

## **Getting the most out of your microwave / Heinz.**

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Microwave Association.

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**HEINZ**



GETTING THE MOST OUT OF YOUR  
*M I C R O W A V E*



## MICROWAVE COOKERS - A WHOLE NEW WAY TO COOK

*Imagine a cooker that saves both time and trouble, which can cook a hot meal in minutes, even straight from the freezer, saves energy, is clean and flexible to use and which cuts down on cooking smells and washing up.*

*Microwave cookers are all that and more. Because they are simple and flexible to use they are suitable for everyone.*

*Many of us already use microwaves to heat up or thaw food - some of us use them for more adventurous cooking. To make life easier many companies such as Heinz now put microwave alongside conventional cooking instructions on all their labelling together with nutritional information.*

*As our lifestyles get ever more hectic, there are also many more totally microwaveable products on sale to meet our demands on time. Try one of the delicious frozen ready meals from the Weight Watchers from Heinz range with Pasta, Vegetable and Meat varieties to choose from - there's one to suit everybody's taste. Or why not try a Heinz Lunch Bowl, the new snack meal alternative, conveniently packaged for microwave use.*

*This leaflet explains how microwave cookers work and how we can get the best out of them whether we just want to heat up a frozen ready or snack meal or cook for a complete dinner party.*



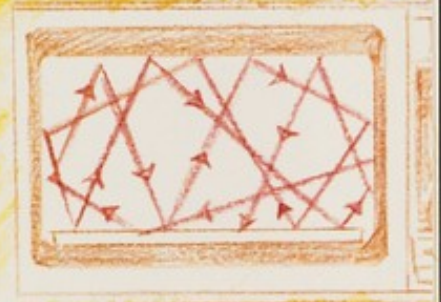


## HOW DO MICROWAVE COOKERS WORK?

To use a microwave cooker confidently it helps to know how it works. Microwaves themselves are invisible, very short waves which are directed into the cooking area. Here they bounce off the cavity walls, floor and roof creating an energy pattern.

The microwaves excite water molecules present in food or liquid, making them vibrate back and forth over two million times per second. This creates heat which cooks the food. Microwave energy penetrates deep (1½ - 2"/4-5cm) into the food and, then, as with conventional ovens, cooking continues through layers by conduction.

Remember that microwave cookers are very economical since they use hardly any energy. However, if you want to cook a whole family meal or batch for the freezer, it might be more economical to use a conventional oven.



## USING YOUR MICROWAVE SAFELY

As with all electrical products, microwave cookers must meet stringent safety regulations and provided they are used correctly they are as safe as any other appliance.

All reputable microwave cooker manufacturers ensure that their appliances are safe, well insulated and bear the British Electrotechnical Approvals Board (BEAB) label guaranteeing their accordance with British Standards.

It is important to follow the manufacturer's instructions to ensure that the best result is achieved. As a general rule of thumb, pre-prepared foods must not be served partially heated because of the possible presence of food poisoning bacteria. Canned and sterilised foods are an exception since they may be eaten cold from the container in complete safety. With other food products, if necessary, continue the heating time until all of the food is piping hot and heated throughout. This is particularly important with meat, poultry and shellfish.



## WHAT CAN I COOK MY FOOD IN?

*Bearing in mind that the only heat comes from the food itself, any container not likely to crack or break when hot is probably suitable. Remember this traffic light code.*

**RED:** *Never use exposed metal containers as microwaves may bounce off the metal creating 'arcing' or flashes of blue light which can damage the cooking cavity walls and blacken metal-decorated china or glass. Some manufacturers will advise that small pieces of foil can be used for masking small areas of food. Check your microwave instructions to see if this use is stipulated and don't let it touch the cooking cavity walls.*

**AMBER:** *Think before using some foods high in sugar or fat which get very hot and may cause containers made from substances such as table glass to crack or break. Wood or basketry, which contain natural oils can dry out and crack if placed in the microwave cooker for long periods of time, whilst pottery can retain water after washing. The microwave energy is attracted to this water and may extend the cooking time. Be sure that any plastic container can withstand high food temperatures - hot food may cause it to melt.*

**GREEN:** *Most other materials are suitable for use, such as china, oven glass, unwaxed cardboard (a waxed finish could melt from the heat of the food), greaseproof paper, parchment and paper towelling. Also plastics developed to withstand high temperatures such as roast bags, boil-in-the-bags and specifically designed microwave containers. Non-additive cling film designed for microwaves can be used but should be pricked to avoid a build up of steam underneath the film.*

## KEEPING IT CLEAN

*Always disconnect the microwave cooker before cleaning. Because there is no heat inside the cooking cavity, splashes of food or liquid do not get baked on to the cooking cavity sides and should easily wipe off with a clean, damp or dry cloth. More thorough cleaning should be in accordance with the manufacturer's instructions. Clean regularly to maintain hygiene standards. Abrasive cleaning agents should not be used.*





## TECHNICAL KNOW - HOW

### WHAT DOES WATTAGE OUTPUT MEAN?

*A microwave cooker may be 750, 700, 650, 600 or 500 watts. The higher the wattage the more power, so the quicker the food will cook. It is important to know the wattage output of your cooker so that you can use recipes from other recipe books and pre-packaged foods. Check with the manufacturer or stockist if you are unsure of your cooker's wattage.*

*Check the wattage against recipes or food manufacturer's instructions. If your wattage output is lower, then longer thawing or cooking times will probably be required and vice versa. A 650 or 700 watt is the norm. So for a 600 watt cooker allow an extra 10-15 seconds for every minute stated and 15-20 seconds for a 500 watt model.*

### WHAT ARE HOT AND COLD SPOTS?

*Microwave energy bounces off the cooking cavity walls to give an energy pattern. Sometimes the microwaves can miss small areas or be concentrated more strongly in others and so parts of the food may get more or less energy - thus the term "hot and cold spots". Turning, stirring or rearranging the food will help ensure even cooking.*

### WHAT CAN I COOK IN MY MICROWAVE?

*Many foods cook very well in a microwave cooker including soups, vegetables, sauces, poultry, many meats, pasta, rice, fish, hot steamed puddings, cold desserts, fruits and unshelled eggs. Sometimes the cooking method will be different to conventional cooking but the end results are just as good.*

*Some foods should not be cooked in a microwave. Do not try deep fat or shallow fat frying because there is no control over the cooking. Heating alcohol may result in overheating and possible combustion while eggs in their shells could burst.*

### DOES THE SHAPE OF THE CONTAINER MATTER?

*It is worth considering specially designed microwave containers which take shape, material and food arrangement into account. In general, avoid using ones with sharp corners as the food in the corners will receive more energy and may dry out as a result. Try spreading diced or small vegetables as they will cook more quickly if spread out in a large bowl or dish and when thawing choose a container which keeps the thawed liquid close to the frozen block.*

### WHEN SHOULD I COVER FOOD?

*It is just a case of remembering the basic principles. Cover to keep in the moisture or to reduce splashing or spitting and do not cover if the food is to be fairly dry.*







## COOKING CHECKLIST

*Remember, the microwave cooker is not intended to take over all the cooking operations in the kitchen and should be considered as an addition to the conventional cooker and other appliances.*

*Less microwave energy concentrates in the centre of foods so those with thin or delicate ends such as chops or broccoli should be placed with these areas towards the centre of the cooking container. Arrange small foods such as cakes or scones in a circle with a space between each and the central area empty.*

*Food that is over-cooked becomes dehydrated and unpalatable so standing time is an important part of the cooking operation. Standing time enables the food to finish the cooking process by conducting heat through to the centre. When cooking foods such as meat and poultry it is essential to follow the standing time instructions as eating them under-cooked may be a health hazard.*

*Most small items of food can be thawed and cooked simultaneously, but for larger items such as joints and poultry use the defrost control to slow down the process and ensure even thawing. Cook immediately once thawed. To speed up thawing and separation of foods such as fish fillets, stews and soup, break them up during the process with a fork or spoon. Check your microwave manufacturer's instructions for general thawing times.*





## COOKING QUESTIONS ANSWERED

## DO I NEED WATER TO COOK FRUIT AND VEGETABLES?

*Fruit or vegetables should be placed in a covered container with a small quantity of water. If the vegetables have a tendency to shrivel it is likely they are being over-cooked. Frozen foods often contain enough water from the ice to make additional water unnecessary.*

## CAN I GIVE A BROWNED APPEARANCE TO MY FOOD?

*Because microwave cooking generates heat within the food there is no opportunity for the sugar or fats on the outside of the food to be browned. A joint or whole bird may start to brown as cooking times are longer and the fat has the opportunity to start browning.*

*Special microwave cooker browning dishes or skillets are available where the base is heated, the food is placed on the hot base to brown it and then the dish and food are returned to the microwave cooker to continue the cooking process. Alternatively, try powders or sauces which can also be sprinkled or painted over the surface of the food.*

*You might consider purchasing a combination oven which can be used as a microwave cooker or as a conventional electric oven. Both energies combined will give the benefit of speedy microwave cooking at the same time as conventional heating which will give the desired browning effect.*

## HOW CAN I TELL WHEN POULTRY OR JOINTS OF MEAT ARE COOKED?

*The cooker manufacturer will give recommendations as to the cooking time per kilo/pound for joints and whole birds. It is best however to buy a microwave thermometer which is inserted into the thickest part of the joint or bird and this will register the temperature. The minimum temperature required throughout heated food to destroy harmful bacteria is 70° centigrade. Never use an ordinary thermometer as this may contain metal.*

## WHY DO SOME FOODS BURST?

*As food heats up, moisture is given off in the form of steam. If this steam is trapped under the skin or outer membrane of certain foods, pressure may build up causing it to burst. This is avoided by pricking any such foods, eg, the yoke and white of eggs, apple, tomato and potato skins and liver.*

## WHERE CAN I FIND OUT MORE INFORMATION?

*For further information on cooking with a microwave why not contact one of the following:*

*The Microwave Association  
Field House  
8 High Street  
Hurstpierpoint  
West Sussex BN69 9TZ  
Tel: 0273 834716*

*Heinz Microwave Information  
Service  
Hayes Park, Hayes  
Middlesex  
UB4 8AL  
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