Getting started with growing your own food









Welcome to the *Health for Life* guide to Getting Started with Growing Your Own Food

This booklet contains some hints and tips to help you plan your vegetable garden whether you have an acre field or just a couple of pots in a yard.

Our straightforward instructions will take you through everything from understanding how to use crop rotation to reduce plant disease, how to manage weeds and pests without using chemicals and how to sow, transplant, water and maintain your precious vegetable plants.

We will also tell you how to make the most of garden waste and vegetable scraps by creating your own compost.

This booklet is aimed at adult new growers but can also be used with children and school groups. We also have a range of videos that you can access via our Grow Well Eat Well Facebook group: https://www.facebook.com/groups/hflgrowwelleatwell which give more food growing advice and recipe instructions for the delicious meals you can make with your home-grown produce.

The guide has been developed for *Health for Life*, a programme funded by Mondelēz International Foundation and delivered by The Conservation Volunteers (TCV) and Services for Education.

Any Questions?

Our team of experienced Project Officers also runs food growing sites across South Birmingham with free week-day sessions open to all (booking essential). Please contact *midlands@tcv.org.uk* for an up to date programme of session times and locations.

Sessions are open to all abilities and those with no previous experience of food gardening. Working alongside our Project Staff, you can learn new skills or share your own knowledge and take a share of the harvest.

We also run free Eat Well for Less sessions where you can practise turning your harvest into a healthy delicious meal without breaking the bank. Take a look at our Facebook page: https://www.facebook.com/HealthForLifeInTheCommunity for previous recipes and dates of upcoming sessions.

If you have any specific questions about food growing, you can also email them in to us at *midlands@tcv.org.uk* and our experienced staff will answer and signpost you to other available resources.

We hope you enjoy the guide and wish you every success on your food growing journey!

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Plan a food garden

What kind of space do you have?

Whether you have a large garden, an allotment, a tiny yard or even a balcony, you will be able to grow some of your own food.

Think about the space available - is it sunny or shady? What is already growing there? How much space do you want to devote to vegetables, herbs and fruit?

Decide what to grow

It makes sense to grow your favourite vegetables, particularly those such as baby carrots with their tops on or early new potatoes where the flavour and texture is best when just harvested. Once you have listed what you like, decide how much of each you need, bearing in mind that not all produce can be stored. If you find you have grown too much of something, you can get creative with jams, chutneys and pickles or give some produce away.

Find out what type of soil you have

If you are growing in containers or filling new raised beds, you can choose the type of compost/ soil to use. If you are growing directly in the ground, it helps to know what type of soil you have. Soils with a lot of clay are harder to dig and take longer to warm up in the spring but they hold the water and nutrients that your crops need. Sandy soils are lighter to dig and warm up fast (making them good for early crops) but need more frequent watering and feeding as water and nutrients drain away. Using raised beds means you can adjust the soil type to suit your needs but can be a costly and is not necessary for good crops.

'Dig or No Dig?'

If your chosen vegetable garden currently has a lot of perennial weeds (things like nettle, dock, ground elder, thistles, dandelion, brambles, mares tail or bindweed) you will probably need to do some digging to clear these.

You can also cover weeds with cardboard (weigh it down) or membrane to shut out the light and leave for a season for the weeds beneath to weaken or die.

Some gardeners choose to dig over their plot and others choose to build up the soil in raised beds. Building soil on top of the existing ground level gets rid of the need for heavy digging. 'No dig' methods are also best for preserving the soil ecosystems and allow beneficial bacteria, invertebrates and fungi to thrive, which reduces the need for fertilizers and pesticides.



Small containers work well



A raised bed is easy to manage



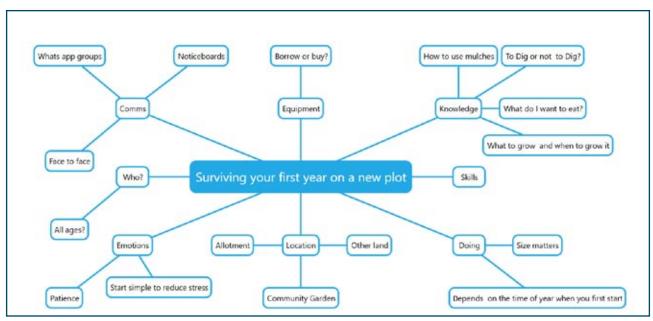
Preserve your produce!



Light, sandy soil



Plan a vegetable garden



Some things to weigh up before you begin

Consider time

Consider how much time and effort you want to devote to your vegetables.

Some vegetables have to be grown every year from seed. Tomatoes, for example, are popular but they need sowing, potting on, staking and training. They only crop outdoors for a few weeks in late summer. They need a lot of care relative to the amount of harvest.

Beans, peas and most root vegetables can be sown directly where they will grow and can stay in the ground till the vegetables are harvested. Beans and peas will benefit from regular picking and continue to produce for a longer period.

Fruit trees and bushes need minimal care once established and crop year after year. Plant woody plants in the winter when they are dormant.

If you want your garden to be producing some food all year round, make sure that you have a good vegetable planner to help you sow at the right time.



Fruit trees and bushes need minimal care once established



Choosing Your Vegetable Plants

Vegetable seed suppliers produce useful catalogues and websites to help source seeds. If you don't have space for sowing in trays and potting on, choose seeds that can be sown directly in the ground. You can also buy small vegetable plants from garden centres and grow them to full size in your own garden. Swapping seeds and plants is another avenue to explore.

Once you have decided what you want to grow and when, the next task is to fit your plants into the space available. Seed packets will tell you the recommended spacing for each plant but in a small garden, you can get away with growing more plants closer together.

You can also sow a row of lettuce between carrots or onions (intercropping) or grow a fast- growing vegetable alongside slower growing vegetables (catch cropping).

Try to keep any plans - they may come in handy for planning your crop rotation (see later section on Crop Rotation).



Create a low maintenance garden

Vegetable gardening requires a commitment of time and effort but growing your own fresh vegetables doesn't have to take over your life. If you start with a few easy to grow vegetables that don't require daily care, you can be eating fresh food all year round. You don't even have to have a garden. Most of these vegetables can be grown in containers and kept at hands reach. Here are five popular vegetables that require little maintenance:

Beans

Beans are one of the most prolific vegetables you can have in your garden. Climbing beans, in particular, keep going from mid-summer until frost. All you need is a packet of seeds and something for them to grow on. Don't let the idea of a trellis put you off. You can grow pole beans along a fence or railing or up some string or twine. The only trick to having a continual harvest of beans is that you need to pick them regularly. If you leave them on the plant, the plant will stop setting more pods.



Cherry tomatoes

It's easy to grow tomatoes, but more difficult to keep them healthy. Tomatoes are prone to lots of fungal diseases that set in as soon as the weather heats up and becomes humid. The low maintenance choice for tomatoes would be cherry tomatoes. Look for packets that say they are hybrids. Hybrids generally have better disease resistance and many varieties have been bred to grow more vigorously and yield more fruits. Sounds good?

The smaller tomatoes (e.g. cherry, grape, pear) are some of the hardiest varieties. They can be grown in the garden or in containers; staked or allowed to sprawl or hang. There's no wrong way to grow cherry tomatoes. You don't even need to slice them – a low maintenance bonus.



Garlic

It doesn't get much easier than this. Dig a hole; plop in a garlic clove; cover; come back next summer; dig and enjoy.

Okay, you do need to make sure your garlic gets watered and a little food, but seriously, that's it. Animals don't bother it. You don't have to stake or prune. You can even save a few bulbs from your harvest to plant again in the autumn, so you don't even have to order more.



Leafy greens (cooking and salad)

Salad greens, like lettuce, mizuna and spinach, can all be grown in the garden or in containers, harvesting just a few leaves from each plant, known as the 'cut and come again' method. The plant will keep growing new leaves. Sow some seeds and then sow again a few weeks later. This is called succession planting and will make your harvesting season longer. Some salad greens will go to seed (bolt) in hot weather, but lettuce and mizuna can be grown throughout the summer, especially in containers, if you provide some shade.

The cooking greens, kale and chard for example, just keep chugging along. Harvest the outer leaves and the plants will fill right back in.



Tiny hot peppers are much easier to grow than their larger sweet cousins. Each plant will set a sizeable harvest. You can harvest at any stage, from green to screaming orange, so even if you forget to harvest for a month or so, your peppers will only get better. In fact, my top recommendation for growing hot peppers is to neglect them. Be stingy with the water, but generous with the heat and sunshine. This is another vegetable that is rarely bothered by pests or diseases.

Hot peppers do well in containers, although they can get heavy when they are loaded with fruits and may need staking. They can also be kept through the winter by pruning them and keeping them inside.

Herbs

Many herb plants are easy to grow. The loveliest thing about growing herbs is the more you snip and eat them, the fuller they grow. Plus, the oils that give them their flavour and aroma are more concentrated if you go easy on the water.

Herbs do well in containers but can be tricky to grow indoors because they need a lot of sunshine and a container large enough for their roots to spread out. Herbs, like rosemary, thyme, oregano and sage can be grown as windowsill plants. Tender basil, dill and cilantro are easy to start from seed or seedlings but will require more water than their Mediterranean cousins like rosemary.







Crop rotation



Crops can be rotated between raised beds

What is crop rotation?

The principle of crop rotation is to grow specific groups of vegetables on a different part of the vegetable plot each year. This helps to reduce a build-up of crop-specific pest and disease problems and it organises groups of crops according to their cultivation needs.

Quick facts

SUITABLE FOR: all but very small vegetable gardens TIMING: plan before the growing season, when ordering seed DIFFICULTY: easy

Crop rotation is used in allotment plots and kitchen gardens for most annual vegetable crops. Perennial vegetables (such as rhubarb and asparagus) do not fit into the rotation.

Certain annual crops such as cucurbits (courgettes, pumpkins, squashes, marrows and cucumbers), French and runner beans, salads (endive, lettuce and chicory) and sweetcorn can be grown wherever convenient, merely avoiding growing them too often in the same place.

Plan your crop rotation before the growing season starts and mark out the plots on the ground so you know where to plant each crop.



Cucurbits can be grown wherever convenient

Benefits of crop rotation

SOIL FERTILITY: Different crops have different nutrient requirements. Changing crops annually reduces the chance of particular soil deficiencies developing as the balance of nutrients removed from the soil tends to even out over time.

WEED CONTROL: Some crops, like potatoes and squashes, with dense foliage or large leaves, suppress weeds, thus reducing maintenance and weed problems in following crops.

PEST AND DISEASE CONTROL: Soil pests and diseases tend to attack specific plant families over and over again. By rotating crops between sites the pests tend to decline in the period when their host plants are absent which helps reduce build-up of damaging populations of spores, eggs and pests. Common diseases that can be helped avoided by rotation include clubroot in brassicas and onion white rot.

Divide your vegetable garden or allotment into sections of equal size (depending on how much of each crop you want to grow), plus an extra section for perennial crops, such as rhubarb and asparagus. Group your crops as below:

BRASSICAS: Brussels sprouts, cabbage, cauliflower, kale, kohlrabi, oriental greens, radish, swede and turnips

LEGUMES: Pea, broad beans (French and runner beans suffer from fewer soil problems and can be grown wherever convenient)

ONIONS: Onion, garlic, shallot, leek

POTATO FAMILY: Potato, tomato, (pepper and aubergine suffer from fewer problems and can be grown anywhere in the rotation)

ROOTS: Beetroot, carrot, celeriac, celery, Florence fennel, parsley, parsnip and all other root crops, except swedes and turnips, which are brassicas. Move each section of the plot a step forward every year.



The dense foliage of potato plants



Crop rotation can minimise pest infestations

	Bed 1	Bed 2	Bed 3	Bed 4
Year 1 and Year 5	Autumn: enrich with compost and manure Spring: plant potatoes and tomatoes Late summer: leeks Autumn: onions and garlic	Root vegetables (e.g. carrot, parsnip, beetroot Fill gaps with lettuce Green manure in winter	Cabbage family: kale, rocket, cabbages, cauliflower, sprouts	Harvest onions and leeks from previous year Sow peas and beans in spring Add lime/manure in autumn
Year 2	Harvest onions and leeks from previous year Sow peas and beans in spring Add lime/manure in autumn	Autumn: enrich with compost and manure Spring: plant potatoes and tomatoes Late summer: leeks Autumn: onions and garlic	Root vegetables (e.g. carrot, parsnip, beetroot Fill gaps with lettuce Green manure in winter	Cabbage family: kale, rocket, cabbages, cauliflower, sprouts
Year 3	Cabbage family: kale, rocket, cabbages, cauliflower, sprouts	Harvest onions and leeks from previous year Sow peas and beans in spring Add lime/manure in autumn	Autumn: enrich with compost and manure Spring: plant potatoes and tomatoes Late summer: leeks Autumn: onions and garlic	Root vegetables (e.g. carrot, parsnip, beetroot Fill gaps with lettuce Green manure in winter
Year 4	Root vegetables (e.g. carrot, parsnip, beetroot Fill gaps with lettuce Green manure in winter	Cabbage family: kale, rocket, cabbages, cauliflower, sprouts	Harvest onions and leeks from previous year Sow peas and beans in spring Add lime/manure in autumn	Autumn: enrich with compost and manure Spring: plant potatoes and tomatoes Late summer: leeks Autumn: onions and garlic

Example of 4-bed crop rotation

Sowing seeds



Sowing seeds in modules

Gardening does not have to be too complex. Almost all of us – probably in school – planted a seed in a cup of soil, watered it, and watched it grow, but creating a garden that produces fresh food and flowers all season is not so elementary, especially to those who did not grow up gardening. This guide introduces the basics of sowing (or 'planting') seeds.

Sowing in trays or modules

Loosely fill the tray with a peat-free seed compost or potting mix (traditionally one third sand, one third compost and one third topsoil). If you can't get a seed compost, you can use multi-purpose compost. If you add vermiculite or perlite to the compost, it will help to lighten the mix, aid drainage and help seeds to push through.

Gently press the compost flat (you can use an empty seed tray or board to do this) - this creates a flat surface for the seeds to lie on. If the seed you are growing is large (sunflowers, pumpkins, cucumbers) - then only put one or two seeds in each cell of the tray. For smaller seeds, you can put more in but then you will need to thin them out at the potting on stage.

Potting on

When your seedlings have at least 2 leaves, you can plant each seedling in its own 9cm pot. Be careful not to disturb the roots too much and try to get the seedling right in the centre of the pot. You can firm down the compost to help the seedling root.



Potted on seedlings

Direct Sowing - make your bed

About three weeks before you are ready to plant, after the soil has dried so that it doesn't clump when you pick up a fistful, sink a fork into the earth.

Loosen it down to about 12 inches, add a half-inch layer of compost, and rake the surface of your garden until it has no weeds, dirt clumps, or big stones. Over the next three weeks, pull any weeds that come up. Raking and then letting the soil sit for a few weeks brings out weed seeds that were lurking in the soil.

DIG A FURROW... OR NOT

If you like symmetry and order, carve out a shallow trench with a hoe or hand trowel. But you don't have to plant in rows. You can organise your garden as a grid, with plants at the four corners of each square, or you can choose not to organise it at all. Whichever style you go with, dig shallow furrows or holes for the seeds.

Rake before leaving the soil for a few weeks

WATER LIGHTLY

Moisten but don't soak the soil. Watering before rather than after planting the seeds protects them from being swamped, or washed up and out of the soil.

Sowing seeds

SOW THE SEEDS

Spread the seeds through the trench or place two or three in each planting hole. The seed packet tells you how far apart to plant them. If you plant too closely, you can thin them after they come up and, in many cases, eat the thinnings.

COVER WITH SOIL

The seed packet will also tell you how deep to plant your seeds. Sprinkle soil on top of the seeds, pressing gently to ensure they have contact with the soil. A few seeds, such as lettuce and dill, need light to sprout, so cover them sparingly.

KEEP MOIST

Sprinkle water on the seedbed whenever the surface is dry until all the seeds have sprouted.





Transplanting vegetable plants

If you have grown seeds in trays and then potted them on, you will then need to transfer them to their final growing space in a garden bed or larger container.

These steps also apply to vegetables you get in packs at the garden centre, as well as annual and perennial flowers.

DIG A HOLE

Make the planting hole as deep as the plant's container and about double the width.

WATER THE PLANT

Give it a drink before planting, because until the roots start growing, they can't draw water from the soil.

REMOVE THE PLANT FROM THE POT

Place your hand on top of the pot, with your fingers around the plant's stem. Turn the pot upside down and gently squeeze it or push the plant out from the bottom with your other hand. If you must tug it out, pull it by its leaves rather than the stem. If a leaf comes off, no harm will be done but if the stem is damaged the plant will not survive.

CHECK THE ROOTS

If the roots have wrapped around and around the plant, gently pull a few loose with your fingers.

PLACE IT IN THE HOLE

Set the plant in the hole at the same depth it was in its pot, generally where the stem meets the roots. Tomatoes are an exception to this rule - plant them deeper.

REPLACE SOIL AND THEN WATER

Backfill the hole with the soil you removed and press gently to ensure that the roots have solid contact with the soil. Be sure the soil stays consistently moist until you see the plant start to grow.

Key to success...

Transplant on an overcast day to give the plants a chance to adjust to their new home without being withered by direct sun.









Managing weeds

Weeds take up water, use up the nutrients in the soil and they can make your garden look untidy. Some weeds are deeprooted or will remain in the soil for more than a year (perennial or pernicious weeds). These can be hard to get rid of and require patience and repeated effort – do not lose heart. The more you plant and weed, the better chance you stand of your vegetables and flowers thriving.

Other weeds will arrive carried by animals or birds or as seed blown in on the wind. These will appear as tiny seedlings, which are easier to scrape off the surface by hand or with a hoe.

It is better to avoid using toxic herbicides as these will also harm the hedgehogs, frogs and birds which are the gardener's best friends when it comes to controlling pests in an environmentally friendly way.

Use the following strategies instead.

Tolerate Beneficial Weeds

Some weeds, like nettles, can be important habitat for beneficial insects such as ladybirds. Weeds are usually native plants which are well adapted to the local climate and soil, which is why they are so good at taking over your garden! Plan your garden to include some areas of beneficial native plants. Garden design is evolving to be much more tolerant of wild areas.

Mulch

Mulch is anything which is used to cover bare soil either prior to planting or placed around plants. Mulches can be any organic material such as straw, dried grass clippings, shredded leaves or even woodchip. Spread a thick layer (2 or more inches / 5 cms deep) of organic mulch – straw, dried grass clippings, shredded leaves – on your garden each spring and replenish it throughout the growing season.

Bonus: The mulch nourishes your soil as it decomposes. For even better weed protection, use several sheets of newspaper or cardboard under these mulches. They are nearly impenetrable by weeds.

Weed suppressant membrane

This is also known variously as 'weed control fabric' or 'weed barrier matting' (or by brand names such as Mypex). The fabric is permeable, allowing air, water and nutrients to pass through down to the soil, whilst blocking out the light of the sun to inhibit









photosynthesis and therefore stop weed growth.

A membrane will help keep water in the soil and raise the soil temperature, helping to promote the growth of anything you choose to plant through the fabric. Non-woven types are cheaper but woven fabric is much stronger and more resistant to punctures and tears. To use, clear the area of weeds as much as possible and lay the fabric out on the ground. You could peg it down with metal tent pegs, or decorative plant pots for example.

Decide if you would like to plant anything in particular in the area – if so then make 'X' shaped cuts at the correct spacing for your chosen plants and plant them! If you do not like the look of the fabric on show then simply cover with natural material such as woodchip or mulch. Some gardeners prefer not to use membrane as it contains plastics. Cardboard is the best substitute if you want to be super-green!

Hand-pulling weeds

Sounds like a lot of work, we know. But pulling out a few weeds every day or at least every week keeps them from getting out of control and brings you up close to your garden so you can inspect your plants for problems. Keep a bale of straw or a pile of grass clippings on hand so you'll have mulch on demand to help prevent weeds from returning after you've pulled them.

Hoeing

Use a hoe's sharp edge to sever weed stems from their roots just below the soil surface. To hoe your garden without cultivating a backache, hold the hoe as you would a broom.

Key to success

Weeds come out easily when the soil is moist, so think of a summer rainstorm as an opportunity to free your garden from a weed infestation.

Be persistent

Persitence is your most important long-term weapon against weeds. Mulch, and pull or hoe the weeds for a few minutes whenever you visit your garden. Do these things consistently for a few seasons, and you will slowly but surely expel problem invaders for good.



Hand-pulling weeds



Hoeing weeds



Try to keep your hoe's blade sharp

Controlling pests

Whenever you see insects in your garden, remember this:

Not all insects are bad

Most are no threat to plants, many are even beneficial, and all of them, even the pests that eat your plants, are an integral part of the ecosystem you are cultivating. But what do you do when the pests seem to have the upper hand? You don't want to enforce a "no-fly zone" with pesticides. They're dangerous for you to have and to use, and they harm wildlife and contaminate water. Instead, use safe, organic techniques and products to keep the pests in balance.



Grow healthy plants

The best defences against insect attack are preventive measures. Pests target weak or unhealthy plants, so choose plants that are suited to the conditions you are putting them in and they'll be less stressed. If you are starting your plants in modules or pots, wait until after last frost to plant them out and make sure they have good root growth before planting out. Don't let plants be too wet, too dry, or too shaded. Use lots of compost.

Integrate, don't segregate. Mix different vegetables, herbs, and flowers together in your beds. This keeps pests from zeroing in on a whole crop of their target plant.

Encourage pests' predators

The most effective and natural way to control pests is to rely on the food chain. Plant herbs and flowers among your vegetables to lure predatory insects such as ladybirds and green lacewings, which feed on flowers' nectar while their larvae consume pests. Put out a birdbath to enlist the appetites of songbirds to your cause.

Treat frogs and toads as welcome allies, too.

Build barriers

Environmesh is a woven fabric that lets light, air, and water reach plants, but keeps pests (including deer) away from them. You'll find it in local garden centres, in catalogues, and online.





Enviromesh™

Target the treatment

If preventative measures fail, there are a number of organic methods for treating pest infestations. Start by making sure you have correctly identified the pest and confirmed it is the cause of the symptoms you've found. Then, depending on the pest, you can arm yourself with soap or hot-pepper sprays, horticultural oil, or sprays containing *Bacillus thuringiensis* (a naturally occurring bacterium that disrupts the digestion of caterpillars and other leaf-eaters).

Surrender

As we said, insects attack plants under stress. Do you have enough healthy plants to spare the sickly ones? Can you restore sickly plants to robust health so they can resist insect attack? If not, let the pests do their worst, then watch as their predators flock to your garden and protect your healthy plants.

Key to success...

Check the undersides of leaves when applying organic pest control—insects often hide out of sight.



Spraying organic pest deterrent



Aphids hide under leaves

Grow vegetables in containers

When to grow vegetables in containers

Timings vary depending on the crop, but the main growing season is from early spring to autumn.

Container choice

Pots, troughs and grow-bags can all be used to allow gardeners without time or room for a vegetable plot to grow fresh, tasty produce.

Container-grown vegetables can be started off in a glasshouse, conservatory or porch for earlier crops

Smaller containers can result in a lack of moisture and nutrients for plant roots. Aim for containers with a depth and width of at least 45cm (18in), otherwise frequent watering and feeding will be needed.

Compost choice

You can buy compost from supermarkets, hardware stores and garden centres. The soil-based compost John Innes No 3 is especially easy to manage but other composts, including peatfree varieties, are also suitable. Peat-free is the best choice if you want to be environmentally friendly.

Compost in grow-bags is often both good value and reasonable quality.

Home-made mixtures of two parts soil and one part well -rotted organic matter can be an economical substitute.

Organic growers who wish to avoid fertiliser use can get good results from mixing well-rotted manure into the potting compost in the lower half of their containers – 20 percent by volume should be sufficient.



Herbs in an home made trough



Hanging tomato garden



Mix rotted kitchen compost with soil for containers



Potatoes growing a bag

Further care

Aftercare should involve provision of a constant water supply but take care to avoid prolonged waterlogging. A feed of general-purpose liquid fertiliser can be applied every two weeks. If frost is likely, cover the plants with horticultural fleece and move the pots to a warm, sheltered spot.

Crop selection

Rewarding vegetable crops for containers include:

BEETROOT: sow in March at 10cm (4in) spacings. The young leaves can be used as 'spinach'. Follow these with quick growing crops of late summer salads.

BROAD BEANS: sow from February at 20cm (8in) spacings. The tops can be pinched out to reduce blackfly attacks and also for use as 'greens'. The broad beans can be followed in June or July with beetroot for late summer crops.

CARROTS: sow Nantes or Amsterdam cultivars from February for June harvesting. Thin seedlings to 8cm (3in) between plants. Cover the containers with fleece from April onwards to exclude carrot fly. After the carrots, sow French beans to gather in September.

HERBS: parsley, for example, can be sown in March for harvesting from June; coriander is also an attractive and popular crop. Basil is another great herb for pots. Repeat crops can be sown for late summer harvest.

LETTUCES: mini lettuces such as 'Little Gem' and 'Tom Thumb', spaced at 15cm (6in), can be sown from January for June harvesting. Follow the lettuces with leeks for winter harvesting.

PEAS: sow 'mange-tout' cultivars with edible pods from March; plant them out at 15cm (6in) spacings; harvest in June and follow with salad leaves for late summer.

POTATOES: plant early cultivars from March with one tuber for every 30cm of pot diameter.

SALAD LEAVES: sow from February aiming for 5cm (2in) between plants. Rocket, coriander, lettuce, chicory and spinach are tasty choices. Harvest by pinching off the top few salad leaves, leaving a stump to re-sprout for follow-on crops.

SALAD ONIONS: sow from February with 3cm (1.5in) between plants. Pull them up when they get big enough. By July, you should be able to re-sow with finger carrots for bunches of baby carrots in October.

SPINACH: sow from February aiming for 10cm (4in) between plants. Spinach quickly runs to seed, so follow it with courgettes in June for late summer fruits.







Problems

Growing vegetables in containers are generally quite easy with the main problems being drying out.

Lack of root space can be a problem in small containers, and may result in wilting and symptoms of nutrient deficiency.

Water wisely

Pick your plants

When deciding what to grow, choose plants suited to the soil, climate, and site. A plant that grows best in shade, for instance, will demand lots of water in a sunny spot. As you set up your garden, try to group plants according to their water needs, so you can irrigate them efficiently.

Putting down roots

Every plant needs extra attention in its early days. Check newly planted crops frequently, and don't let them wilt from lack of water.

Try early or late

Water your garden in the early morning or in the evening – cooler temperatures mean less moisture evaporates than during the heat of the day. Direct your hose or watering can at the soil around plants to get them the maximum moisture, with minimum evaporation.

Take the 'two-knuckle' test

Before you water, push your index finger two knuckles deep into your garden's soil. Feel damp? If so, don't water the garden, no matter what the plants look like. (Many appear to wilt during high heat.) Also, prioritize your water usage – seedlings, for example, have small, delicate root systems that require consistent watering. Give priority to transplants and newly planted crops, and leave trees, shrubs, and perennials to find water in the soil with their deep roots.

Weed and mulch

Weeds compete with plants for water. Mulch shields the soil from the baking sun and keeps it moist.

Key to success...

Make sure your plants get about an inch of water a week, either from rainfall or you.

Dig the drip

To use water most efficiently, use a soaker hose (which "weeps" water along its length) or, even better, a drip-irrigation system (which lets you target exactly where you want the water to go).





The 'two-knuckle' test



Soaker hose drip-irrigation system

Composting

Composting kitchen and garden waste is a great, free way of improving the soil in your garden.

Types of compost bin

Compost heaps can be designed to suit gardens of all sizes. You can build your own or choose from a whole range of specially designed bins, available at garden centres and through internet and mail order outlets. Some local councils now offer subsidised compost bins. A larger garden can easily accommodate a simple heap in a lesser used part of the garden or even a multi-bay heap, while even the smallest terrace could accommodate a worm composter.

Siting and installing your bin

Whichever type of compost bin you decide on, make sure it is easily accessible – having to face trekking right down to the bottom of a muddy garden in the snow might be less appealing later in the year! To erect your own bin, hammer into the ground four 10cm x 10cm (4in x 4in) posts to enclose an area about 1sq m (40sq in.) Then bash the soil with the back of a spade to consolidate it. Next either tack wire netting to the posts, or nail planks around them, leaving the front side easily detachable so you can get the finished compost out. If you have opted to buy one, try to check factors such as how easy it will be to get the compost out or whether it comes with a lid that will stay on in heavy winds.

Making compost

For best results you need a mixture of "greens" and "browns". "Greens" include soft, green, nitrogen-rich material such as grass clippings, whilst "browns" include dry, brown, carbon-rich material such as straw and dead leaves. Try to aim for a roughly even mix. If you do have lots of one type material in a large quantity, try to layer it. For example, if you have just cut your lawn, put shredded cardboard in between layers of the grass clippings. Keep adding to the heap or pile at regular intervals until it is full.

Quick compost and slow compost

Keep adding to the pile at regular intervals. When the heap or bin is full, it will start to heat up as the decomposition process gets underway. After a couple of weeks when it begins to cool down, turn the heap with a fork to improve air circulation, mixing up the contents thoroughly and adding water if it is drying out. The composting process is complete when mixing no longer produces heat in the pile If turned regularly and in warm conditions your compost could be ready in about 2-4 months. A cold compost heap doesn't mean it isn't decomposing, just that



Harvesting compost from a conical plastic bin



Making a wooden bin from pallets wired together



Home made rolling barrel composter



A bin can be insulated with old seed trays and bags

the process will take a little longer. A heap left unattended and using bulkier, unshredded material may take over a year to fully decompose.

When the compost is finished, the pile will be about half its original size, have an earthy smell to it and be crumbly. Sieve (or 'riddle') your finished compost over a wheelbarrow. Any large materials that have not yet composted fully can be added back into your new compost pile.

What to compost

Green, nitrogen rich material: Grass cuttings, soft prunings, annual plant and weed remains before they have set seed, fruit and vegetable scraps, old cut flowers, tea bags and coffee grounds. Brown, carbon rich material: Torn up cardboard, ripped up newspaper, scrunched up paper bags, shredded paper, straw.

What not to compost

As a general rule try to avoid putting the following into your compost bin: Diseased plants and perennial weeds e.g. bindweed (as these can sometimes survive even a hot compost pile); meat, fish, cooked food and dairy (as these can attract scavengers); disposable nappies; cat and dog litter (as these can harbour harmful pathogens); bbq coal ash (as these can contain chemicals that don't break down). Ash from a wood fire is fine, just try to layer it with other material and be aware that in large quantities it can make your compost alkaline. However, if you are looking to compost pet waste, there are specially designed compost bins available that will do this safely (the "Dog waste digester" "Doggie Dooley" or "Pet poo wormery") you won't get compost you can use on vegetable plants but will be great for ornamental plants.

Dealing with autumn leaves and woody material

A large pile of brown leaves in the autumn will decompose very slowly and may be better used as a 'leaf mould'. To create leaf mould, you can make a 'cage' from chicken wire or use hessian sacks (or even just plastic bags with holes cut in them) to store your collected leaves until they decompose on their own (this can take between 1-3 years). Just pack them in and add water, or make sure they are open to rain. When they are a rich, crumbly texture, they are great for using as a mulch, or if left another year, make an excellent soil conditioner.

Small twigs can be added to your compost heap to help with air circulation. Shred larger items so they decompose more easily and if the waste is very dry, spray with water to moisten the pile, but do not soak it. Try to layer it with "green" nitrogen rich material. If you have a large amount of shredded woody material, it could be used as a mulch around plants. If you cannot shred the material, think about other uses – e.g. large branches can be used for creating a habitat pile or edging garden beds.



Grass cuttings can be the green layer...



...and 'browns' can be shredded office paper



Kitchen waste just added to the bin



Chicken wire leaf mould composter

Solving problems

Compost should not produce any nasty smells and should be damp to the touch.

SLIMY, SMELLY COMPOST: A slimy compost heap is usually due to too much wet material such as grass clippings, and not enough air in the heap. To solve this problem, mix material such as straw, shredded hedge clippings or crumpled paper into the 'slimy' layer. Turn your heap periodically to get more air in, and cover the compost heap (e.g. lid on a compost bin or an old tarpaulin over an open compost bay).

DRY COMPOST THAT ISN'T DOING ANYTHING: Make sure you are using an even mix of wet 'greens' and dry 'browns'. Use a watering can with a rose (sprinkler) on the end to add water into the pile, and turn the pile.

ANTS: Are a sign that your compost heap is far too dry - moisten the heap without soaking it and add more 'wet' greens to your pile - they should soon leave.

SCAVENGERS: Small rodents (e.g. rats) are attracted to meat and fatty food. Do not add meat or fatty food scraps including dairy products such as cheese. Turn the pile regularly. Regular noise and tapping the bin as you walk past it will discourage them. Ensure a lid is kept on the bin (this will also deter larger scavengers e.g. foxes) – wire mesh across the bottom of your bin can also help to discourage them from digging under your compost pile.

Quick tips on other bins...

WORMERIES: Needs to be kept warm in winter and won't take large volumes of material but can be used indoors and will produce liquid plant feeds. So these are the only composters that work if you live in a space with no garden.

BOKASHI BINS: These are a type of composter that use a special type of bran to help with creation of compost from kitchen scraps. The composting process begins indoors but you will require an outdoor bin to complete the process. You need space for two and have to invest in special bran continuously but can be used indoors.



Worms: composter's friends



Wormery composter



Bokashi bin with bran

Many thanks to Rod Weston for permission to use photos in this composting section. www.carryoncomposting.com







Health for Life is a partnership programme which supports fun activities that engage people in growing food, physical activity, healthy eating and cookery. Funded by Mondelēz International, Health for Life is delivered through primary schools and to the wider community in Birmingham by Services for Education and The Conservation Volunteers. The programme supports Change4Life and offers a range of opportunities to encourage families towards leading healthier lifestyles.

Mondelez, International

Thanks for picking up our guide. Now you have all the information you need to give it a go. But if you would like to learn more about growing food, come along to one of our Green Gyms and talk to one of our team.

For more information about what we do, and how you can get involved, contact:

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