

Microwave Cooking Top Tips



What is a microwave?

Microwave ovens turn electric energy into electromagnetic waves. These waves stimulate molecules in your food to heat it up.

Microwaves are a form of electromagnetic radiation, like the radiation from mobile phones. However, microwave ovens are designed to prevent radiation from escaping so present no harm. Microwaving may minimise the formation of harmful compounds that can form when cooking at high heat.

What are the benefits of using a microwave?

Microwaves can speed up cooking time significantly over most other methods.

They are less energy intensive than ovens and hobs, so save on fuel costs.

They also allow you to defrost food quickly and safely.

If you have a digital microwave, then this allows for precise cooking programmes and time settings as well as variable heat settings on some machines.

Cooking in a microwave avoids burning or charring food which can often occur with oven cooking and frying.

Nutritional benefits of using a microwave?

Some nutrients break down when they're exposed to heat, whether it is from a microwave or a regular oven. Vitamin C is perhaps the clearest example. But because microwave cooking times are shorter, cooking with a microwave does a better job of preserving vitamin C and other nutrients that break down when heated.

Food tends to retain more nutrients when cooked in the microwave because they are not destroyed by prolonged cooking.

All cooking methods reduce nutrient value in some form e.g., nutrients leak out of veg much faster during boiling, but microwaving generally preserves nutrients.

You may notice that when you boil vegetables such as broccoli, the water turns green. This is the vitamin and mineral content seeping out of the vegetables in the boiling process.

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What can I use a microwave for?

As well as cooking whole meals and reheating leftovers, microwaves have a multitude of handy uses which could save you time and effort in the kitchen:

- Softening onions
- Melting chocolate
- Melting butter
- Making rice pudding
- Getting the most from citrus fruits – pop a lemon in the microwave for 10-20 seconds before juicing it and much more liquid will come out
- Heating milk
- Defrosting food
- Individual meals in mugs for quickness
- Reheating tea/coffee/hot chocolate

Top tips for cooking in a microwave

1. Avoid metal

Never ever put anything metal in the microwave. This includes foil, cutlery, or any crockery with a metal trim. Metal reflects the microwaves and catches fire – it's a common cause of kitchen fires, and kitchen fires quickly turn into house fires.

2. Separate foods by cooking time

Larger, more dense foods like starchy vegetables and thicker meat cuts will need a longer cooking time than smaller foodstuffs. To avoid overcooking some foods and undercooking others, it makes sense to separate these out and starting with the larger items and adding in the smaller foods as you go so that everything is warmed up sufficiently for when you need it.

3. Cut up larger foods to speed up cooking time

Larger chunks of meat, or chunky veg such a potato will cook much faster if you chop them into smaller portions and strips before microwaving.

4. Arrange food properly on a microwave-safe surface

Find a microwave-safe dish or plate for cooking and spread the food out as evenly as possible in a single layer. As food around the outer edges of the dish will cook faster than the centre, try to arrange the thickest part of the food facing away from the centre of the dish if possible. Microwave-safe dishes should be labelled with an

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appropriate icon – however, glass and ceramic dishes are normally safe to microwave even if not labelled.

5. Cover with cling film

When cooking dishes with a high liquid content, such as pasta, rice or soups, cover with cling film and pierce to contain the liquid and allow the heat to escape – this prevents messy explosions. I stand anything like this in a bowl to catch any escaping liquid and keep the bottom of my microwave clean.

6. Don't over fill your container

Liquid in the food can bubble up or splatter in the microwave, so either loosely cover what you're heating with a microwave-safe plate or make sure it's in a bowl big enough to allow for this. Some cooks also suggest putting the bowl or mug you're cooking in on a second plate to catch anything that overflows.

7. Pierce for a perfect poach

For a perfect microwave-poached egg, crack it into a fat-bottomed mug, then pierce the yolk with a knife or fork – this is important. The yolk cooks faster than the white, so leaving the membrane intact will cause your yolk to make a bid for freedom under the pressure. When pierced, cook it on medium for three 30-second bursts. If you're cooking it with other food, you can use high, as the more things there are in a microwave, the less microwaves each one absorbs and the more gently everything cooks.

8. Clean up

In case of spills or dried-on food, simply place a slice of lemon in a bowl of water, and ping in the microwave for 30 seconds. Remove the lemon and rub it over any stains or baked-on residue to loosen it.

9. Stir food regularly for even heat distribution

Microwave cooking isn't even because it works by agitating the water molecules. These might not be evenly distributed within the food, so you need to cook food in shorter intervals and stir at least halfway through to make sure the heat can be spread around.

10. Don't tuck in straight away

Microwaved food will continue to cook for a minute or so after the machine is turned off. So try to resist the temptation to eat straight away and let the food stand for a minute for the molecules to finish bouncing round.

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11. Try to avoid using plastic containers unless labelled microwave safe

Many plastics contain hormone-disrupting compounds that can cause harm.

An example is bisphenol-A (BPA), which has been linked to conditions like cancer, thyroid disorders, and obesity.

When heated, these containers may leach compounds into your food.

For this reason, **do not** microwave your food in a plastic container unless it is labelled microwave safe.

Summary:

Microwaves are a safe, effective, and highly convenient cooking method.

There is no evidence that they cause harm – and some evidence that they are even better than other cooking methods at preserving nutrients and preventing the formation of harmful compounds.

Avoid:

- Overheating or underheating your food
- Standing too close to the microwave
- Heating food in plastic containers unless it's labelled microwave safe

There are so many recipes you can make in a microwave. Alongside this information sheet are three simple, tasty & nutritious recipes:

- Noodles in a mug
- Omelette in a mug
- Chocolate brownie in a mug