# Food's not rubbish!



How to make the most of your food, save money and produce compost at home





#### Food's not rubbish!

Every year in the UK nearly **7 million tonnes** of edible food is thrown away.

And surprisingly, more than 70% of food waste happens at home, not in businesses or restaurants!

This comprehensive guide offers practical tips on how you can make the food you buy go further and save money, and also how to compost and recycle what can't be eaten.

The diagram below shows the kinds things you can do to reduce food waste and the impact it has on the environment. These are shown in order and focus on reducing waste first. Each action has a bigger benefit than the one beneath it.

Reduce your food waste as much as possible

Share surplus food with friends, via a sharing app or use a community fridge

**Compost at home** 

Recycle food waste using your kerbside collection

# How to make the most of your food and save money

## Buy what you are likely to eat

With a bit of extra thought, you can save money on your weekly shop, save valuable time and feel good about doing your bit.

#### Check before you shop:

Take a look in the fridge, freezer and cupboards so you get what you need, not what you've already got.

#### **Get smart:**

Save your shopping list on your phone. Snap a fridge or cupboard 'shelfie' or use mobile apps to remind you to buy what you are likely to eat. If you buy from shops that sell items loose with no packaging, you may be able to buy just the amount you need for your recipe to avoid surplus and waste.

## Plan your portions:

Plan your portions to work out how much you and your family need to stay healthy. We often cook too much of foods like rice, pasta and potatoes, but if you cook the correct amount you'll save money and reduce how much ends up in the bin.

Nearly 1 in 5 bags of food we buy ends up being binned. The average Oxfordshire household could save £700 a year by only buying food that will be eaten.









## Make your food last longer

#### Love your freezer

Freezing the food you haven't had time to eat – any time before the date on the label – acts like a pause button, buying you more time to eat the food you've already got. Here's a selection of food you might not have known freeze well.



**Fruit** – slice and freeze lemons then use them straight from the fridge in iced drinks. Frozen grapes and strawberries also make novel ice cubes, which taste great.



**Potatoes** – simply boil for about five minutes and freeze them for later. When you want them, thaw overnight and roast the next day. Mashed potato also freezes well.



**Chillies** – few of us manage to use up all the chillies in the packet, but you can freeze them whole and chop while they're still frozen.



**Cauliflower and broccoli** – make a big batch of cauliflower or broccoli cheese and split into individual portions for freezing. It's great if the veg isn't going to last much longer or you've

bought too much. It's very tasty with garlic in the cheese sauce then topped with breadcrumbs and parsley.



**Milk** – this is one thing that you do need to freeze as soon as possible after buying. When you need it, thaw it in the fridge. Plastic containers are okay for freezing milk in, but the milk will expand so

pour out a small amount (for example, in a cup of tea) to allow for this. Shake well before using.



**Cheese** – try grating Cheddar cheese and then freezing it for use as toppings on pizza or shepherd's pie. Stilton can be frozen and defrosts just as good as fresh.



**Leftover cooked meat** – all sorts of leftover meat can be frozen. Thaw in the fridge and use as normal, in a risotto or curry.



**Bread** – slice a whole loaf and use straight from frozen in the toaster or to make sandwiches for work – by lunchtime they'll be defrosted. For sliced loaves, loosely tap the loaf on a work

surface before putting it in the freezer to help the frozen slices come apart more easily.

### Chill the fridge out



The fridge is very important too! Check it's set to between 3 and 5 degrees so that things like milk and vegetables stay fresher for longer.

Don't overfill your fridge – leave space so that air can circulate and maintain the right temperature for longer.



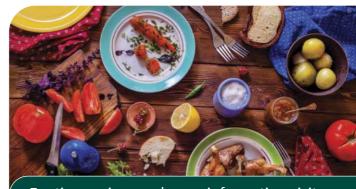
## Use what you buy

#### Love your leftovers

Use the food you spend your money on. Visit lovefoodhatewaste.com to find simple, creative recipes that will help use up your leftovers, saving you time and money!

Why not try some of these simple ideas to get started?

- If you've got fruit that's going a bit soft, whizz it up in a blender with some milk or yoghurt for a smoothie
- Turn limp salad leaves into pesto by blending with garlic, sunflower seeds and olive oil
- Grate stale bread and freeze it to use as a crumble topping
- Mash leftover potatoes with milk and butter
- Grate bendy carrots, soft swede or cabbage and add mayonnaise to make a coleslaw
- Check the date labels on your food. 'Use By' is about safety use your food up before the 'Use By' date. However it's OK to eat food after the 'Best Before' date this is about quality and you have more time to use it up.





## **Growing your own**

Growing your own fruit, vegetables and herbs is an excellent way to save money, live sustainably and enjoy the pleasure of eating home-grown food all year round.

If you're just getting started, why not try growing:

- Potatoes in a sturdy sack or bin filled with compost or directly in the ground.
- Perpetual spinach in a pot or in the ground. This tasty green keeps growing all year round as you harvest the leaves!
- Radish and lettuce together in pots or in the ground.

### **Growing in the community**

There are community gardens across Oxfordshire where you learn about growing and meet new people! Your nearest community garden may also be interested in taking surplus compost you can't use at home. Search online to find your nearest project.

#### Get an allotment

If you want outdoor growing space but don't have a garden, you can rent an allotment for a small fee. It is recommended to apply early as the waiting lists can be long.



For thrifty tips on growing your own, check out the Replenish resources to food growing on a budget: replenishoxfordshire.com/growing-at-home/



## **Composting at Home**

Composting is an inexpensive, environmentally friendly and natural process that can transform your kitchen and garden waste into a valuable and nutrient rich fertiliser for your garden.



Systems that keep the food waste enclosed like wormeries and the Bokashi method are the best ways to home compost food waste. Outdoor composting systems work best for garden waste. They can be used for certain kinds of food waste but pests may be attracted to compost bins and heaps to feed on some types of food waste.

#### Why compost at home?

#### Home composting...

- Saves energy and avoids carbon emissions from making fertilisers. It also reduces climate impacts by capturing and storing carbon in soil.
- Produces a free, fertiliser that supports soil health by improving soil structure and increasing soil fertility.
- Reduces the need to buy commercial compost which can cause habitat destruction in its production.
- Saves your local council money through having reduced waste to collect and dispose of – so your council tax can be spent on other services.



## **Composting food waste**

#### **Worm farms**

Worm farms are a fantastic way to compost household food waste. Special composting worms transform waste into a nutrient-rich compost and a liquid fertiliser. The worms are kept indoors in a small container – ideal if you don't have a garden. The process is clean and odourless.

#### What you can feed your worms

Fruit, vegetables, cereal, bread, egg-shells, tea and coffee grounds. You should also add 30% carbon, such as egg boxes, unbleached paper and corrugated cardboard

#### Things you can't put in a worm farm include

Citrus fruits, onions, garlic, dairy and meat, very oily foods and bleached paper.

#### Starting a worm farm

Find information about worm farms from organisations like the Royal Horticultural Society.

#### **Bokashi bins**

Bokashi is a method of processing food scraps using fermentation. Bokashi bins allow you to pre-process food waste that normally can't go into an outdoor compost bin or worm farm. Bokashi bins can process most foods, including raw and cooked foods, dairy, meat and bread.



#### How it works

Food waste is sealed in an airtight bin. It does not attract pests or odours and can be kept on a kitchen counter. Bokashi bran is added, which contains bacteria that ferment the food. After two weeks, the fermented food is partially broken down. A liquid is produced that can be removed using a tap on the bin. The liquid can be used to clear drains or diluted and used as a fertiliser.

#### Finishing the composting process

The fermented food should then be moved to a new location to fully break down into nutrient-rich compost. You can do this by:

- Burying it in a garden bed
- Adding it to an outdoor garden waste compost bin. Rats aren't attracted to bokashifermented food waste.
- Adding it to a worm farm in small amounts, until the worms get used to it.



# Composting outdoors: a step-by-step guide

### 1. Find the right site

Ideally site your compost bin in a reasonably sunny site on bare soil. If you have to put your compost bin on concrete, tarmac or patio slabs ensure there's a layer of paper and twigs or existing compost on the bottom so the worms and other creatures can colonise. Choose a place where you can easily add ingredients to the bin and get the compost out.



## 2. Add the right ingredients

Although outdoor compost bins are best for things like garden weeds, grass clippings, prunings, autumn leaves, you can also add vegetable and fruit peelings, teabags, toilet roll tubes and cereal boxes. If you find food wastes attract pests, consider an enclosed system like a wormery or recycle food waste using your kerbside collection. Please don't add cooked food, meat or fish to your compost bin. See page 12 for more information on how to make good compost.



## 3. Fill it up

Tip any suitable kitchen waste along with your garden waste into your compost bin. Add greens and browns in layers (see pages 12 and 13).



### 4. Turn the pile regularly

The organisms composting your waste (such as bacteria and fungi) need air to survive. Introduce air by turning the contents of the bin every few weeks with a compost aerator. If you're composting in an open heap, this can be done with a garden fork.

### 5. Ready for use

Once your compost has turned into a crumbly, dark material, resembling thick, moist soil and gives off an earthy, fresh aroma, you know it's ready to use.



## 6. Removing the compost

Lift the bin slightly or open the hatch at the bottom and scoop out the fresh compost with a garden fork, spade or trowel. See page 15 for a guide to getting your compost out of the bin.



#### 7. Use it

Don't worry if your compost looks a little lumpy with twigs and bits of eggshells – this is perfectly normal. Use it to enrich borders and vegetable patches, plant up patio containers or feed the lawn.



# **Making good compost**

The key to good compost lies in getting the mix right. You need to keep your greens and browns properly balanced. If your compost is too wet and gives off an odour, add more browns. If it's too dry and is not rotting, add some greens. Air is essential to the composting process and by mixing material up, as you fill your bin, it will create air pockets and help keep your compost healthy.

#### Put these in

Like any recipe, your compost relies on the right ingredients to make it work. Good things you can compost include vegetable peelings, fruit waste, teabags, plant prunings and grass cuttings. These are considered "greens." Greens are quick to rot and they provide important nitrogen and moisture. Other things you can compost include cardboard egg boxes, scrunched up paper and small twigs. These are considered "browns" and are slower to rot. They provide fibre and carbon and also allow important air pockets to form in the mixture.

#### 'Greens'

- Tea bags
- Grass cuttings
- Vegetable peelings, salad leaves and fruit scraps
- Old flowers and nettles
- Coffee grounds and filter paper
- Spent bedding plants
- Rhubarb leaves
- Annual weeds without seeds



#### 'Browns'

- Egg and cereal boxes
- Corrugated cardboard and paper (scrunched up)
- Toilet and kitchen roll tubes
- Garden prunings
- Twigs and hedge clippings
- Straw and hay
- Bedding from vegetarian pets
- Ashes from wood, paper and lumpwood charcoal
- Sawdust and wood chippings
- Wool
- Woody clippings
- Cotton threads and string (made from natural fibre)

- Feathers
- Old natural fibre clothes (cut into small pieces)
- Tissues, paper towels and napkins
- Shredded confidential documents
- Corn cobs and stalks



#### **Keep these out**

Certain things should never be placed in your bin.

#### Do not put in...

- Egg shells
- Cooked vegetables
- Meat
- Dairy products
- Diseased or pest-infested plants
- Dog poo or cat litter, or baby's nappies.

Putting these in your bin can encourage unwanted pests and can also create odour. Also avoid composting perennial weeds (such as dandelions and thistles) or weeds with seed heads. Remember that plastics, glass and metals are not suitable for composting and should be recycled separately.

# Finally, your compost is ready for use!

The time for putting that finished compost to use has arrived. Before starting you'll want to find out if it actually is ready to go. You can do this by making sure your compost is dark brown and smells nice and earthy. It should also be slightly moist and have a crumbly texture.



It probably won't look exactly like the compost you buy at the shops and it's very likely that yours will still have twigs and eggshells in it! Don't worry... it's still perfectly good to use! Simply sift out any larger bits and return them to your compost bin.

Your fresh compost is nutrientrich food for your garden and will
help improve soil structure,
maintain moisture levels, and
keep your soil's PH balance in
check while helping suppress
plant disease. It has everything
your plants need including
nitrogen, phosphorus and
potassium and it will help buffer
soils that are very acidic or
alkaline. Compost improves your
soil's condition and your plants
and flowers will love it!

# Getting the compost out of the bin



#### Step 1

Remove the hatch at the bottom of the compost bin to see if the compost is ready. Finished compost should be dark brown, crumbly and moist with a nice earthy smell. It is likely that it will still have twigs and eggshells in it. If you only need a small amount of compost for potting purposes, then the hatch provides perfect access to remove a small amount with a trowel.



#### Step 4

Once you have removed the bin you will be left with a 'compost cake'. You should have a plentiful supply of finished compost at the bottom, a middle layer of partially rotted material and your most recently added items at the top.



#### Step 2

If you need lots of compost then it is best to remove the whole compost bin. To separate and loosen the material from the edges of the bin, push the bin backwards and forwards in a rocking motion. Lift the bin up and off. The contents will remain in situ, the bin itself acting a bit like a jelly mould. To make this easier it is a good idea to remove the hatch from the bottom completely so you can get a good grip on the bin.



#### Step 5

Using a garden fork remove the top layers into a wheelbarrow – you can then add these back into the bin to continue rotting down for next year's compost.



#### Step 3

There are other compost bins available with different ways to access the finished compost. Certain types of bins have front and sides which are easily removable to provide access to finished compost.



#### Step 6

If you don't need to use all of your finished compost, you can bag it up for future use – you can store finished compost for up to a year. Old plastic sand bags are great for storing finished compost. Don't forget to always wear gloves when handling compost.

# **Using your compost**

#### ...on flowerbeds

Help your new plants and flowers bloom by digging a 10cm layer of compost into the soil prior to planting.

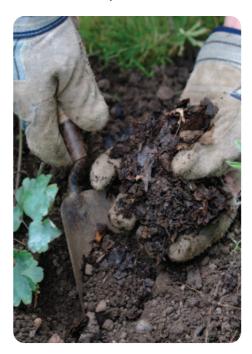
If your flowers have already been planted you simply need to spread a thin layer of compostenriched soil around the base of the plants. Nutrients will work their way down to the roots and your plants will enjoy the healthy boost compost provides. It is important that you leave gaps around any soft stemmed plants.



#### ...to enrich new borders

The borders of your garden will also greatly appreciate your compost.

Spread up to a 5cm layer of compost over the existing soil. Worms will quickly like getting to work mixing it in for you! Otherwise you can dig your finished compost into the soil prior to planting. It is important that you leave gaps around any soft stemmed plants.



### ...as mulch

Using your compost as mulch is a great idea.

By using 'rough' compost (where not everything has completely broken down) over flowerbeds and around shrubs, helps prevent soil erosion and will replenish much needed nutrients. A layer of about 5cm should do the trick. Make sure you leave a gap around any soft-stemmed plants. Adding mulch after it has rained will help keep the moisture in the soil.



# **Using your compost**

#### ...around trees

Compost is great for your trees. Spreading a 5-10cm layer around the roots will provide them with important nutrients and can protect against drought and disease.

Avoid the base of the tree and do not spread too close to the trunk. Your trees will also benefit from less weeds growing around them. Doing this once or twice a year will help your trees grow taller and bushier in no time at all.



## ...to replenish pots

give your potted plants and containers an extra boost by removing the top few centimetres of existing soil and adding your freshly made compost.

Leave a gap around soft stemmed plants. This will provide food for your plants and flowers and is a great way to make them more healthy and robust.



#### ...in patio containers

You can mix home compost with regular soil or leafmould to create your own healthy potting mixture for patio containers.

Your plants and any new plants from seeds will enjoy the additional nutrients and minerals that your compost enriched potting mixture contains, and outdoor container plants will love it too.

About a third of the mix should be compost, slightly less when you are planting seeds.

The reason for this is that home made compost is too strong to use on its own for planting into.



For more composting tips and information visit oxfordshirerecycles.org.uk/composting



# **Using your compost**

# ...healthier herbs & vegetables

Compost is excellent for growing herbs such as chives, parsley and mint.

Simply crumble it around the base of the plants for healthier, leafier herbs. Your vegetables will also grow better with compost added to their soil. Apply compost with each rotation – it's exceptionally good for planting potatoes and carrots.



## ...feeding your lawn

Dressing your lawn with compost helps young grass take root and can make your garden healthier and greener.

First, you'll need to sieve the compost and remove any large twigs or eggshells. Next, mix it with an even amount of sharp sand to compost as this will allow it to spread more easily. You'll want a layer of about 2.5cm. Mature lawns can really benefit from this little extra kick of nutrients but be aware that newly seeded or turfed lawns can be scorched by it.



# **Recycling autumn leaves**

When autumn arrives you may have a surplus of fallen leaves that could upset the balance of ingredients in your compost bin.

However by turning them into leafmould, a dark brown, crumbly and nutrient-rich material, you can make a great soil improver, lawn conditioner and mulch for your garden.

Leafmould is easy to make, suitable for all types of soil, reduces the need for peat and provides a free, organic matter that can also be used in seed and potting mixes, if well rotted.

Large quantities of dead leaves are best recycled separately because they are broken down by the slow action of fungi rather than bacteria, and therefore rot slowly. All kinds of deciduous leaves can be used for leafmould, although some may take longer to break down than others.

# Making the perfect leafmould



Step 1
Collect the leaves

Small quantities of leaves are best gathered by hand using a rake; however, if you have a large quantity of leaves, they can be collected with a special leaf blower vacuum, which shreds the material into smaller pieces helping to speed up the decaying process.



Step 2 Add moisture

If the leaves are dry, moisten them with a little water.



Step 3
Bag it up

Bag up the leaves in a large bin bag and punch holes in it to allow the air to circulate. Place in a secluded area of the garden.



Step 4 Use chicken wire

Alternatively, you can make a simple container made from plastic or wire netting with a few supporting stakes which can be reused year after year. Adjust the size to suit your requirements.



Step 5 A little patience

Leave the bag or container untouched for between one and two years. The longer you leave it, the finer the leafmould will be.



Step 6 Mulch

'Young' leafmould, which is one to two years old, can be used as mulch around shrubs, herbaceous borders, trees and vegetables – just add it as a layer on top of existing soil.



Step 7 Soil improver

You can also dig young leafmould into beds as a soil improver for sowing and planting.



Step 8 Sowing mix

Well rotted leafmould that is two years old or more can be used to make a seed sowing mix. Combine equal parts of leafmould, sharp sand and garden compost for an ideal growing medium.



Step 9
Potting

For established plants, mix well rotted leafmould that is over two years old with equal parts of sharp sand, garden soil and compost to make a perfect potting compost.

## **FAQs**

#### Q. I seem to have a lot of small black flies in my compost bin. Is this good for the compost or should I get rid of them?

A. Fruit flies do not carry disease and do not harm your compost. However, if you find them unpleasant you can reduce their numbers by ensuring that the organic waste destined for your bin is always covered in the kitchen or wherever it is stored. You can eradicate them by keeping the lid off your bin for 3 or 4 days, thus allowing the predator beetles to gain access and kill them for you; and by covering the compost surface with about an inch of soil to prevent the hatching flies from being able to escape. They are not an indicator of a failing bin.

#### Q. Why does my bin smell?

**A.** You need to introduce more oxygen in your compost bin so that your waste can break down aerobically. By mixing items such as toilet roll tubes, cardboard or scrunched up or shredded paper into your bin you can introduce pockets of air.

# Q. I've waited a while but I still don't have any compost at the bottom of my compost bin. Why is this?

**A.** Don't forget it takes 9-12 months to make finished compost. Keep adding a good balance of greens and browns and the creatures will keep composting everything down.

# Q. Why do I get a lot of ants in my bin?

**A.** Ants are part of the home composting process but it could mean that your bin is too dry. For a quick fix, add some cold water to your bin. Over time, you need to add more 'green' nitrogen rich items such as grass cuttings and kitchen peelings to keep moisture levels up.

#### Q. Do compost bins attract rats?

**A.** If you live near water, farmland/open countryside or derelict buildings, you are likely to have rats living in the local area.

Rats may be attracted into your garden, like other animals, to look for a dry place to shelter, for example under a shed or decking, or to find food.

A rat may seek out a compost bin in the garden if cooked foods, dairy products, meat, fish or bones have been composted, which would make the bin a source of food and shelter. On some occasions, rats may also be attracted by other types of food waste. A compost bin that is used regularly will deter them.

If you do find rats are attracted to your compost bin, you could consider using the bin just for garden waste and either use an enclosed system like a wormery to compost food waste or recycle all of your food waste using your kerbside collection.

# Food recycling collections

For everything that can't be composted at home, such as meat, dairy products, and cooked food, use your food caddy.

Food waste is collected for recycling weekly from all households in Oxfordshire. Your food waste is taken to one of two anaerobic digestion plants where it is broken down by bacteria, as it would be in our stomachs.

The plant produces a nutritious organic fertiliser and methane gas which is burned to generate electricity.



Food waste plants in Oxfordshire generate enough electricity to power more than 9,000 homes.

Recycling food also makes sense financially –
it costs less than a quarter of the price of
disposing of it with general rubbish.



## How to recycle your food waste

Each household should have a small indoor caddy, or you could just use an old container to collect food for recycling in your kitchen.

Currently, you have three main choices for lining your food bin:

put your food waste in loose

 line your food bin with newspaper

use a compostable liner

If you live in Oxford City, South Oxfordshire, Vale of White Horse or West Oxfordshire

you can also:

 reuse an old plastic bag like a bread bag, carrier bag or a cereal bag

 use a thin plastic liner (no black bags please).

Don't put packaging (even compostable packaging) or any other waste into your food bin.





# The Replenish project

The Replenish project recruits volunteers to help reduce food waste and promote home composting by passing on skills and messages to their local community.



Replenish volunteers are members of a wide network of people passionate about the environment, and knowledgeable about issues related to food waste and composting – from cutting down food waste and cooking with surplus food to making and using home-made compost in your garden.

#### Replenish volunteers can:

- hold a stall at your event, sharing tips on how to reduce food waste and how to create compost from your food scraps and garden waste
- help your organisation, school or business develop its own plan for reducing and composting food waste
- run a skills-based workshop, teaching practical skills such as cooking with surplus food, making your own wormery, using a bokashi bin, and more
- give a talk, presentation or Q&A session for your group



## **Volunteer with Replenish!**

Let's feed our planet, not our bins! Get trained on home composting, reducing food waste, sourcing and cooking with food surplus – and then share your skills with your community.



The Replenish project is funded by Oxfordshire County Council and collaborates with many other local partners who work on food and growing projects.





waste.management@oxfordshire.gov.uk

01865 792422

Oxfordshire Recycles is a partnership of the councils of Oxfordshire who work together to continuously improve waste management services within the county.

