and decided what to plant in each square. With proper planning, I know what I need to start indoors. For example this year, I'm dedicating one square foot to leeks. Using the SFG method, leeks should be planted 9 per square foot, so I've got at least nine leek seedlings growing. I also always start a few extra, just in case.

If I hadn't done any planning, I might have started too many seedlings and found myself scrambling to make room for leftover plants. Luckily, this year I'm donating any extras to our local community garden.

If you're working within a limited space, like a balcony, count up the number of pots you have or plan to use before you start growing or purchasing seedlings.

How do I narrow down my planting choices?

Sunlight

Now that you know how much space you're working with, consider the amount of sunlight that shines upon your growing space. How many hours of sunlight does your garden receive? 6-8 hours is ideal. Less than 6 hours of sun typically means the area is partially shaded. You can still grow plants in low sunlight, but growth will be slower, and not all plants will thrive without full sun (e.g., tomatoes).

Working with a super sunny area?

In the summer, you may want to use shade cloth to protect greens like lettuce because heat will cause certain plants to

bolt and go to seed. In the very hot sun, greens may also experience leaf burn. Mulching to conserve moisture is crucial. You may also plant heat-sensitive crops close to larger, leafy vegetables for shade. In full sun, you'll have success with eggplant, tomatoes, peppers, and squash.

Shade tolerant veggies

Note that the use of the word *tolerant*. Temper your expectations when working in a shaded or partially shaded area. Don't expect to grow big juicy tomatoes if your garden gets less than 4 hours of sunlight. I have experience gardening in a well-shaded area. The biggest issue is that growth is extremely slow. The advantage? In the thick of the hot summer, it's easier to grow lettuce, spinach, and Asian greens. Here are a few examples of vegetables you can grow in partial shade:

- Carrots
- Radishes
- Chard
- Parsley
- Lettuce
- [Kale](#)
- Mustards
- Mizuna
- Pac Choi
- Broccoli

Your dinner plate

I'm a big proponent of choosing vegetables and plants that will make their way onto your dinner plate. Don't grow stuff you don't like to eat unless you plan to trade it with other gardeners. I don't love cucumbers. I find them boring, and plants always produce way more than I can eat, so I don't typically grow them. What's the point? I'd rather use the space to grow something I love to eat! My favorite veggies

include bok choy, kale, eggplant, and carrots. I eat these veggies the most, so I make sure I have plenty of growing space for them.

Which plants are the easiest to grow and which are the toughest?

I hear this question a lot, and I'd say it depends. A lot of people find it easy to grow tomatoes. I find they're a lot of work and often produce way more than I can eat in a season. It's possible to preserve them, but that involves extra labor.

Radishes grow super quickly, and some varieties are ready to harvest in less than a month. But your success with radishes may depend on your soil composition.

Lettuce is easy to grow, but in climates with sweltering summers can bolt quickly and turn bitter before you even have a chance to harvest the leaves.

Spinach is another low-maintenance quick growing green, but in my climate, if I don't sow seeds early, plants go to seed before I even realize they're ready to eat.

I've had great luck with eggplants, but it's true that they're finicky.

Difficulty level depends on many factors, and you may find that the easiest vegetables to grow are the ones you enjoy eating because the harvest is so rewarding. Plan your garden according to your palette, and it'll be that much more fun to nurture the plants within.

Seed Starting on a Budget Series: Germination



Germination is the process by which a plant sprouts from its seed. Because it mostly happens underground, it's such a mysterious and almost magical occurrence. One day you're popping seeds into moist soil mix and the next you've got bright green seedlings popping up. It's a simple yet incredible feat of Mother Nature that such a miniature-sized organism is capable of making its way above ground to seek sunlight. Seed starting is all about this process, so I wanted to talk a bit about it, requirements for germination, and germination times.

Germination Requirements

Germination requirements differ depending on the plant in question, but all plants require the following:

- Moisture

- Suitable temperature range
- Oxygen availability

Contrary to popular belief, most seeds don't need light to sprout. But it's handy to have lights on and ready since your seedlings will require light as soon as they emerge from the soil.

Germination Times

Not all seeds sprout at the same rate. While environmental conditions may alter germination time (e.g., if the soil is too cold, tomato seeds may take longer to germinate) some seeds naturally take a lot longer to pop up out of the ground. Knowing how long a seed should take to germinate is an integral part of the seed starting process. If quick-to-sprout seeds like mizuna and lettuce are taking longer than seven days, you can be sure there's a problem with your setup or your seeds. Here are a few examples of germination times for favorite garden vegetables:

- Tomatoes: About a week
- Eggplant: About a week
- Beans: About a week
- Kale: 4-5 days
- Chard: 4-5 days
- Lettuce: 3 days
- Parsnip: Up to two weeks

**note these times are based on optimal conditions, slightly colder or warmer soil may delay germination*

Having Problems?

If you've waited patiently and seedlings aren't showing up, you may have a bad batch of seeds on your hands. You may also not be meeting the optimal conditions for germination.

Different varieties of the same plant may germinate at

different rates. As always, I suggest taking notes for next year. Knowledge is power, after all!

Seed Starting on a Budget Series: The Importance of Biding Your Time



My first serious foray into indoor seed starting began with a bang. My husband helped me set up a makeshift grow shelf, and I purchased soil mix, trays, and pots. I was so ready to get started that I assumed it would be better to get things going sooner rather than later.

I quickly realized, that when starting seeds, getting things

done faster isn't necessarily better especially if you're on a budget!

Problems with Starting Seeds Too Early

It seems entirely logical to start plants earlier. They'll be bigger by the time they get planted out, and you'll harvest vegetables sooner. If you don't have money to spare, however, early indoor sowing can leave you scrambling. Here are some ways starting early may be a detriment for the frugal gardener.

- **Higher supply cost.** You'll likely need to repot plants into bigger containers to prevent them from becoming root bound. This will involve purchasing larger pots and more soil mix.
- **Bigger time investment.** The earlier you start, the more time you'll spend babysitting your plants.
- **More space required.** Bigger pots and plants mean that you'll need to carve out more space for your seed starting activities and that can translate to extra money spent. You may need to purchase more lights for a second shelf, for instance.
- **Pressure and potential loss of seedlings.** As your plants get bigger, you may feel pressure to transplant too early, especially if you simply don't have the budget to purchase additional supplies. This may lead to loss of seedlings if they are transplanted out before the last frost date or without proper hardening off.

The Right Timing

I addressed this in a previous post, but I'll repeat it. [Proper timing](#) is key. Don't overestimate the time you'll need. Instead, I recommend that frugal gardeners under-estimate. For instance, the typical recommendation for starting tomato seedlings is 6-8 weeks before the last frost date. Go with the 6-week figure to be safe and take notes on timing, so next

year you can master your schedule.

Exceptions

Of course, there are exceptions to the rule. If you have plenty of space, a bigger budget, and patience, starting slightly earlier isn't a big deal. And some plants, like leeks and onions, can be started early without too much trouble. They grow slowly and aren't susceptible to becoming root bound. You may also want to begin cool-season veggies such as spinach and mizuna early so you can transplant them outdoors as soon as the soil warms in the spring to maximize their exposure to cooler temperatures.

Overall, the lesson I'm trying to impart is that there's no need to rush!

Seed Starting on a Budget Series: The Importance of Labeling



It's almost time for me to start my very first seedlings of the season. I've been busy gathering supplies, cleaning out my grow room, and sanitizing trays that I plan to re-use. I've been organizing my seed packets, and I'm thoroughly excited to try a few new varieties this year. I'm also shifting my start dates a bit later because I always find myself stuck with seedlings outgrowing their pots, despite my best efforts to make conservative estimates based on the last frost date in my region.

The weather is so unpredictable, so this year I'm delaying my foray into seed starting. It's hard to resist. Those in warmer regions are already sharing photos of cute little transplants on social media. I know, though, that the wait will be a smart move.

My System

In addition to getting pots and trays ready, I've also done

some thinking about how I'll keep track of my seedlings this year. Because I'm growing starts just for myself, I tend to have multiple varieties and sometimes different vegetables in the same tray.

If I didn't label starts, I'd be mighty confused. Over the years, I've tried multiple labeling strategies, each with pros and cons. While I can definitely tell which vegetable is growing even at the seedling stage, I like to know a bit more information than just the veg type.

For now, I've settled on a system that combines plain plastic labels and a Google spreadsheet. I use a thin sharpie to write down the vegetable and variety (e.g., Old German Tomato).

Then, in a digital spreadsheet, I mark the date the seedlings were started and any other notable information including anything meaningful from the seed packet (e.g., date to maturity, whether the variety is determinate or indeterminate, etc.). If I start two sets of 'Old German Tomato' at different times, I simply label the groups 'A' or 'B' to differentiate them.

Why is Labeling Important?

Without labels for your starts, you'll quickly lose track of what's growing where. You'll second guess yourself, too. Why are these seeds not germinating yet? Has it been a week? There's no need to guess at this information if you have it available at your fingertips. My system also involves keeping notes, which allows me to look back at my seed starting dates and practices and see where I might improve or make changes.

Other Labeling Options

My system won't work for everyone, and I think it's important for gardeners to develop their own. I tried a lot of different things before I found what worked for me.

- **Masking tape** – Write on bits of masking tape and affix the pieces to trays or pots. Masking tape is cheap but doesn't adhere to all types of materials. Ink, if wet, will bleed and leave information unreadable.
- **Label maker** – Pricier alternative, but if you already have one lying around the house, why not use it to label seedlings?
- **Paper** – When I first started, my operation was very unsophisticated, but even then I knew the importance of keeping track. I tore up pieces of paper and arranged them near my windowsill growing op. It wasn't an ideal system, but it worked in a pinch.
- **Color / Shape coding** – Use different colored or different types of containers to organize your seedlings.

Don't forget to re-use

If you use plastic or wooden markers, don't throw them away. They're incredibly easy to reuse. Write on the other side next year or affix a piece of tape to cover up last year's markings. Or use the same label if you're re-planting the same seedling varieties.

And, don't forget that your seedling labels are perfectly usable for outdoor organization purposes, too!

Seed Starting on a Budget Series: Indoors vs. Outdoors



I recently polled my social media followers to find out what kinds of questions they had about seed starting and a common source of confusion is figuring out which seeds need to be started indoors. You don't need to dig out *all* your seeds and start everything indoors before the last frost date.

Why Not Start Them All?

The biggest reason is that it's just not necessary. We start some seeds indoors because they require a long growing season. Eggplants, for instance, need plenty of time exposed to summer heat to grow, mature, and bear fruit. In many climates, it's just not possible to direct sow seeds after the last frost date for these types of plants. They wouldn't have enough time to mature in ideal conditions.

Some seeds can be direct sown even when the weather is cool. They actually prefer the cooler soil. So you don't need to

bother to start them indoors. The exception being if you want to succession sow your plants. You can start seeds indoors to enjoy a steady supply of seedlings.

Other plants don't like to be transplanted. Often these are plants with shallow root systems. Transplanting stresses the plant and may leave you with dead seedlings.

Examples

Here are a few examples for each case mentioned above.

Heat-loving / Long growing season

- Eggplants
- Tomatoes
- Peppers
- Onions
- Leeks

Easy to direct sow

- Radishes
- Asian greens (mustard, Pac Choi, mizuna, etc.)
- Lettuce
- Kale

Don't like to be transplanted

- Carrots
- Beans
- Peas
- Beets

Tip for Direct Sowing

For plants like radishes and greens that mature reasonably quickly, direct sowing is easy. Pop seeds right into the ground, spacing things out accordingly, and it won't be long before you notice seedlings sprouting from the earth.

A few problems may arise, however: birds and small mammals might munch on your seeds, and there may be seeds that don't sprout at all (they may be old, or you may have received a bad batch).

An easy solution is to pre-germinate seeds. Sprout seeds on a damp paper towel, and you'll quickly be able to pick out viable sprouts to plant in your garden. There's no need to go back a week later to re-sow in spots where seeds didn't sprout. You still may have to protect your garden from birds or other hungry creatures, but at least you'll know that animals are the culprits!

Are you still confused? Need more clarification? Have another burning seed starting question? Leave a comment below!

Seed Starting on a Budget Series: Get Your Timing Right



When January rolls around, the seed catalogs start to arrive in the mailbox. Then, as soon as February hits, I get a constant flood of seed starting photos popping up on my Instagram feed. It gets me excited for the gardening year ahead, but I've also learned to slow my roll. Just because someone else is starting seeds doesn't mean it's time for me to do so. The Internet is full of excellent seed starting calendars for different zones and regions making it easy to know when it's time to get going.

Most of the calendars are based on last frost dates. It's important to note that the dates are ballpark figures. There have been years when I've followed a chart I found online and ended up having to transplant my tomatoes, peppers, and eggplants into larger pots because it was still way too cold to set them out into the garden, but they were beginning to show signs of stress from the small-sized starting containers.

Timing is everything, but it takes a bit of practice to get into a groove.

Tricks of the Trade

Here are a few tips to help you get the timing right.

Use a notebook. The best way to figure out optimal timing is to take copious notes during the seed starting and transplanting process. Next year, you'll have data to help you make decisions. Last year, for example, I started my tomatoes too early, without my notes, I'd probably forget what I did, and I'd risk starting my seeds too soon all over again.

Follow other gardeners. Follow them on Instagram or read blogs to get a sense of what other gardeners do in terms of timing. Be sure to follow folks who garden in the same zone as you, but always remember that there are fluctuations and minor differences in temperature even in the same zone depending on where a person lives, where their garden is situated, etc.

Read seed packets. Don't ignore the information on all those [seed packets](#). Sometimes you'll find useful info that will help you get your timing right.

Mistakes to Avoid

I've made a lot of errors during the seed starting process, but thankfully they've helped me learn and adjust.

Being too eager. Don't start seeds too early. You'll be left with plants that outgrow their pots, and you'll be tempted to transplant them way too early.

Sticking to frost dates. Last and first frost dates are not set in stone. They're simply guidelines. Just because the LFD in your area is usually May 15th, doesn't mean you should set out transplants no matter what. Check the weather forecast and

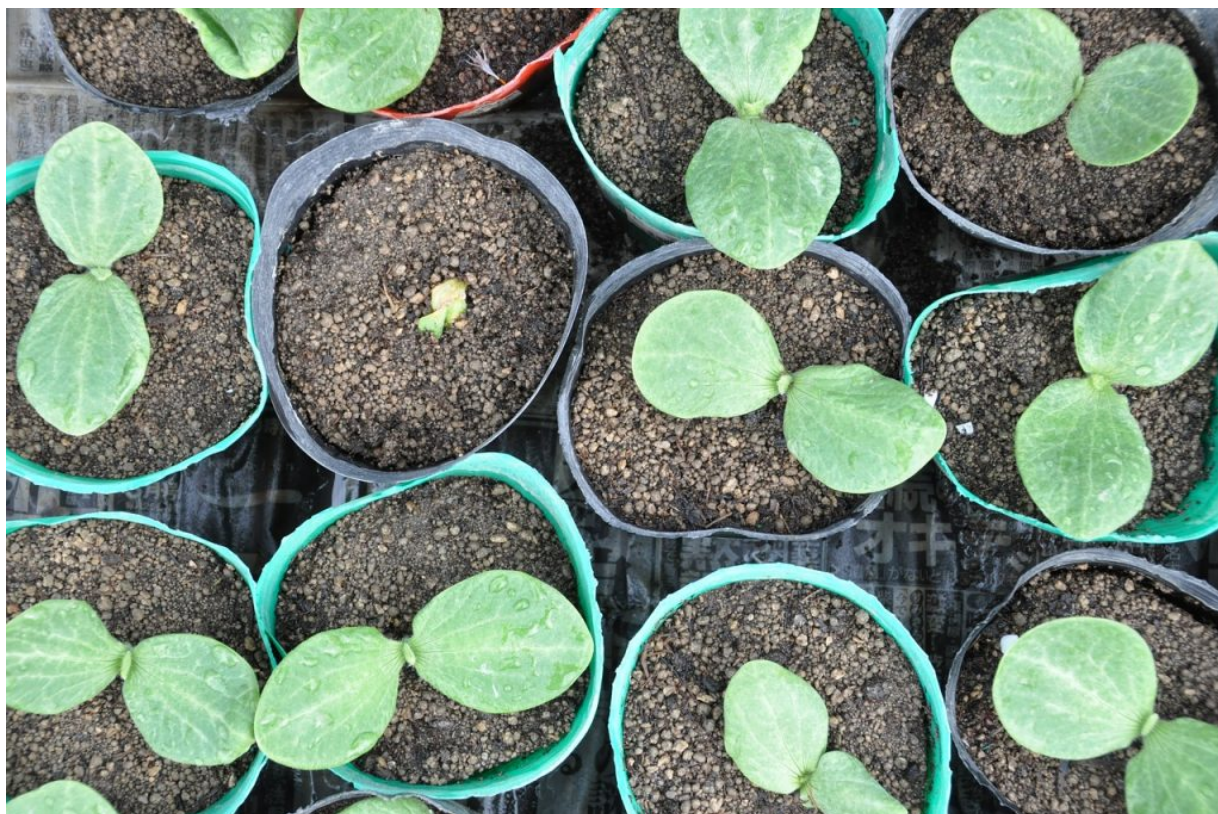
use your judgment.

Not hardening off seedlings. Your little baby seedlings are coddled indoors and require a bit of help getting used to the outdoor environment. It's important to expose them little by little to the outdoors. This ties into being too eager, too. Don't rush to get your plants outside. Be patient and acclimate them accordingly.

Resources to Help You Get Your Timing Right

- [Regional Planting Charts](#) from West Coast Seeds
 - Smart Gardener [Garden Planner](#)
 - You Grow Girl [Spreadsheet Planner](#)
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Seed Starting on a Budget Series: DIY Containers



No rule says that seed starting requires fancy flats or trays. For the frugal gardener, spending money on pots and containers is a definite no-no. The smallest portion of your gardening budget should be allotted to containers. Why? Because they're so easy to find for free or cheap! Including plenty of DIY options to consider!

Budget, Free, and DIY Container Options

When looking for items to recycle into seed starting containers choose pots that allow for appropriate drainage. You can poke holes to let water to seep through. When puncturing the container isn't possible, add rocks to the bottom, so your plant's roots don't sit in water. Consider the following when selecting container sizes. Will you be re-potting seedlings at some point? Or are you timing your plantings so that you'll just need to transplant once into the garden?

I like to set my containers on a tray of some sort to keep accidental soil and water spills in check. I also prefer to

water seedlings from below to prevent damping off. Years ago I splurged on heavy-duty seed starting trays. I expect them to last for years to come. Any tray will do. Check your kitchen cabinets for old serving trays.

- **Egg carton** – a cheap, recyclable option, but indents are relatively small
- **Chinese takeout containers** (plastic or paper) – make sure to poke holes in the bottom for drainage
- **Paper towel rolls** – sit them upright and fill with soil, small but eco-friendly option
- **Dollar store options** – pass by the dollar store in the spring and you're likely to find a few seed starting options for a steal.
- **Coffee pods** – they're tiny, but instead of chucking them in the trash you can rinse them out and add a bit of soil to start seeds
- **Yogurt or applesauce containers** – small but easy to collect if these happen to be a favorite snack in your household
- **Paper cups** – have some extra paper cups from that new year's eve party you threw? They make great seed starting containers
- **Bulk plant trays** – whenever you purchase plants for your local nursery, keep those plant packs they come in and use them to start seeds
- **Jiffy or coir pellets** – these aren't free, but they're typically low cost and super easy to use. Add a little water, and they puff up, so they're ready for seed starting. Buy in packs to save money and find a tray or use a box or larger container to keep them in.
- **Clamshells** – strawberries, blueberries, salad, baby spinach, it's a shame that so much of our food requires so much plastic packaging. Use it to your advantage by repurposing the clamshells as trays for your pellets or soil. Close the top, and voila you'll see your seed sprouting in no time!

- **Juice or milk cartons** – cut the side out of a carton and fill with soil. These provide a nice large area for starting seed

These are just a few ideas. There are no doubt plenty more. Let me know if you have a favorite budget method for starting seeds. I'd love to hear it! Leave a comment below.

Still Thinking of Buying Speciality Trays and Flats?

If you want to spend extra money on this type of equipment, that's fine. I do suggest, though, that you make sure you're buying the highest quality containers that you can afford. That way, you can reuse them each year.

Regardless of the container you go with, if you pick something that's being repurposed or reused, just be sure to sanitize it.

Seed Starting on a Budget Series: Inventory & Supplies



For the next few weeks, I'll be focusing on the topic of seed starting. I'll be providing you with budget-friendly tips, hints, and strategies to get you started this gardening season without breaking the bank. This week, let's talk about inventory and seed starting supplies.

Inventory

Every year I have a mini panic about the stuff I'll need to purchase to get through the seed starting period. And then I quickly realize I already have plenty on hand from years prior. Carefully taking inventory is how I avoid overspending on seed and supply orders. Here's what I ask myself:

- Do I have enough seed trays and pots?
- Are there any seeds I need to buy? Which ones?
- How many plants of each type will I grow? I suggest referring to any [plans](#) you've drawn up during the winter months.
- How many bags of soil mix do I need?
- What do I have on hand that I can re-use?

Guestimating is your enemy. Guessing how many pots or soil mix I need is a recipe for overspending. Knowing the exact numbers will save you from wrecking your budget.

Buying Supplies

Before you start clicking around online to purchase seed and supplies, have a budget in mind. I typically set mine to no more than \$50.

The three most important tools required for seed starting are:

- Seed starting soil mix
- Seeds
- Containers

Through seed saving, you can drastically reduce your spending on seeds, but sometimes it's fun to try new varieties. A tip for saving money if you're buying seeds: buy them with a friend or two to save on shipping costs. Often, packets include way more seed than most gardeners would use in a single season. Pair up with another gardening pal so you can share and split the cost.

Each year I [re-use](#) my seed starting flats and containers. The number one rule? Make sure to sanitize! Otherwise, you might end up with a whole tray of dead seedlings. Use found and recycled containers to save money. Only buy new containers and flats if current ones are totally broken and unsuitable for planting.

Soil mix is where I don't skimp. I buy the best mix I can afford as long as it fits into my set budget. Buy larger bags of soil mix to save cash. If buying online, keep a close eye on shipping costs. Some companies may charge extra fees for shipping bulky items. Don't substitute bags of earth or potting soil for seed starting mix. Before buying, figure out how much soil you'll need to fill your trays and containers. Remember, you can always buy more seed starting mix if you

need it.

Start Small

You don't need to start with an intense operation all at once. Start small and increase your seedling production each year. I started off starting seedlings under a small grow light in a single tray. Today, I have a homemade shelving system equipped with adjustable grow lights. I hope to add a shelf next year, but I'm in no rush. Be patient and purchase supplies when they're on sale. As time progresses, you'll find yourself more well-equipped than ever.

An Organized Pantry Makes All the Difference for the Frugal Gardener



A peek into my pantry. This is the section where I store beans, grains, and pasta.

You're probably wondering why I'm talking about pantry organizing. Aren't we here to talk about gardening? Of course, but being a successful frugal gardener takes more than just popping some seeds into a clump of dirt. I approach gardening much like I do my health. A holistic strategy is required for best results. Everything has an impact on my gardening, including my pantry (and fridge) organization. If everything is in disorder and I don't know where essential ingredients are, it becomes difficult to make use of what I'm harvesting in the garden. If my pantry is a mess, I don't know what I need to replace, which may potentially lead to unwanted

spending at the grocery store.

Get it Done Now

I usually only do one big cleanup of my pantry each year. I don't have the time to do a whole bunch of mini cleanups. I also typically do it in the winter time. Why? Because it gets things ready for the spring when all my energy is focused on prepping the garden. It's one less thing to think about.

Tips for Organizing

Whether you have a tiny cupboard or a walk-in pantry for all your dry goods, you can organize things in a way that makes sense for your lifestyle. Where there's a will, there's a way!

- **Start small.** It's tempting to try to tackle organizing things all at once, but it can be discouraging if you don't have the budget to buy expensive food storage containers in large quantities. Start with one shelf at a time.
- **Not everything needs to match.** I've seen the photos on Pinterest. Pantries with perfectly matched containers, everything perfectly lined up. It looks great, but it's not realistic especially if you're on a budget.
- **Label, label, label.** Label the things that need to be labeled. For instance, different types of rice need to be labeled. Pasta does not (you can identify it at a glance). I bought inexpensive chalkboard labels from Amazon so that I can erase and re-label at will.
- **Head to the dollar store and look for sales.** As long as containers are airtight, they're fine for food storage. I purchased most of my storage containers at IKEA during their storage sale events.
- **Organize by shelf.** If your pantry has multiple levels, designate each shelf for a type of food. In my pantry, I have one shelf for snacks and nuts, another is for canned goods and spices, and one for legumes, grains,

and pasta. The bottom shelf includes everything else.

- **Take everything out.** Remove everything when you're ready to get started on a big cleanup project. Have all the containers you need? Labels at the ready? Get everything out of there before you start organizing. You'll be able to visualize everything a lot better.
- **Disinfect.** Wipe down shelves and all surfaces so everything is spic and span.
- **Buy clear jars and containers.** You'll be able to see when it's time to replenish lentils and grains with a simple glance.
- **Containers over boxes.** I've always tried to have a neat pantry. Even when I purchased boxed goods like pasta or grains, I'd find a way to store everything neatly. The problem was, it still looked overwhelming and cluttered. Containers and jars lessen the visual clutter and make opening the pantry a lot nicer than before.
- **Extra containers.** Get an extra jar or container, so there's always a place to put newly purchased dry goods. Use them in rotation to store the stuff you don't buy often.

Have any questions about pantry organization? Let me know by leaving a comment. I'm no Marie Kondo, but I sure do love when things have their place, and clutter is kept to a minimum!