




Recycling food waste

Choose your compost composition!



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 **In the UK we throw away 25% of the food we buy and on average spend £420 per household on food each year that is thrown away. Every day we bin 4.4M apples, 5.1M potatoes, 2.8M tomatoes and 1.6M bananas.**

Unprocessed food and packaging waste often goes to landfill sites, using land that may otherwise be used to grow crops. Recycling food and reducing the amount of waste that goes to landfill, protects the environment, reduces global greenhouse gas emissions (GHG) and reduces the need to use land suitable for crops for burying our rubbish. If household food waste could be eliminated it would reduce GHG emissions as much as taking 1 in 5 cars off the road.

There are a number of different uses for food waste. Compost is made from rotted organic material like potato peelings, grass cuttings, banana skins, cardboard and straw. This involves a range of organisms from bacteria to worms and insects that break it down until it forms a brown crumbly earthy mixture that looks like soil. Scientists are developing new techniques

Credit: Institute of Food Research




that improve and expand the uses for composting unavoidable food waste. Peat is used by commercial growers and recreational gardeners in fertilisers and soil replacement, due to its aeration and water-holding properties. But digging up peat causes environmental












damage and results in the release of considerable amounts of GHGs. The UK has used over 94 % of its available peat supplies and Government aims to make all the growing media used by home gardeners peat-free by 2020. Researchers have developed a novel peat replacement from food waste, such as mixtures of leafy vegetables, fruits and cereal by-products, using a new composting procedure. This brand new technique maintains the plant structures and prevents the compost turning into a pile of bacteria or black slime by careful choice of waste and high-tech monitoring of the composting conditions in a bioreactor.

Activity

Can you design the perfect compost composition?

 Which waste can be recycled and which waste can be put to good use?

What you will need:

-  Some household organic food and paper or cardboard waste
-  Straw or twigs
-  Leaves or grass clippings
-  Gloves (gardening gloves are suitable).
-  Scissors
-  2 litre plastic water or soft drink bottle
-  Saucer
-  Mesh or muslin
-  Rubber band
-  Seeds – marigold or bean seeds
-  Soil

What to do:

1. Sort the food waste into two groups; brown (wastepaper and card), green (organic/food/vegetable waste). Decide on what materials you will use to design your compost.
Brown waste: straw and hay, sawdust, wood chippings, egg boxes, scrunched up paper and cardboard, leaves and bedding from pet cages
Green waste: vegetable peelings, fruit scraps, tea leaves, tea bags, grass cuttings, dead plants and flowers, hedge clippings and weeds.
2. Prepare the compost ingredients by tearing or cutting them up into small pieces.
3. Build up layers in the bottle starting with straw and twigs in the bottom, followed by food waste and then a thin layer of soil on top.
4. Add three to six tablespoons of water.
5. Cover with some mesh or muslin and secure with a rubber band.
6. Once the contents look like dark soil, poke holes in the bottom of the bottle, place on a saucer, plant some seeds and water.

ALWAYS handle compost with gardening gloves and wash your hands afterwards.

TOP TIPS

1. Keep it moist – Add enough water to keep the compost damp.
2. Keep it warm – place your compost pot in a sunny spot or window sill.
3. Keep it aerated – turning the contents occasionally will ensure a steady supply of oxygen.
4. Keep it balanced – add some more chopped up cardboard or waste paper if it is too sludgy.
5. Keep it out – don't add cooked vegetables, meat or fish including bones, dairy products or any other non food waste

How long will it take to generate my compost?

It takes about a year for waste materials to fully decompose and form compost but this smaller version should be ready in 4 to 6 weeks.

FURTHER INFORMATION

For further information on composting at school visit
www.recyclenow.com/home_composting/schools/