
Grow
CREATE THE BEST
VEGETABLE GARDEN

Hello. I'm Bec

I am the urban hillbilly behind Growing Home. For almost 10 years I have been growing my own food, raising chickens + bees, cooking from the garden, and preserving the harvest.

I love growing my own vegetables! There are so many benefits but one of the best things is the satisfaction and convenience of having fresh, healthy produce that you grew yourself... let me help you to start your own vegetable garden!

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GETTING STARTED

Growing your own fresh produce, or even growing just some of what you eat, has so many benefits. I won't tell you it's always easy, but it really is worth the time, effort and investment you put into starting your own vegetable patch.

Home grown vegetables taste amazing, made even better when you have put the effort into producing them. You can have tomatoes that taste like they are supposed to, peas so sweet you can eat them from the vine, and crisp cucumbers ripe with the flavour of Summer.

Organic produce can be expensive and hard to find (or comes wrapped in plastic when you can source it!) Growing your own vegetables can mean you have an abundance of organic food, that you can actually afford. If you want to make the switch to a healthier lifestyle, starting with a vegetable patch is an awesome way to go.

By growing some of your own food, cooking from the garden, and preserving the harvest, you know what it is in your food. You know what isn't too. You can grow it without toxic chemicals, better for you and for the planet.

The convenience of home grown produce means you can eat healthier food, when it is just a step outside to pick lettuce for a salad, zucchini to make fritters or a handful of green beans for a side dish.

Not to mention the benefits of getting outside in the fresh air, and connecting with nature instead of the wifi! Get the kids outside too. Let them experience how food is supposed to taste, and let them know where food comes from. They might even learn to appreciate fresh vegetables instead of turning their noses up!

Having an abundance of fresh produce gives you an opportunity to experiment with new recipes, learn how to preserve the harvest, and helps you connect with your community. You can give your excess away to colleagues, neighbours, family and friends. See their faces when you hand them a bag of fiery chillies or a variety of green beans they can't buy in the store.

Growing your own means you can embrace heirloom varieties that your grandparents grew (and that your grandkids might grow). It also helps you see that unusual or wonky vege's are still great to eat, in fact, they can be better!

When you grow some of your own food, you get an appreciation for the hard work that farmers and producers put in to feeding the nation. There will be challenges to face even in a backyard garden but learning to overcome them is yet another benefit.

The satisfaction of nurturing your own vegetable garden, from seed to harvest, is a feeling that never gets any less exciting to me, even after 10 years of edible gardening. The joy of that first tomato of the season, the potential in a basket full of home grown goodies, the taste of real food. There is no better time to find yourself in the dirt.

GETTING STARTED

BENEFITS

Growing your own food, from putting seeds or seedlings in the dirt, to seeing them grow, then harvesting and eating your home grown fresh produce, is a wonderful thing. The rewards can be as simple as the taste of tomatoes that actually have flavour!

Being able to grow your own organic food to make it more affordable + have access to a range of varieties.

Good health from getting outdoors, connecting with nature, doing some exercise + eating better.

Less toxins, packaging + waste. Less pollution, carbon emissions + reliance on fossil fuels.

Knowing where your food comes from. Looking after the land, the animals + communities.


A great way to get involved with your neighbours + community, helping to build resilience + adapt in place.
Increased awareness about the food industry + the processes your food goes through.
Security of being able to feed and provide for yourself, your kids, your loved ones + your community.
Satisfaction + fun creating, growing, trouble shooting + being productive.
You can swap, share and barter with your produce + preserves.
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CHALLENGES

There may be challenges to face when setting up your vegetable garden and growing your own produce... but there are always solutions.

budget

Be resourceful, look for affordable and low cost solutions. Make do with stuff you have. Start small. Develop a budget to follow. Consider it an investment.

time

Make time by being organised + prioritise what you want to do. Find time-saving techniques and set up's. Don't try to grow everything yourself, look into barter/ swapping options.

space

Grow in pots or containers. Research space efficient or vertical options. Look into community gardens, rooftop options, or local schools, community centres or nursing homes with space you can co-op.

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travel or relocation

If you travel for work, or have frequent relocations, focus on mobile or temporary options. Find good support in your area who can help out while you are away. Join a local community garden (or city farm co-op) instead of building your own.

existing animals or pets

Research how you can set up your vege garden to be more secure, such as the type of garden beds or chook enclosures you choose.

health

If you have ability issues/ allergies/ other health concerns, you know your own limitations. Problem solve and find creative ways to solve the issues you face. Try to see issues as challenges to tackle, rather than stop you.

renting

Choose temporary/ mobile options. Be aware of landlord + council restrictions, if you live in an 'estate' or there is a communal housing board. Get creative with solutions, but make sure you get approval before implementing them.

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GROWING ESSENTIALS

I refer to vegetables as all the varieties that are treated as vegetables when cooking, even if technically they are fruit. I didn't make these rules, but it is easier to follow them.

SOIL

Most vegetables need good quality soil, rich in nutrients, dark, loose and moist but which drains well. Read more here.

SUNLIGHT

On average, full sun for 6 hours each day, some varieties like leafy greens can handle getting just 4 hours, others like tomatoes, chillies, capsicums, okra and eggplant need up to 8 hours to grow and produce well. More about how important sunlight is later on.

WATER

Rain is great but not always reliable, so make sure you have a nearby water source or a way to harvest and store rainwater.

SEEDS/ SEEDLINGS

Seeds and seedlings (young plants) can be bought from local nurseries or online, or check out the Seed Saving and Raising Seedlings mini eGuides. Note, some things are propagated from cuttings, divisions, roots, bulbs and crowns instead, such as potatoes, sweet potatoes, lemongrass, garlic, asparagus, rhubarb, artichokes and certain herbs.

GARDEN BEDS

There are a diverse range of growing methods and systems used around the world, from simple to elaborate. We will learn more about commonly used and available garden bed options here.

TOOLS + EQUIPMENT

Depending on the size of your vegetable garden, you may need very little tools or equipment. You may be able to borrow tools you won't use often, or buy them to share as a co-op with neighbours, family or friends.

GOOD BUGS & POLLINATORS

Good bugs are predators which eat the eggs, larvae or adult 'bad bugs'. Pollinators can include the wind for certain varieties but usually gardens need crawling and flying insects, such as bees and hoverflies. You can encourage these into your garden by planting to attract them and creating eco-systems and habitat for them.

TIME + ENERGY

Your garden will also need time and energy put in to setting it up, planting seeds or seedlings, nurturing the soil and plants, troubleshooting and harvesting your vegetables. You need to enjoy the challenges, be willing to connect with and learn about nature, not just expect to skip straight to the part where you pick your own food.

GROWING ESSENTIALS

CLIMATE ZONE

Climate zones are parts of your country with similar average weather patterns, including temperature and rainfall. Knowing your climate zone gives you an idea of what to expect throughout the year, and makes a difference to what you can successfully grow and when.

You can work out what climate zone, or 'zone', you are located in by referring to Gardenate, an online website which covers Australia, Canada, New Zealand, South Africa, UK and USA. You can refer to average rainfall and temperature charts in your area. You could ask a local community garden, nursery, look for newspaper articles, blogs or seasonal guides by people living in your area. You will also come to know the variations for your area, and even in your own backyard.

Microclimates can mean you have warmer or sunnier spots, cooler or shadier spots, damp or more humid etc. which you can use to your advantage. This might be related to the aspect of your space as well as existing structures, walls or fences, trees, vines or plants, or even contours or slopes.

You cannot change the climate you live in, but you can consider it when siting and setting up your vegetable garden and adapt or manipulate the conditions as necessary.

If you live somewhere hot and dry, take advantage of structures that offer shade in Summer, like deciduous trees, and consider setting up wicking garden beds or watering systems.

If you live somewhere with cold, frosty Winters, avoiding shaded areas will be important, and consider using a greenhouse, garden covers or cold frames, and seasonal planting.

You can also take your climate zone into consideration when choosing when to grow and what to grow. Seasonal planting guides are available to suit your climate zone.

SEASONAL PLANTING - WARM SEASON + COOL SEASON

Seasonal planting means choosing the right varieties for the right time of year to suit your climate zone and microclimates in your space, so that your vegetables can grow and thrive. This is based on what conditions the plant can handle, or their 'hardiness' (such as whether they are cold/ frost or heat tolerant).

In many areas we plant and grow 'by the season', that is the cool season, or the warm season. Other places can grow year round, or have wet and dry seasons instead. Those closest or furthest away from the equator may have limited season and varieties compared to more temperate or subtropical areas.

The warm season is a period of the year with warm soil and air temperatures, when you can grow plants which require warmer soil to germinate and can tolerate hotter conditions.

The cool season is a period of the year with cool soil and air temperatures, when you can grow plants which tolerate frosts and cold temperatures.

GROWING ESSENTIALS

The start and end periods, and the conditions during each, will vary depending on which hemisphere and climate zone you live in, and even vary per season depending on the current weather patterns in your area.

You may also find the timeframes and conditions vary from backyard to backyard, with the influence of microclimates. Learn more about adapting to or working with the seasons, or extending them in When to Grow.

FROST TOLERANT PLANTS

How sensitive a plant is to temperatures falling below freezing, when ice crystals may form on the plants and damage 'frost sensitive' varieties, or even kill the plant.

DROUGHT TOLERANT PLANTS

How sensitive established plants are to dry conditions (note: most seeds still require water to germinate and seedlings require it to grow).

ANNUAL PLANTS

These complete their life cycle, from germination to the production of seeds, within one year, and then die. They need to be replanted every year. You may also use succession, or staggered planting to ensure harvests throughout the season. Many vegetables are grown as annuals.

BIENNIAL PLANTS

These take two years to complete their life cycle. In the first year, the plant grows leaves, stems, and roots, then it enters a period of dormancy over the colder months.

During the next warm season, the stem of the biennial plant elongates greatly, or 'bolts'. The plant then flowers, produces fruits and seeds before it finally dies. Under certain conditions, it may complete it's life cycle over a year.

Biennials that are grown for edible leaves (silver beet, kale) or roots (carrots, beetroots, swede) are often grown for just one year and harvested or removed (they are not grown for a second year or allowed to go to seed). The gardener treats them as an annual and plants new seed/ seedlings each year.

PERENNIAL PLANTS

Plants that live more than two years. These can be Herbaceous Perennial, which means they die off in Winter but come back in Spring from their rootstock, or Evergreen Perennial, which maintain leaves year round. This may also depend which climate you are growing in. Some commonly grown perennial vegetable varieties include asparagus, globe artichoke and Jerusalem artichokes. They may require more thought to where and how to grow them. Whilst they can certainly be incorporated into your vegetable garden, this eGuide focuses more on annuals to suit beginner gardeners.

BOLT/ GO TO SEED

This means the plant will start to form flower, then seed, and often the leafy part becomes thin and straggly, sometimes bitter.

You can often delay a plant from bolting by pinching out/ removing the flower heads before they form. Or if you want to collect the seed, you may choose to let your plant 'bolt'.

GROWING ESSENTIALS

SELF SEED

Once seed has formed, if the plant is left in place and the seed head are left on the plant, the dry seed falls on the soil and can germinate to grow a new plant. Once a fruiting variety has reached maturity, if the ripe/ overripe fruit falls in the garden bed, the tissue part will decay and the seeds will be left and may germinate. This can mean you will find certain vegetables 'volunteering' to grow the next season, which can be a benefit.

If you do not want this to happen, but sure to remove the flower heads before the seed pods dry and open, or pick any overripe fallen fruit off the garden bed.

DIRECT SOW SEED

Some vegetable varieties prefer to be planted as seed directly into the garden bed where they will grow, as they do not transplant very well into the garden bed after germination occurs. This is called 'transplant shock'.

These include carrots, beetroot, radishes, swede, turnip, beans, peas, silver beet/ chard, spinach, corn, kohlrabi, Asian greens (and herbs - coriander, parsley, dill).

If you still want to try starting these early and raising them as seedlings indoors, you could try plantable pots, such as jiffy pots or soil blocks, which can be planted into the ground with the seedling, reducing or avoiding transplant shock.

TRANSPLANT SEEDLINGS

Some vegetable varieties can handle being transplanted, so they can be started early indoors and then planted out as seedlings. This means they get a head start, compared to sowing seed which can take several weeks to get to the same stage. It also means less risk of pests or poor weather conditions ruining them if started directly in the garden beds. This includes capsicums, tomatoes, eggplants and chillies, broccoli, cauliflower, Brussels sprouts and cabbage.

Some varieties do better being transplanted out into the garden bed or pot as seedlings, as the seeds are hard to germinate and need more attention and controlled conditions to be met, or they are slow to grow from seed. This includes onions and some herbs, as well as those grown from cuttings, divisions, roots, bulbs and crowns.

You can buy seedlings, or learn how to raise them yourself in the Raising Seedlings mini eGuide.

DIRECT OR TRANSPLANT

Some varieties can either be planted directly from seed, or grown into seedlings and then transplanted.

Depending on the varieties you are growing, you will probably have a combination of some varieties sown directly as seed into garden beds, and also some seedlings to transplant.

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planning & design

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PLANNING + DESIGN

To give your vegetable garden the best chance of success, let's do some planning and design. Use the six page Vegetable Garden Project Planning tool in the Appendix.

1. Work out what goals you and your family want to achieve. Consider any challenges you and your family have, and what solutions you may need to implement.
2. Decide how much you have to invest. If your budget is limited, get resourceful with what you already have, or can find and recycle.
3. Make a schedule, put it in your calendar
4. Use the Where to Grow assessment + design tool in the Vegetable Garden Project Planning tool
5. Decide where to locate your garden.
6. Decide what kind of garden beds or containers you will build or buy
7. Work out what other tools + equipment you need
8. Make a plan of what and how much you want to grow, based around what is suitable for your space, time, challenges and family preferences/ requirements, as well as your climate and the season you will be in (refer to Gardenate or ask your local nursery or community garden).
9. Make a list of the equipment and materials you need and gather them
10. Schedule a day or weekend (or longer) to set up or build your garden beds.

YOUR GOALS

Do you want to grow a few things in pots, like some leafy greens, cherry tomatoes and green beans? Do you want to supplement your current produce requirements, by setting up a couple of garden beds? Do you want to grow as much of your own fresh produce as possible, with an extensive vegetable (plus herbs and fruit) garden?

Do you have the space, time, money and energy to achieve your goal? What challenges and limitations (such as those covered here) do you have? What options or solutions can work for your family and lifestyle?

START SMALL

Even if you have big dreams for a vegetable garden that takes over your backyard (or perhaps an urban homestead) I recommend that you start small to avoid becoming overwhelmed or taking on too much.

Make a list with your family of the most important projects you want to achieve, but start with one or two, like building a garden bed, or starting a compost system. You could plan it in stages, with the other projects to be tackled in the future, like adding a greenhouse and raising your own seedlings.

IMPERFECT ACTION

Are you someone who could research, ponder, um and ah for so long, you never get started? Sometimes you just need to take action, even if it isn't perfect! Things often evolve and change as you go anyway. Don't forget, the learning is in the doing!

PLANNING

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WHERE TO GROW

Deciding on the best position to set up your vegetable garden depends on a few variables that may influence each other, including the

- Aspect of the space you have and how much sunlight (or shade) you have in certain areas, through the seasons
- Climate you live in
- Size and Layout, including the amount of space you have or whether the layout is restrictive (structures like clotheslines or sheds that can't be moved, or lack of fencing in front yard OR exposed to wind)
- Water access

Other things to consider include

- any existing growing areas/ beds you have
- what you are planning on growing
- any location issues (like zoning requirements or unreceptive neighbours)
- any security concerns (i.e. an unfenced front yard may have issues with vandals or animals)

If you have little choice of where you can locate your garden beds, instead think about manipulating the conditions, using covers or cold frames, shade cloth, watering systems etc. Or by choosing suitable varieties to plant instead. Some leafy vegetables can handle partial shade and less sunlight hours, whereas some varieties like tomatoes, capsicums, chillies and eggplant can handle hot full sun conditions.

ASPECT

Sunlight provides energy for your vegetables to grow and therefore is one of the most important factors to consider when choosing a location for your vegetable garden. We focus on getting that right first because it is the hardest factor to change.

Whilst you can get a longer hose or condition the soil, you cannot easily change the amount of sunlight that your space receives.

Your vegetable garden needs to get 6 to 8 hours of sunlight per day. You can work out which areas of your space will receive this by observing and assessing it, measuring it, or use an app or online calculator to determine the path of the sun, year round.

The sun rises in the east and sets in the west, but each day it changes position slightly. The path that the sun travels throughout the year may affect where shadows fall depending on

- where your dwelling (or your neighbours) is situated
- whether there are any evergreen trees (which keep their leaves) or deciduous trees (lose their leaves in Autumn and not grow back until Spring)
- other structures such as sheds/ carports, kids play equipment etc.

Locating your garden beds along a North-South axis can help maximise sunlight. Also think about the height of the plants you are growing. Taller vegetables or those requiring a trellis can be used to provide shade to other vegetables in Summer. Avoid growing them in front of others in Winter.

WHERE TO GROW

In countries closer to the equator there isn't as much difference in the position of the sun, but in those areas further away the difference throughout the year is why we have seasons.

SOUTHERN HEMISPHERE

During Winter in the Southern Hemisphere, the sun travels more towards a northern direction (closer to the northern horizon, lower in the sky) as it tracks from east to west. The days are also shorter, with less sunlight available, so you may need to maximise it. Any structures north of where you plan to locate your garden beds will cast shadow and restrict much needed sunlight. The further south you are, the further any shadows will reach.

During Summer in the Southern Hemisphere, the suns path is more overhead as it tracks from east to west, with structures casting smaller shadows. The days are longer and hotter, so it may be a case of providing shade rather than seeking more sunlight.

NORTHERN HEMISPHERE

During Winter in the Northern Hemisphere, the sun travels more closer to the southern horizon as it tracks from east to west. Any structures south of your garden beds will cast shadow and restrict much needed sunlight. The further north you are, the further any shadows will reach.

During Summer in the Northern Hemisphere, the suns path is more overhead as it tracks from east to west, with structures casting smaller shadows.

WHERE TO GROW

CLIMATE ZONE

Consider how your vegetable garden location and plans might need to adapt because of the climate zone conditions or microclimates in your space throughout the year. Some ideas:

ARID – Hot and dry warm season, milder cool season

- Install wicking beds, a watering system, use greywater and use mulch
- Put up shade cloth or use shade and wind protection from nearby structures/ trees
- Choose drought resistant varieties

COOL-MOUNTAIN - Hot but short warm season, frosts in the cool season

- Deciduous trees (like stone fruit and apple trees) lose leaves in the cooler seasons, provide shade in Summer
- Choose frost tolerant varieties and start warm season seedlings early indoors
- Install wicking beds, a watering system and use mulch

TEMPERATE – Moderate warm season, mild cool season with potential frost, decent rainfall

- Covers when frosts are forecast
- Install wicking beds and use mulch

SUB-TROPICAL - Hot humid warm season, milder dry cool season

- Put up shade cloth or find shade
- Choose humidity resistant, tropical varieties and avoid top down watering

(Continued next page)

WHERE TO GROW

TROPICAL - Hot humid wet season, warm dry season

- Think about drainage in the wet season
- Put up shade cloth but allow for ventilation
- Choose humidity resistant, tropical varieties and look into perennials
- Avoid watering on top of the leaves
- Grow in cool season

SIZE + LAYOUT

SMALLER SIZE/ RESTRICTED LAYOUT

You may have limited size (patio, courtyard, small yard) or a restrictive layout, and will have to work with what you have by

- Growing in containers or pots
- Using vertical space by growing up trellises or herb gardens/ green wall
- Maximising use of your space by planting multi cropping varieties
- Manipulating the conditions to make them suit what you are growing (i.e. set up a shade cloth in a hot courtyard, using a mini greenhouse or 'cold frame' to extend the seasons, or use a plant stand on a patio to elevate pots to get more sunlight).
- Choosing varieties which lend themselves to the conditions (shade tolerant greens, or heat loving tomatoes, chillies and eggplants).
- Finding an alternative solution (allotment, community garden, co-op space).

WHERE TO GROW

BACKYARD OR BIGGER AREA

If you have a backyard or bigger area, you may be able to access your block plans or use Google maps to get an overview or lay out of your setting, it may show (or you can add) any structures, verges etc. that can help you plan. Make photocopies of it, so you can do multiple drafts. Or you could create a template using a Word document or other software, or online aids.

You can also use the six page Vegetable Garden Project Planning tool to help work out the best options.

If you have several areas with ideal conditions in terms of sunlight and climate in your space, to help decide where best to site your vegetable garden think about other factors, like water access, security and how user friendly the area will be.

Make the most of areas or 'pathways' that you visit daily, and plant items that need attention daily. Garden beds or pots in a sunny spot close to the back door or kitchen door, will be handy and more likely to be picked when making meals or preserving.

If you have to lug the hose around the corner and set it up each time to water, it may become a task that doesn't get done consistently. Choose a better location, or find a way to set up a better watering option.

It's human nature to choose the path of least resistance, and you give yourself the best chance of success by setting up a good design.

WHERE TO GROW

WATER

It is important to provide adequate water for your vegetable garden. Rainwater is ideal as it has more nutrients, a better pH, less purifying chemicals and it's free. But it's not always consistent and you may not be able rely on rainfall as your main water source. Let's think about how you will water your garden beds when it hasn't rained or hasn't rained enough.

If you have a smaller garden or are growing in pots, you may be able to save water to use on your garden beds by collecting the water in a jug or bucket whilst waiting for the water to heat up in the shower or when washing up, or used when peeling and washing vegetables. Or use a watering can from a nearby tap. It is also possible to set up drip irrigation to pots. Think about using self watering pots, or adapting those you have to include a reservoir in the bottom.

RAINWATER HARVEST + STORAGE

For bigger spaces, harvesting and storing rainwater may be an option. If you have existing rainwater tanks, how can you incorporate them into your garden plan? If you are considering installing tanks, look for government grants or subsidies in your area or more affordable options like portable tanks. Other ideas include French drains that capture rainwater and allow it to seep into the soil.

Wicking garden beds have a reservoir in the bottom which captures rainwater (or can be filled by hose) and the capillary action caused by surface tension allows water to be drawn up through the reservoir and the soil towards the area where the roots of the plants are.

WHERE TO GROW

MAINS WATER

If rainwater storage isn't an option, you will need to use mains/ tap water with watering cans, hoses or other methods described more in Ongoing Care. Take note where there are taps when doing your assessment and mark it on your garden template in the Planning Tool.

If water access isn't close by to the optimal spot to place your garden beds, or you live in a drought prone area, are time poor, or have ability or health issues, think about setting up an automatic watering or irrigation system on a timer (and with a rain sensor). You could install a more simple set up and upgrade it later, or retrofit a complete system in to your vegetable garden at a later date.

GREYWATER

Greywater is 'used' water reclaimed from your laundry, washing machine, bathrooms. Please research the suitability and any regulations in your area. You may have to install a system that diverts, filters and possibly treats the greywater for a safer, approved method. Be mindful to use grey water friendly detergents. Avoid using greywater directly on any edibles and allow your garden to have a break. Fruit trees may be better for untreated greywater.

TOO MUCH WATER

Also think about how will you handle too much rain, especially if you live in an area with wet seasons or there any hills/ slopes/ swamps which can cause drainage issues. Research swales and French drains to capture and redirect rainwater or run off, or use raised garden beds, if this is the case for you.

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WHAT TO GROW IN

CONTAINERS/ POTS

What is it? This method uses plastic, ceramic or terracotta pots, or grow bags/ potato grow bags, or buckets/ boxes or other items with drainage holes added to the bottom, filled with soil & mulch.

Benefits

- Good for small areas or those who are renting, time restricted, relocate frequently
- More affordable, portable, easy and low maintenance, a great way to start
- You can grow any herbs in a pot, and many varieties of vegetables
- You may need to move your pots to find the ideal position, which may change each season. Put 'pot trolleys' under them before filling as they can get heavy

Challenges

- More limited range and amount of produce (some types of produce may not grow well in containers) compared to garden beds
- Pots can dry out/ get overheated, and nutrients can get depleted quicker

Equipment/ materials include containers (consider large 'self-watering' wicking types, or maybe you can find second hand or DIY) that allow for soil of 30 to 40cm depth, soil, mulch, stake or mini trellis, labels.

Optional extras Plates or stands to assist with airflow and drainage. You may require a liquid fertiliser as the soil gets depleted in containers quite quickly.

NO-DIG GARDEN BEDS

What is it? A garden bed is formed directly on top of lawn/ dirt/ ground, using a layer to suppress grass or weeds, then layers of growing mediums, soil and mulch.

Benefits

- Good for areas with poor soil
- More affordable by sourcing materials cheaply or for free
- Can add tent-style trellis/ support structures, or poly tunnels over the top

Challenges may include

- More chance of weeds and pests
- More bending over/ kneeling
- May need topping up with compost/ soil more frequently

You could plant a border of clumping chives around the edge to stop any lawn from creeping in!

Options Research 'lasagna' no-dig garden method, or consider hugelkultur, which involves using layers of pruned branches, leaf mulch, and other organic matter, which then breaks down to make the growing area and feed the plants.

Equipment/ materials required vege compost/ good quality soil, mulch, newspaper or cardboard (maybe weed matt/ geotextile to stop grass growing up through), organic fertiliser.

Optional extras

Can add tent-style trellis/ support structures, or poly tunnels over the top.

WHAT TO GROW IN

RAISED GARDEN BEDS

What is it? A structure/ container placed on the ground and filled up with soil. Build your own, or buy pre-made garden beds.

Benefits include

- More space to grow
- Able to add good quality soil
- Less bending over/ kneeling down
- Ability to add trellis/ support structures.
- Wicking garden beds are good for areas that get hot and dry, or for time poor people

Challenges include

- Buying or making the structures
- More surface area (than pots) more chance of weeds and pests and requires more water
- Not easily relocated once in place

Options include pre-made garden beds (like Vege Pods or Vege Crates) or DIY kits (like Birdies raised colourbond garden beds), or make your own from pallets/ sleepers/ concrete etc. Consider buying or make your own wicking beds (find the mini eGuide here).

Equipment/ materials required may include the beds/ containers (or equipment/ materials to make them), soil, mulch, stakes or trellis, covers for shade/ pests

Optional extras shade and support structures; watering system or consider making them into wicking garden beds, with a reservoir of sand or river pebble in the bottom, a layer of geotextile and then the growing medium/ soil on top, a thin layer of mulch, and piping to distribute water and drainage holes to prevent overflow

WHAT TO GROW IN

IN GROUND GARDEN BEDS

What is it? This is where a hole is dug in the ground, and existing dirt/ soil turned over and conditioned, or the dirt is removed for new soil to be added.

Benefits

- More affordable option as you are using existing materials, especially if soil is in good condition (such as where a chicken run was previously located) or if you have time to add compost, manure and let it age
- You can add tent-style trellis/ support structures, or poly tunnels over the top

Challenges include

- Digging up the ground can be hard work
- More chance of weeds and issues with pests/ pets
- More bending over/ kneeling to do the gardening

Options dig out an existing decorative garden bed, or create a new one by removing lawn/ weeds, then digging down, removing dirt and replacing with better quality soil, or conditioning existing soil

Equipment/ materials required may include digging equipment, compost or manure to condition the soil, mulch, stakes or trellis, covers for shade/ pests

Optional extras edging (to stop grass and weeds invading the garden bed), watering system, shade system

WHAT TO GROW IN

SOIL

Soil is dirt that has nutrients and living organisms in it. Healthy soil has about 45% minerals, 25% water, 24% air, 5% humus and about 1% living organisms (bacteria and fungi, protozoa and nematodes, earthworms and other tiny creatures).

You may have decent soil available already, which is dark, friable (easily crumbled) healthy and ready to plant in. Or you may be able to condition and improve the existing soil by

- Adding compost (make your own, or buy it) and manures (chicken poo or other animal manure, or pellets that you can buy)
- Mulching the top with straw or hay, to protect it from moisture loss
- Balancing water input, and drainage
- Boosting the soil by giving it some organic food too, called fertiliser, such as worm castings or juice
- Rotating crops (the different type of plants) that we grow in the soil to reduce the depletion of certain nutrients, and to reduce build up of disease pathogens
- Growing root vegetables that help break up the soil
- Growing green manure crops (certain varieties that you grow only to chop them down, then dig them into the soil)
- Checking, and adjusting, the pH level

If you are interested, you can learn more about Healthy Soil in this mini eGuide, including ideas on how to condition your soil and test the pH levels.

WHAT TO GROW IN

If you have to buy soil, for smaller amounts you may be able to buy organic 'vege mix' from your local nursery or hardware store by the 25 to 30 litre bag full. For buying larger amounts, you'll find it is better value from a wholesale landscape supplies for a trailer or truck load.

MULCH

Mulch for vegetable garden beds is generally a light, loose material, such as sugar cane mulch, pea straw or Lucerne. This covers the top of the soil, and then sits around the base of the plants as they grow, keeping in moisture and nutrients, and reducing weeds from growing.

You can buy it by the bag or 'block' at nurseries or hardware stores, or even by the bale from stockfeed stores or bulk nurseries.

COMPOST

You can make your own compost from most kitchen scraps and garden waste to end up with a dark brown, crumbly material, or buy bags of it. This can be added by

- Mixing it into the soil in your garden beds as you create them.
- Sprinkling it around the soil under plants (under the mulch) if you feel the nutrients are lacking during the growing period.
- In between seasons when there are no plants in the garden bed, by digging it in to the top layer of the soil then laying mulch over top.

If digging it in, you could use a garden fork if you have one, to loosen any compacted soil and mix the compost in.

WHAT TO GROW IN

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WHAT TO GROW WITH

GARDEN TOOLS

There are so many different gardening tools available, but you only need some basics to get started, depending on how you intend to set up your vegetable garden. You may be able to borrow what you need to get a start.

If you are buying, you could try finding second hand and more affordable garden tools, on local classifieds, tip stores or even some hardware stores may sell on consignment.

Also think about where you can store your tools and equipment. You may have a garden shed, or set up a tool stand (using pallets) or even a shelving unit or bucket on your patio.

Smaller spaces may only require

- gardening gloves
- a handheld trowel and garden fork
- watering can
- garden tidy bags
- a harvest basket

Bigger gardens may also require

- Gardening gloves (adult and kid sizes)
- Garden Fork, Rake, Shovel (scooping) or Spade (digging)
- Secatuers (pruning shears)
- Hose with adjustable nozzle
- Wheelbarrow
- Harvest, washing and storage options

TRELLIS STRUCTURES

Some vegetable plants require support to keep them upright, allowing for ventilation, exposure to more sunlight, to protect the root system and keeping the fruit off the ground to prevent rotting or pests. A stake or spiral frame may be sufficient, say for bush tomatoes or dwarf beans. Some varieties with climbing vines are better trained to spread out on a trellis or fence.Others (like pumpkins or melons with heavy fruit do better on the ground if you have space).

If you buy pre made garden beds, see if there is a trellis accessory you can add on. If you want to DIY, check out the local second hand store or tip shop for metal mesh (like concrete wire mesh), bamboo, lattice or possibly pallets and chicken wire or netting. Some people even use old bed frames or clothes drying racks. You can make support using string and weave your tomatoes around it as they grow.

You may want to consider being able to add shade cloth to your trellis structures. A trellis covered in vines and leaves can be used to provide shade in your garden in hotter weather too. Think about creating archways or even bean tepee's for fun.

If you need to remove the trellis/ supports, or move them between beds between seasons, look into portable options.

To secure the plants to the trellis, use something that won't cut into or tighten on the plant stem, like wire garden rings, soft stretchy strips of fabric or stocking, but that can also be removed easily.

WHAT TO GROW WITH

SHADE STRUCTURES

Certain climate zones may need to think about providing shade to their vegetable garden in the hot months. Drought tolerant and heat loving plants may be able to tough it out. Some will wilt during the day and perk up again in the cool of the evening. Providing shade can help reduce the amount of water required and protect the varieties that don't like the heat and direct sun.

A low cost idea is to grow taller plants at the end of the garden bed that will then cast shadow over other plants. Blocks of sun-loving corn or sunflowers can create some shade behind them if planted in the right position.

A trellis or archway with a climbing bean variety growing over it can create a dense layer, especially if you have more than one plant growing on to it. Other plant varieties may include melons or pumpkin vines (the fruit may need support if it is hanging off the trellis).

Adding shade cloth over a trellis, or even temporarily hang an old sheet or tarp for days when heatwaves are forecast. Make sure there is some ventilation or hot air could get trapped under there. Use nearby structures like fences, trees or lattice to hang up covers, but make sure they are sturdy so it doesn't fall down and squash your garden.

You could also erect a more permanent awing or shade canopy that stays put all through the warm season.

Planting deciduous trees and vines is an option but remember that nearby trees may compete for nutrients and water.

WHAT TO GROW WITH

LABELLING IN YOUR GARDEN OR POTS

Putting a label where you have planted seeds or seedlings, means you know where you planted and you don't accidentally dig up or plant in the same spot!

Labelling with the variety you've planted means that you can identify what you are growing (don't rely on remembering it!)

Adding the date means you can keep on eye on the success of germination. If the seed hasn't germinated within the expected timeframe, time to problem solve and plant more seed! Some people also use garden journals to keep an eye on when seedlings should emerge.

You can use a variety of options to label, including

- plastic labels you can buy
- make from recycled plastic containers cut up plastic containers, like ice cream containers and lids, or milk cartons
- wooden 'paddle pop' sticks but these can become illegible after being wet each day
- slate, metal or 'blackboard' type labels, which are supposed to be reusable but I often find the white chalk or wax pen doesn't clean off easily

You can write with permanent marker, or a removable option like a liquid chalk pen (make sure it won't wash off easily) or you may look into 'chinagraph' grease/ wax pencils (which can only be removed with a solvent cleaner). Or you may be interested in using a Garden Map instead.

WHAT TO GROW WITH

WHEN TO GROW

As already discussed, the climate zone you live and grow in is an important part of knowing what edibles to grow, and when, to suit the conditions where you live. Trying to grow certain varieties at the time of the year when the climatic conditions doesn't suit them, means they fail to grow, fruit, or they just outright die.

Seasonal planting means thinking about when the cool season/ dry season, or the warm season/ wet season is in your area, and choosing what you can plant. Some vegetables, herbs and fruit do not tolerate cold or frosty weather (they are 'frost sensitive' or 'frost intolerant', like tomatoes, basil, green beans and zucchini) just as some do not handle very hot weather (they shrivel or won't produce flowers/ fruit, like peas and snow peas, or they can 'bolt' or 'go to seed', like broccoli).

In some areas the warm season is quite short, so 'extending the season' means raising seedlings 6 to 8 weeks in advance. This enables a head start once the soil has warmed up and the risk of frosts has passed. We can also grow 'warm season' vegetables with smaller produce that can get to maturity quicker, like mini eggplants or pumpkins.

Use a mini greenhouse to start seedlings early and have them ready to plant out when the weather is right. Or use garden cloches or cold frames that cover seeds/ seedlings and provide warmth and moisture.

In hotter areas where the 'cool season' is short, and varieties droop or bolt quickly, make the most of microclimates such as areas that may get more shade, or rig up shade cloth and timer watering systems. You could make the most of shaded or cooler microclimates for these varieties, even if that means they are in a pot away from your main vegetable garden.

I recommend checking out Gardenate website or app to work out what climate/ growing zone you are in for your country, and the guidelines for what is recommend for you to plant in what season/ month. You can see their suggestions on what can be sown direct/ potted up, and transplanted, and the timing required.

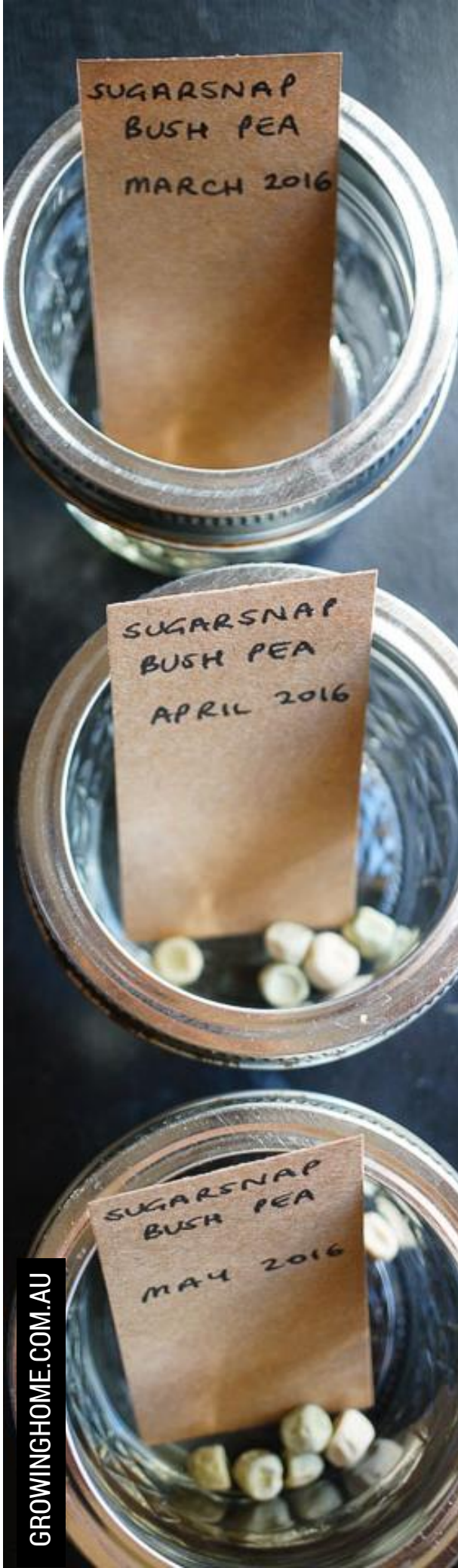
OTHER TIMING

Succession or staggered planting is useful to ensure a supply of harvests throughout the season. Especially for those varieties with only one or two produce per plant, like swede, carrots, broccoli, sunflowers or corn. Or determinate varieties which produce many fruits (beans, cucumbers) but only produce one crop each season.

Using small containers, ice cube trays or egg cartons with the seeds in sections and dates to plant is an easy way to see what is due. Be sure to leave space to be able to add these staggered plantings. I tend to grow multi cropping and indeterminate varieties that I can do succession harvesting with instead!

The time of day (morning, evening) or even the phase of the moon in the sky (moon/ lunar planting) are some other considerations that may influence when you want to grow.

WHAT TO GROW



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WHAT TO GROW

Sometimes the hardest part is choosing from all the wonderful options of what you can grow!

The produce you grow may depend on:

- the space or layout you have
- the climate or zone you are in
- what season it is
- what you eat
- difficulty level

SIZE + LAYOUT

BACKYARD OR BIGGER AREA

If you have more space, there are some vegetables which like to spread out and require lots of nutrients, vines like pumpkins or melon, and climbing varieties, like runner beans or cucumbers. You may require structures for them to grow on, like a fence or adding a frame or trellis.

Other varieties which only produce one or two items per 30cm of soil, like swede, turnip, kohlrabi onions, garlic, broccoli, cauliflower, cabbage, sunflowers or corn also go better in a garden bed, rather than pots.

If you have the room, consider succession or staggered planting, keeping room aside in the garden beds to plant seed or seedling over the coming weeks to be able to harvest in a more consistent manner.

SMALLER SIZE/ RESTRICTED LAYOUT

If you have less space, some varieties will do well in pots or small garden beds, including:

- **Herbs** - all herbs can be grown in pots,
- **Greens**, like lettuce, silver beet/ swiss chard, collards, Asian greens, rocket
- **Fruiting varieties**, like green beans, peas, tomatoes, chillies, cucumbers, capsicums and even eggplant and zucchini, or even spring onions, that produce multiple crops from one plant
- **Tubers** - You can also grow tubers, like potatoes, sweet potatoes, ginger or turmeric in pots or grow bags, but may not produce as big a crop

Choose varieties that stay contained like dwarf or bush beans, bush cucumbers, determinate tomatoes. Or varieties that produce smaller items that need less nutrients to get to maturity, like cherry tomatoes, button squash and long eggplants.

Avoid running or climbing vines and varieties, unless you have structures for them to grow on, like positioning your pots against a fence or adding a frame or trellis to the pot.

WHAT TO GROW

SHOULD I GROW WHAT WE EAT, OR EAT WHAT WE GROW?

Grow the things your family regularly eat and enjoy, but also learn to eat the things that grow well in your climate and seasons.

Some produce you commonly eat now, may not be so easy to grow yourself, depending on the climate you live in, and the space you have. You may have to learn to enjoy what does grow well in your area instead.

Don't automatically snob things you never eat, as you may be surprised at how amazing home grown produce tastes compared to shop-bought. You might like to limit how many seeds or seedlings that you plant of that type of vegetable. You can always learn how to cook or preserve it in a way that transforms it, or share or swap produce you didn't end up liking.

Unless you have the space and can do 'succession planting' then you may also find you can't grow enough, or consistent amounts, of what you do eat. When you run out of carrots, maybe kohlrabi is your new best friend. A big part of cooking from the garden and eating seasonally means learning how to substitute.

The best thing about growing some of your own food is that you can experiment and if something wasn't popular last season, don't grow it again. Or grow more if it was a hit!

DIFFICULTY LEVEL

It's a good idea to start with things are that are easier to grow, and by that I mean:

- they germinate easily (if growing them from seed), or are hardier as seedlings (i.e. they can handle transplanting into the garden bed)
- they are more resistant to pests, diseases and stressful conditions (i.e. lack of water, sunlight, nutrients, or too much water/ sunlight/ feed!)
- they need less attention or maintenance as they grow (i.e. feeding, thinning, pruning, pollination by hand, protecting from pests and diseases)
- they are known to produce well (i.e. multiple fruitings, come-again harvesting, prolific)

Refer to the Seasonal Planting Guides for some ideas on what to grow as a beginner, keeping in mind these are a guide and may not suit all climates.

WHAT TO GROW

SEEDS + SEEDLINGS

There are different types of seed/ seedlings available

- **Hybrid** (i.e. F1) which are a cross between 2 plants to get the 'best' from both, such as higher yield or disease resistance. Note: if you save seed from the plants you grow, the seed can be sterile and not germinate, or the next generation highly variable, if they do germinate. You need to buy this seed again each time you want to plant it.
- **Open Pollinated** – when pollination occurs naturally, not manipulated; they may be more genetically diverse; may be adapted to local conditions, and resulting seeds will produce plants roughly identical to their parents. You can save seed from the plants you grow using this seed.
- **Heirloom or Heritage** – genetically strong open pollinated seed that have been around for a long time. A wide range of more unusual colours, shapes, textures, flavours and growing habits.
- **Organic** – grown and processed without toxic chemicals – may be certified

Some options to find/ buy seed and seedlings

- Look for local swapping groups such as Seed Savers Networks
- Look for urban farms, community gardens or sustainability groups - see if they have swap days or markets stalls
- Look for farmers markets or school fetes in your area
- Barter with your neighbours, family, friends or work colleagues
- Buy from an online company, markets, local classifieds or a local nursery

In Australia, seed companies that I have used and recommend:

- The Lost Seed
- Green Harvest
- Herb Cottage (seed and herb seedlings)
- Southern Harvest

Remember that there may be quarantine restrictions for some interstate posting of seeds.

You can find a list of other seed companies (or contribute to it) in The Growing Home Community, a free group hosted on Facebook.

To learn more about saving your own seed to grow with, check out the Seed Saving eGuide.

If you want to learn more about raising your own seedlings, check out the Raising Seedlings eGuide.

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planting & growing

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PLANTING + GROWING

Now that you have your vegetable garden planned and created, it's time to plant! Let's talk about how to plant seed direct into a pot or garden bed, and how to grow from seedling planted into a pot or garden bed.

Before planting seeds or seedlings, check the growing information on the seed packet or seedling container label for

- When to plant (what time of year)
- Where to plant (full sun/ part shade)
- How deep (for seed)
- How far apart the plants should be from each other

It may also tell you if the seed or seedlings need to be planted in hills or mounds, if they need to be kept drier (to avoid rotting) or to be kept moist (such as carrot seeds).

Some seeds benefit from special handling before planting to induce germination. This information should be available on the packet, or do some research if you have saved your own seed. For example, some seeds may need soaking to remove a chemical coating or to rehydrate them, or scarification, which is 'roughing up' or breaking the coating.

Seeds like this include silverbeet, beetroot, okra, beans and peas.

If you have saved/ swapped seed with no packets, or seedlings without a label from a market or friend, you can try finding the information online (such as Gardenate) or in a gardening book (like Stephanie Alexander's Kitchen Garden Companion – borrow it from your library).

GARDEN MAP

You may have decided on a labelling method, as described here, but using a garden map is also good in case labels go missing or fade.

A garden map is a way to know what you have planted and where in your garden beds, especially if you have a bigger area. Draw a template of your garden beds, or use a word doc, that you can photocopy/ print and use each season. Write the name/ variety of the plantings in the spot where you planted it, and the date if you like.

This works well when you label your seedling pots with chalk pen and do not have labels to put into the garden bed when you transplant.

OTHER METHODS TO GROW FROM

Some edible plants are propagated from cuttings, divisions, roots, bulbs and crowns instead of seed or seedlings, such as potatoes, sweet potatoes, lemongrass, garlic, asparagus and certain herbs.

They may require more thought to where and how to grow them. Whilst they can certainly be incorporated into your vegetable garden, this eGuide focuses more on making it easier to get started by focusing on seeds or seedlings.

PLANTING + GROWING

GROW FROM SEED

To plant seed direct into the pot or garden bed. Before planting seed direct, check the growing information on the seed packet.

step one

Make a hollow or trench in soil to depth required (check the seed packet or plant at a depth double the seed size)

step two

Place seeds in, spaced apart as required (check the seed packet or allow about 30cm apart)

step three

Cover the seeds with soil you hollowed out (Take care not to cover more than the depth required or disturb the seeds)

step four

Lightly water + cover with a loose layer of mulch (organic sugar cane or pea straw), only about 2cm deep

step five

Label each plant individually or record what you planted, where + when on a garden map

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GROW FROM SEEDLING

Growing from seedlings (that you have started from seed, or bought as seedlings)

step one

Make a hollow in soil to depth and width of the seedling pot(s) plus 2cm, leaving soil to the side

step two

Loosen seedling gently from pot (gently massage + loosen the roots if they are 'pot bound') then place seedling, roots down into the hole

step three

Cover up the base of the seedling with the soil you removed, pressing it down gently to make the seedling secure – add a loose layer of mulch

step four

Lightly water around the base of the seedling (apply diluted worm juice or seaweed tonic to reduce 'transplant shock' over the first couple of days)

step five

Label each plant individually or record what you planted, where + when on a garden map

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PROTECT YOUR SEEDLINGS

Wild birds, pets, insects and curious children may want to wreak havoc on your emerging and new seedlings in your pots or garden beds. Think about how to keep your seedlings safe, and also refer to Troubleshooting.

MONITORING + MANUAL REMOVAL

Sadly sometimes you don't know you have a pest problem until you find your seedlings all nibbled to basically nothing! If you do notice holes appearing in some leaves, or the odd seedling destroyed, check under and around your pots or trays of seedlings.

Remove any naughty pests you find and take action to prevent more attacking, including removing any potential homes for them (stacked pots etc) and try the following methods.

COVER

Over many years I have found using garden cloches is one of the best methods to prevent pests attacking seedlings, plus they also let in light, and keep in warmth and moisture.

Make your own from recycled plastic juice bottles cut in half to make two cloches. Carefully push the cloche into the soil where you planted the seed or seedling in the pot or garden bed.

IRON EDTA BASED PELLETS

Another reliable method I have found to keep slugs and snails away from seedlings is using iron based, pet-friendly pellets around the edges of garden beds or pots, or even directly under the seedling.

PHYSICAL BARRIERS

You can try creating a barrier that may reduce the activity of pests, but these are not proven. Use on top of the soil where you have planted your seed, or around the bottom of the seedling. Reapply as necessary.

- **Diatomaceous earth (DE)** is a natural abrasive rock powder that desiccates pests. It can affect beneficial insects too, so use accordingly. Wear a face mask when applying; use food grade DE.
- **Copper tape** placed around pots, as slugs and snails may react to the electrical charge as their slime connects
- **Egg shells** Rinse, dry and crush up egg shells into very small pieces
- **Other options** include wood ash, sawdust, wood shavings and coffee grinds

NATURAL PEST + DISEASE SOLUTIONS

As your seedlings grow and become more established plants, there are many pests and diseases they may face. To learn more I recommend the eGuide, Natural Pest and Disease Solutions.

PROTECT YOUR SEEDLINGS

ONGOING CARE

GERMINATION OF SEEDS

Check your pots or garden beds every day to second day, for progress on germination and growth, as well as observing for any issues. Depending on the variety, seeds could germinate (start to grow and pop up above the soil and mulch) in as little as 2 days, up to 2 weeks. If not, see Troubleshooting.

To start with the seedlings will have rounded 'seed leaves' (cotyledon) which help feed and nourish the plant, but shrivel once the 'true leaves' come in. The seed leaves help nourish the emerging seedling.

WATERING

Check the watering requirements for what you are growing on the seed pack, seedling label or online. Most vegetables require consistent water, but some can lose flavour or 'split' if over watered. Over watering can also flush nutrients from the soil and compact the soil when top watering.

Most seeds need moisture to germinate and emerging seedlings need consistent water. Gently water each day or every second day, until the soil is just moistened, not saturated.

If you have transplanted seedlings, they may respond well to worm wee or seaweed tonic being diluted in the water for the first few days. **Water to the base/ roots area, rather than all over the leaves.**

Once the vegetable plants are more established the plants will need more water. How often you water depends on what they are growing in, where you have them located, your climate zone/ season, and any watering systems you have set up. In really hot weather you may need to water twice a day.

If you see water pooling out the bottom of the pot, or gathering on top of the soil/ mulch in a garden bed, that's enough. You can get an inexpensive soil moisture meter from nursery or hardware stores that you simply stick in the ground (you can combination meters that measure the pH and light levels too).

Watering cans are good for small spaces, and can also be used to collect rainwater or run off from gutters. You can also get watering spikes that you put into the soil that a bottle of water attaches to and slowly releases water into a pot or the garden bed.

Standard hoses with an adjustable nozzle can be used for hand watering. Soaker or weeper hoses are good for bigger garden bed area, but wicking garden beds or an automatic watering/ irrigation system may be ideal.

FEEDING

Once the true leaves come in on your seedlings you can start to use a diluted liquid fertiliser once a week. Use a diluted worm tea/ juice, or liquid fertiliser as a boost, but if your seedlings become 'leggy' or long and lanky, which can make them weak, hold off on feeding them, as they may grow too fast for their roots to have developed

ONGOING CARE

THINNING

If you put several seeds in you may need to thin or 'prick out' any seedlings that are growing too close to each other, as this may inhibit quality growth. Remove some of the crowded seedlings after the true leaves have formed . You may decide to replant these (some varieties will do OK) or discard them.

WEEDING

Remove weeds as they will compete for nutrients. Carefully grasp close to where the stem and roots meet, so you can ensure you pull out the roots, not just yank the leaves off. If you are concerned you will disturb the roots of a nearby plant, cut the weed off instead.

REPOTTING

If your vegetable plants are growing in pots, there may come a point where they outgrow their home or run out of space and nutrients, and can be potted into something bigger, or divided and repotted.

TRELLIS + SUPPORT

Some plants, like snow peas, will twine their tendrils or stem around the trellis as they grow, or you can weave them to the trellis fairly easily. Other plants, like indeterminate tomatoes need to be secured to the trellis.

You can provide support to climbing varieties, by using stakes, trellis or wire frames, and soft ties, bendable clips or garden wire. Learn more about different support options here.

ONGOING CARE

PRUNING

Some plants require pruning to keep them from bolting, becoming too tall, or becoming scraggly.

For annual vegetable varieties, this can include pruning indeterminate tomatoes, vines from pumpkins or squash that are strangling other plants or weighing down structures, or any diseased or dead leaves.

There may be times when you have to remove a diseased plant altogether, rather than it affecting other plants in the area. Carefully remove it and it's roots, trying to contain any dried or dead leaves (dispose of them in the bin, rather than the compost) and not spread any mildew or rust around the garden. Clean any tools before using them on other parts of the garden.

Removing flower heads is important if you don't want your self seeding varieties to spread.

CONDITIONING THE SOIL

Soil will need to be conditioned to keep it healthy, as covered earlier on. Consider this if you notice plants losing their vigour, not growing well, showing yellowing of their leaves or being attacked by pests and disease a lot.

This may be done in between planting seasons, or in between the plants, if you always have something planted and growing. You may also need to top up the mulch intermittently or between plantings/ seasons at least.

ONGOING CARE

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HARVEST

When setting up your vegetable garden, think about what you will use to harvest your fresh vegetables with, and if you have anywhere you can weigh, wash and sort your harvests. This might be your back patio table, your kitchen or laundry sink, or even setting up an outdoor washing station.

We created an outdoor sink using an old wooden BBQ table (on wheels) and a deep stainless steel sink that we got from the 'tip shop'. We added a squeeze nozzle with hose that attached to any nearby outdoor tap. Also added some piping to the drain (allowing the dirty wash water to flow back on to a garden bed – we don't use any detergents, just water). It has areas on either side of the sink to place tools, harvests and a scrubbing brush. It can be moved near the greenhouse when it's time to pot up, or back to the garden beds when it is peak harvest time.

I have several harvest baskets that I got from second hand stores. They are lightweight and can also be used as short term storage too. You can also use garden trugs, an apron or when you forgot to take these out with you, the bottom of your t-shirt or dress!

There are also mesh baskets, colanders or sieves in which you can collect and then wash your produce in. I have some kitchen scissors I take out in to the garden with me, or the good quality pair of secateurs can also be used if I need to cut some silver beet leaves off or a pumpkin.

As a beginner gardener, knowing when to harvest can be tricky. Some thing might be obvious, like a zucchini or cucumber growing on a vine, easy to see and recognise the shape and size you know from buying them. Or tomatoes are ripe when they become red (or their intended colour). Others are harder, like a beetroot, swede or carrot under ground, which you can't see until you pull it up. Or a pumpkin, which may look ready, but you can't be sure that it will be ripe on the inside.

In some cases, you can harvest one, or two, and if they are not ready, leave the rest. Ask yourself these questions:

- Does it look like expected?
- Is it the width and size expected?
- Has the required time elapsed?
- Can I harvest some, without depleting the rest of the plant? (for leafy greens)

Here are some basic guidelines for the tricker produce, to know when and how to harvest:

PUMPKINS/ SQUASH DELICATA/ SPAGHETTI VEGETABLE

- Size and shape expected has been achieved, plus tendril closest to the stem turns brow, or the stalk starts to shrivel (other suggestions are a hollow sound when you knock on it, or the first frost arrives and vine dies!)
- Cut the stem, leaving at least 5cm attached to the pumpkin/ squash. This will shrivel and seal itself off, allowing the pumpkins to be cured and stored

HARVEST

ROOT VEGETABLES (Beetroot, carrot, swede, turnip, radish)

- The root part is starting to show above the soil level, or you can gently remove a little, and you can see the expected width has been reached
- Loosen the soil around the vegetable, and gently pull it out
- Harvest before they go to 'flower' or seed, otherwise they can be woody
- If only harvesting as you need them, harvest every second one, to allow those left in the line to continue growing
- You can harvest some of the green tops to eat too, before harvesting the root, but don't take too many!

BEANS + PEAS

- Pick beans/ snow peas when tender and slender, and peas when pods are full;
  Pick often to encourage more flowering/ fruiting (the plants purpose is to reproduce itself, so if pods have fattened up enough to fall off the vine and start growing a new vine, the plant stops producing more flowers/ pods, as it thinks its job is done)
- You should get further crops off the plants, so don't remove them after the first harvest of beans/ peas seems over. The plant should produce more flowers and more beans/ peas!

HARVEST

HERBS

- Pick regularly and pinch out the tops to encourage a bushy growth, rather than a tall and straggly plant with less foliage to harvest, and to reduce the chances of the herb flowering and ‘going to seed’
- Pick in bunches and make a herb bouquet, to keep in a glass jar or bottle with some water, on your kitchen windowsill or bench

GARLIC & ONIONS

- Depending on the variety, but about 6 months after planting, or when you notice the green leaves starting to dry and shrivel, gently scrape back the dirt around the bottom of one garlic or onion plant. If you can see the head of garlic has formed bulging cloves/ bulbs, you can harvest. If the onion has fattened up, you can harvest.
- If the head/ bulb looks like it needs longer, cover it back up with the soil, and check again in a couple of weeks.

CORN

- The ears have filled out, and the silks are starting to turn brown on the end of the cob.
- Test one by peeling back a bit of the husk, press on a kernel with fingernail or knife point, if the juice runs milky, they are likely ready.

HARVEST

BACK TO CONTENTS

TROUBLE SHOOTING

SEEDS HAVEN'T GERMINATED

How long has it been since you planted the seed? What is the expected germination timeframe? Some seed will germinate in a day or two, other seeds take up to 2 to 3 weeks to germinate. They may simply need more time. Check the seed packet for information.

Did you use good quality seed? Seeds can expire, or if kept in poor conditions, become unviable. Learn more in the Seed Saving mini eGuide. Check the seed packet for an expiration date. If the seed is new, consider contacting the place of purchase as they may have a replacement policy for poor germination rates.

Did you soak or scarify the seeds before planting? Some seeds germinate better and quicker if they are soaked in water overnight or roughed up before planting. Check the seed packet for information.

Did you plant them to the right depth? Small seed barely need covering, but most seed can be planted to a depth double their size. Seeds planted too deep may not germinate. Check the seed packet recommendations, and if you think this was an issue, consider potting up more seed.

Is the soil temperature correct? Some seeds can handle cooler soil temperatures, but others must be kept warm for germination to occur.

Have you been lightly watering the seeds/ soil in the pots? Consistent watering is an important aspect of germinating seed. Most seed need to be kept moist for germination to occur, but of course, overwatering and saturated seed can lead to rotting.

Are they warm and sunny enough, but not too hot? Keep pots inside in a sunny ventilated room, or outside in a mini/ proper greenhouse.

What soil did you use? Seeds do better with loose, friable, lightly fertilised seed raising mix in pots. If you used compacted soil, it may be hard for the seed to push up through the soil.

Did they germinate but get eaten by pests? Some pests will completely eat a seedling and you may not even see they had germinated, but were then annihilated. See more information on how to protect your seedlings.

TROUBLESHOOTING

TROUBLE SHOOTING

SEEDLINGS ARE WEAK, STUNTED OR JUST PLAIN SAD

Have you been lightly watering the seeds/ pots? Check the moisture level in the soil (poke your little finger in the soil or use a moisture testing tool), and give a light watering with a spray bottle for seedlings or a watering can for young plants, until the soil is damp.

Are they warm and sunny enough, but not too hot? Make sure the seedlings are getting adequate sunlight and warmth where they are located. Try a different location, or consider setting up a DIY mini greenhouse to keep moisture and warmth in.

Are you giving them any feed? Consider trying an organic fertiliser. After the true leaves appear, you can start to give a diluted organic fertiliser once a week. For more established plants that have pale leaves or stunted growth, they may need to be fertilised.

What soil were they potted up in? Think about what soil the seeds were potted up in. Even if you use seed raising mix, the soil in pots can become depleted of nutrients and compacted, sometimes requiring repotting or feeding.

SEEDLINGS ARE SPINDLY/ LEGGY

This can happen from lack of decent sunlight or they may be too close together, competing for sunlight and nutrients, and need thinning. Or it can be a sign of being too warm or overfeeding, causing rapid growth spurts. Make sure they have consistent moisture too.

SEEDLINGS ARE DROOPY

This could be caused by lack of water, too warm, or possibly wilt (a fungal disease, where the leaves droop but also become brown and crispy, or discoloured).

PESTS, DISEASES + WEEDS

Are there any marks, bug holes or signs of pests? Check under the leaves for mites, aphids, eggs or larvae but also check around the edges or bottom of pots and garden beds for snails/ slugs/ other. Find a Bug Identification resource for your area and learn about good and bad bugs.

Is there any discolouration or marks on the leaves or stems? Any leaf drop? This could indicate a viral, fungal or bacterial disease, or even nematodes. Consider soil mineral deficiencies too.

Are there any weeds competing for the nutrients? Pull weeds up and add mulch to prevent them growing back.

TROUBLESHOOTING

appendix

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W growinghome.com.au

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PROJECT PLANNING

GOALS		
CHALLENGES + LIMITATIONS	**OPTIONS + SOLUTIONS**	
BUDGET		

EXISTING RESOURCES	
WHAT TO FIND/ BORROW/ BUY	
SCHEDULE/ CHECKLIST	
COMPLETE ASSESSMENT + DESIGN BY	
GATHER MATERIALS BY	
DATE(S) TO CREATE/ BUILD	
OTHER	

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GARDEN LAYOUT

Access your block plans OR use Google maps to get an overview or lay out of your setting, with any structures, verges etc. Draw an approximate outline here. Work out the path the sun travels in Winter and Summer.

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WHERE TO GROW

	ASPECT/ SUNLIGHT	CLIMATE	SIZE/ LAYOUT	WATER
Consider	Do you have an area with an average of 6 hours of sunlight per day? Work out the path of the sun over your garden throughout the year. Note any trees/ structures on our Garden Layout.	What is your climate/ zone? Or can you access charts for average rainfall and temperature in your area? Or ask local community gardens, nurseries or neighbours for advice?	How big or small is your area? Where are there optimal conditions to grow in? How much you can utilise, in terms of time, energy or money?	How will you water your garden beds? Can you use rainwater as your main water source? Can you harvest and store rainwater? How will you handle too much rain?
Findings				
Positives				
Negatives				
Solutions				

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WHAT TO GROW IN

	EXISTING GARDEN BEDS	SOIL	GARDEN BEDS	TRELLIS/ SUPPORT & SHADE SYSTEMS
Consider	Are there any existing garden beds? Are these in optimal positions, in regards to sunlight and water access? What condition is the soil in?	Do we have suitable soil? What condition is it (dense, sandy, friable)? What is the pH of the current soil/ soil that we sourced? Should we build raised garden beds on top and bring in soil? Do we need to test for toxicity levels?	What can we build that suits our requirements (see What To Grow In)? Do we need pre-made/ raised/ no-dig beds/ wicking beds? Do we need to grow in pots or containers? What materials do we have?	Will we grow plants that are climbing or grow tall, and require support? Do we need to remove the trellis/ supports, or move them between beds? Will we need to provide shade in the hot months?
Findings + Notes				
Strengths + Positives				
Challenges + Limitations				
Options + Solutions				

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OTHER

	GARDEN TOOLS & MATERIALS	GREENHOUSE/ OTHER	PEST & DISEASE CONTROL	LOCATION, SECURITY + SAFETY
Consider	Do we have any gardening tools or resources? Can we borrow or buy what we need? Where can we store our equipment?	If you do not have the right conditions, can you manipulate them by using a mini or full size green house, or using 'cold frames' or polytunnels/ shade covers over your garden beds?	What potential pests are there (bad bugs, wildlife, pets)? Are there any common diseases in your area? How will you protect your vegetable garden?	Are there any zoning restrictions regarding growing food? Are your neighbours and community receptive? How can you keep your family and your garden safe and secure?
Findings + Notes				
Strengths + Positives				
Challenges + Limitations				
Options + Solutions				

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REQUIREMENTS

MATERIALS/ RESOURCES	WHERE TO SOURCE	COST	NOTES
GARDEN BEDS			
SOIL			
MULCH			
GARDEN TOOLS			
WATERING GEAR			
TRELLIS/ SHADE			
SEEDS/ SEEDLINGS			

seasonal planting
PLANNER

SEASON				
WHAT TO GROW	**WHEN TO POT UP SEED**	**WHEN TO DIRECT SOW SEED**	**WHEN TO TRANSPLANT SEEDLING**	**WHERE TO PLANT**

SEASONAL PLANTING GUIDE – WARM SEASON

	RAISE FROM SEED + TRANSPLANT SEEDLINGS	SOW SEED DIRECT INTO POT OR GARDEN BED
	Pot up in late Winter to early Spring, Transplant in 4 to 6 weeks	Plant in Spring to early Summer
EASY	• Zucchini • Tomatoes –cherry tomatoes • Basil • Chillies • Capsicum • Try in plantable pots: Cucumber, Sunflowers, Pumpkin, Squash, Melons, Beans	• Zucchini • Tomatoes • Beans • Cucumber • Pumpkin • Squash Delicata or Spaghetti vegetable • Sunflowers • Basil • Chillies • Capsicum
MORE DIFFICULT	• Eggplant • Okra	• Eggplant • Okra • Corn (sweet corn) • Sweet Potato (plant tubers) • Potato (plant tubers) • Globe Artichoke (biennial) • Jerusalem Artichokes (from tubers) • Rhubarb (perennial - grow from rhizomes or roots)

Please note: these are a guide and may not suit all climates zones, please research what suits your own climate zone and microclimates in your space.

SEASONAL PLANTING GUIDE – COOL SEASON

	RAISE FROM SEED + TRANSPLANT SEEDLINGS	SOW SEED DIRECT INTO POT OR GARDEN BED
	Pot up in late Summer to early Autumn, Transplant in 4 to 6 weeks	Plant in Autumn to early Winter
EASY	• Kale • Onion/ Leeks/ Spring Onions • Try in plantable pots: Sugar Snap Peas, Snow Peas, Peas, Asian greens	• Kale • Onion/ Leeks/ Spring Onions • Asian greens (Pak Choi, Bok Choy, Mizuna) • Peas (bush peas, or climbing peas) • Sugar Snap Peas & Snow Peas • Broad Beans • Kohlrabi and Fennel • Garlic
MORE DIFFICULT	• Broccoli, Cauliflower, Cabbage, Brussels Sprouts	• Broccoli, Cauliflower, Cabbage, Brussels Sprouts • English Spinach • Swedes and Turnips

Please note: these are a guide and may not suit all climates zones, please research what suits your own climate zone and microclimates in your space.

SEASONAL PLANTING GUIDE – YEAR ROUND

	RAISE FROM SEED + TRANSPLANT SEEDLINGS	SOW SEED DIRECT INTO POT OR GARDEN BED
EASY	• Lettuce	• Lettuce • Rocket • Herbs (thyme, oregano, parsley, coriander, dill, chives) • Beetroot (Chioggia, Golden, Red) • Radish (French breakfast, red) • Silver beet (AKA Swiss chard, can get a rainbow of colours)
MORE DIFFICULT	• Herbs (buy seedlings or grow from cuttings/ division, and transplant – sage, rosemary, thyme, oregano, mint, parsley, chives)	• Carrots • Asparagus (plant crowns in Winter or seed in Spring)

Please note: these are a guide and may not suit all climates zones, please research what suits your own climate zone and microclimates in your space.


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