

Choosing cookers, ovens, hobs and microwaves

# Introduction

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Choosing the right cooking appliance for your needs can be fraught with difficulty for anyone and especially so if you are blind or partially sighted.

The range and scope of appliances on sale is diverse and often confusing.

Among many other things, you will need to decide: what type of fuel to use (gas or electric); whether you want a separate hob and oven or a free standing cooker; and if a combined microwave and oven will be the right choice for you.

Taking time to think about your current and future needs in the kitchen will not be time wasted. It will help you translate your needs and home situation into features to look out for when buying a cooker, microwave, hob or oven.

In this guide we help you identify those features and give examples of them. We also give advice on how to approach retailers to ensure you stand the best chance of making an informed purchasing choice.

It is important to note that this guide will take you step by step through the decisions you need to make to find the best cooking appliance for your needs. However it's often the case that information gained later on will change your mind about earlier decisions. This guide is written in such a way to allow you to jump in and out of it, at any section, as you feel necessary.

# **OUR RESEARCH**

The feature identification, design examples and store intelligence are based on Rica's research.

#### The research involved:

- Two focus groups with design sessions involving 18 participants with sight loss. Our design sessions ended by asking the question "If you could design a desert island cooker and microwave, what would they look like?"
- Expert consultation with occupational therapists, housing and facilities managers and a kitchen design consultant for disabled people.
- We visited a total of nine stores with three people with sight loss, to see if we could find products with the features we were looking for.

Our participants were aged between 22 and 89. Five had no useful sight and thirteen were partially sighted.

NOTE: In this Guide, the terms 'blind and partially sighted', 'sight loss' and 'visual impairment' are used interchangeably.

## WHAT WE FOUND

When looking for the features which we identified as important to people with visual impairment, we couldn't find them all in one product – the perfect cooker, oven, hob or microwave does not exist.

The main problem we found during our store visits was the industry move towards touch screen control interfaces. To use these you have to be able to see the information they are displaying. They often use red digits on a smooth black surface.

## **Focus groups**

Our two groups of participants wanted a broad choice of product specification and not to have to pay high prices for accessible design features or modifications. They also wanted to find high quality products with simple and accessible controls.

# **Expert consultation**

The experts were concerned about the safety of the appliance. Most chose induction hobs where the heat is contained within the cooking pan and not on the surface. However they also note many of the hobs have touch screen controls which are difficult for people with visual impairment.

#### **Store visits**

The importance of being able to touch and feel the appliance while talking to a well informed salesperson is crucial. We often found the sales staff didn't understand the accessibility needs of someone with sight loss.

# Types of cooking appliances

## **COOKERS**

There are two types of cooker.

## **Free standing**

These have the oven and hob together in the one unit and can be: all electric, all gas or a combination of both (typically gas hob with electric oven). They come in two main sizes: slim and standard (500mm and 600mm). You can also buy a stand-alone range cooker which can have a width of 1200mm or more.

## Separate hob and oven

This type of configuration is fast becoming the standard way of arranging a kitchen. It allows the oven to be sited at your chosen height in a cabinet.

## **OVENS**

There are two types of oven which can be either gas or electric.

# Single ovens

Single ovens are usually 600mm wide and can be placed at different heights.

#### **Double Ovens**

Double ovens have two cooking spaces and are taller than a single oven.

Single ovens can be fitted under the work top in housing ('built under'). Both single and double ovens can be fitted higher into a housing unit at eyelevel ('built in').

## **HOBS**

Hobs come in a standard width of 600mm but are also available from 300mm (domino hobs) through to 900mm.

#### Gas

A gas hob is often thought of as desirable because it can quickly change the level of applied heat. Most come with the pan supports fitted as a cast iron tray (or part tray) that sits on top of a recess. The other option (gas on glass) is to have the pan supports as separate items which sit proud on top of a glass ceramic top.

## **Electric**

These come as either solid-plate electric hobs or ceramic hobs. The solid-plate hobs are the more traditional type with a raised circular metal heating plate. The ceramic hob has a coiled element underneath the glass top; some of the older models use a halogen bulb as the heat source.

#### Induction

This technology uses a magnetic field to heat pots and pans placed within the field. The benefits of the technology are that it only heats the pot or pan and not the top glass surface of the hob. It is also very responsive and more energy efficient than gas. A possible downside to induction hobs is they require pots and pans made from stainless steel or cast iron to be able to work. As a rule of thumb if a magnet sticks to the pan then it will work.



Single and double ovens can be fitted higher into a housing unit and placed at work top level ("built in")



Having the oven and hob sited separately is fast becoming the standard way of arranging kitchen appliances

## **MICROWAVE OVENS**

There are two types of microwave oven.

#### **Standard**

A standard microwave heats food through the use of radiation.

## **Combination**

Combination have the standard microwave function as well as a fan assisted oven. Sometimes they also contain a grill.

Microwave cooking is widely recognised as being convenient and quick. Microwaves also have many other benefits: they heat the food and not the container; they are energy efficient; if done correctly vitamins and minerals are preserved.

Downsides of microwaves include: a limited amount can be done at one time; pastries and pies don't form crusts; enclosed foods such as eggs and sausages can explode.

# What would make cooking easier for you?

With this guide we aim to help you identify the features found on cooking appliances which are important to your needs and situation at home. Armed with the knowledge of these features you should be in a good position to ask

retailers which products have which features. This will help you make an informed choice of what cooking appliance to buy. The compromises that may be involved are shown in the following illustration.

# OTHER THINGS TO CONSIDER

What is my budget?
What space do I have in my kitchen?

Who else uses the kitchen?

# **YOUR NEEDS**

How much can I see?

Can I easily turn knobs or press buttons?

Do I remember things easily?

Will my future needs be different?

# **COOKING APPLIANCES**

All available equipment

## **OUTCOME**

Cooking
equipment that
matches your
needs AND
your home
considerations

# OTHER THINGS TO CONSIDER

Before identifying the appliance features important to you, a good place to start is to ask yourself some questions. You will need to think about the kitchen space you have and how it is currently used. You will also need to consider your future needs. To help guide you through the following questions, look at the pros and cons table on the next page.

# **Q1 Budget**

O How much can you afford to spend?

## **Q2 Environment**

- What space do you have available?
- Do other people cook in the kitchen, if so what are their needs?

# Q3 Design

- Do you want to buy a cooker with a combined hob and oven, or are you going to buy a separate hob and oven?
- Do you want to buy a microwave, either as an addition to your existing appliances or in combination with a new hob or oven?

#### **Q4 Power**

- Do you have a strong preference for gas, electric or electric (induction)?
- What power supplies are available at your home?

# **Q5 Experience**

• What is your life experience of cooking appliances?



The appliances in this image are separate, with the oven placed underneath the hob ("built under")

Don't worry if you haven't got answers to all of the above questions right now. You might feel you need more information before making a decision. Read on, and consider visiting a store to find out more.

# What would make cooking easier for you?

Do you want?	Pros	Cons
Free standing cooker Hob and oven combined	Less installation cost	Oven will be placed under the hob. You will have to bend down to work with oven
Separate appliances Hob and oven separate	Can choose what height to have oven Can be placed at worktop level Easy to pick and choose appliance type and configuration Easy to upgrade one element at a later point	May use more space  Need housing unit for oven  If replacing a free standing cooker, you will require further work to install these two separate appliances  Need two supply points
Oven Gas	Heats up and cools down quicker than electric ovens Lower running cost than electric oven	Naked flames can be dangerous – many kitchen designers will advise against people with sight loss using gas  Needs to be installed by qualified gas engineer  Uneven oven temperature
Oven Electric	Easy to control heat distribution in oven by use of fans  Many products to choose from	Costs more to run than gas  Some ovens can take longer to heat up and change temperature

Do you want?	Pros	Cons
Hob Gas	Easy to control heat Good overall heat distribution Instantly heats up and down	Needs to be installed by qualified gas engineer Harder to clean metal pan rests
Hob Gas on glass	Easy to clean spillages Easy to control heat Good overall heat distribution	Pans position can be very unstable – risk of accidental spillage Needs to be installed by qualified gas engineer More expensive than conventional gas hob
Hob Ceramic electric	Can look good  Easy to clean  Can be almost flush with the worktop  Just needs a suitable power supply for installation	Most now have touch controls  Can be smashed by falling objects!  Can be scored or scratched by sliding pans over the glass  Hot sugar or syrup type fluids spilt on them can burn into the glass  Can be expensive to repair  Most efficient when correct pan sizes are used for each zone
Hob Induction	Safer to touch when on, although the induction surface can heat up over time Instantly heats up and down Can detect when pan is on or off heating zone and switch on or off accordingly	Requires pots and pans that a magnet will stick to The cooling fan can be noisy
Microwave Standard and combination	Less cooking time than conventional methods Easy to clean Can be placed almost flush with worktop	Crusts on food are not formed  Locating rotary plate onto turntable can be difficult  Some self-contained foods (eggs, sausages etc.) as well as some plastics might explode, burn or melt

# Design features what to look for

# ✓ High contrast elements

Look for elements which have a strong visual definition from the background.



This electric plate hob has high contrast heating zones



Controls are easy to identify on the front of this free standing cooker

# ✓ Lip around top surface of hob

Think about spillages.



This electric plate hob has a well around the plates which provides an easy place to capture any spillages



Another example of a sunken well which will capture spillages, this time on a gas hob

# ✓ Tactile feedback of pan location on hob

Feel the position of the active cooking area through the placement of pots and pans.



This electric hob plate has a stable and well defined area on to which to place pots and pans



This gas hob has a poor pan location and support area

# ✓ Positive switch-off features

Safety features ensuring the turn off state of the cooker is activated.



On/off temperature dial is recessed in the off position. The dial is pressed to get it to come out, after which you can turn it to the required temperature



A failure safety device is fitted on most gas hobs. If the flame goes out without you noticing, the flame failure safety device will automatically turn off the supply

This one also shuts off the gas supply when you pull down the glass cover

# Design features what to look for

# ✓ Safety – minimising reach-over hot surfaces

Consider how much you need to reach over or into a hot cooking area.



Controls are on the front of this electric free standing cooker. This keeps the hands away from the hot ceramic plates



Pull out shelves will minimise the need to reach into the hot oven
These can be pulled out full distance without tipping out of the oven

# ✓ Avoiding bumping into open oven doors

Look for features which are tidy and won't catch your body or clothes.



This oven door slides underneath the oven when it is pulled down so it won't get in your way



The handle on this oven sticks out and could catch on your clothes. The grill door also sticks out when it is open

# ✓ Tactile feedback of controls

Controls that click when you turn them will help locate the dial to a setting. These clicks can be counted and memorised.



It is easy to tell where these controls are pointing on the front of this cooker. They also click into positon for high and low settings



There are well defined clickable heating settings (1 to 6) to this electric hob

# ✓ Tactile indicators of controls

Bumps and marks about the dial to help indicate the position.



These dial handles offer a clear indication of their position. The functions can be learnt by counting the steps from the top of the dial



Another example of dials with a clear indication of their position

# Design features what to look for

# ✓ Push-in / pop-out buttons

Look for elements which give tactile indicators of control state or position.



Buttons that stay pushed in or pop out to indicate on or off



Another example of buttons that pop out

# ✓ Audio feedback

Look for audio outputs to help indicate cooking appliance settings



Too many 'beeps' and 'tings' can get confusing



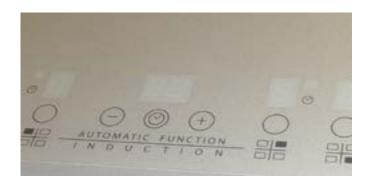
Talking microwave

TIP use a talking wrist watch to time your cooking

# Design features what to avoid

# **X** Smooth glass surfaces

Smooth glass surfaces with no tactile, positioning or control feedback.



This induction hob is completely smooth with an integrated touch screen to control the heating elements

It's difficult to know if the pan is placed on the right area for cooking

It uses numbers displayed on a screen to indicate the hob settings



These microwave controls are entirely accessed through the touch screen interface

They use numbers displayed on a screen to indicate the microwave settings

# **X** Rotating dials

Dials that rotate around and around, or toggle -/+, where the value of the setting is shown on an LCD screen.



**Controls** – Dials that rotate around and around

They use numbers displayed on a screen to indicate the setting on the dial



**Controls** – Dials that toggle left and right to decrease or increase setting

They use numbers displayed on a screen to indicate the setting on the dial

# Design features checklist

Use this table to prioritise the features important to you.

Feature description	They help you	They can be found on	Insert 1, 2 or 3*
High contrast	locate pans onto cooking area	<b>Hobs</b> – cooking plates & burners	
High contrast	identify the settings	<b>Controls</b> – knobs & buttons	
Spillage capture	contain spillages	Hobs – lip around top surface	
Tactile feedback	locate pans onto cooking area	Hobs – lumps & bumps on surface	
Tactile feedback	locate the desired setting	<b>Controls</b> – dials that click for particular settings	
Tactile feedback	identify the current setting	<b>Controls</b> – bumps in-built around the dial	
Tactile feedback	distinguish between knobs to identify function	Controls – different size or feel of knobs for grill, oven & hob	
Positive switch-off	check if gas is turned off stop accidentally touching burners which might still be hot	Hobs gas – pull-down glass splash back Hobs induction – heating only occurs when pans are placed on the hob	
Positive switch-off	quickly check if power is on or off	Control dials & buttons  – power on/off state is indicated by being in or out	

# \*KEY

- 1 I need this
- 2 I want this
- 3 Would also be helpful

Feature description	They help you	They can be found on	Insert 1, 2 or 3*
Minimising reach-over hot surfaces	reduce the risk of accidental burning when reaching over hot plates or burners	<b>Hobs</b> – have control knobs on the front & not at the side	
Minimising reach-over hot surfaces	reduce the risk of accidental burns when reaching into oven to get at pans etc.	Ovens – pull-out shelves which can be fixed at their extended positon	
Minimising things to bump into	avoid accidentally bumping into door when open	Ovens – doors that open down and slide under oven	
Audio Feedback	control and identify the settings	Controls – beeps, tings, buzzers or speech	



This kitchen has a microwave in combination with an oven ("built in"), and a separate hob



Induction hob with single oven placed underneath ("built under")

# Where & how to buy cooking appliances

Once you have thought more about your home environment, budget and preferences, and have identified the important features for your needs, you should feel informed enough to go and approach retailers.

There is a real benefit to visiting a store, talking to a sales representative, and trying out cooking appliances. It is especially useful to discover for yourself the tactile landscape of cooking appliances and understand the control layout.

# **Tips for visiting stores**

- Phone before you visit and ask for someone to help you with choosing the right cooking appliance for your needs – you may need to arrange a time
- Tell the store you are blind or partially sighted
- Go to a store that has plenty of appliances on display
- Rule of thumb the larger the store the more likely it is to have examples of products on display

## **STORE TYPES**

#### **Warehouse stores**

(e.g. B&Q, Wickes, Homebase)
These can have a wide variety of products on offer; however they often only have a limited number on display. It is worth phoning the store to ask how many of their products are on display.

## **Chains** (e.g. Currys)

White-goods chain stores, especially the larger ones, can be excellent for trying out the feel of different products.

## **Independents**

Small high street independent retailers will often have limited space and consequently a limited range of products on display. Larger independents such as John Lewis have more products on display.

# RESEARCHING ON THE INTERNET

The internet is a great source of information with most stores and manufacturers having their own website.

#### **Retail websites**

Use them to explore options and start to identify some appliance types. Price information is often included.

#### Manufacturers' websites

These are likely to have a more detailed technical description of the appliance you have identified.

Remember, there is no substitute for going to a store to find out first-hand how the appliance feels.

# **CASE STUDY**

John (pseudonym) is in his late 20s and is blind. He lives in North London but is in the process of relocating to the North West of England where he is moving into a new unfurnished flat. He needs to choose kitchen appliances for his new property. His three store visits with his guide dog and our researcher were of keen interest to him. He is very methodical and likes to consider all his options.

# First store visit by John

**DIY and home improvement store**John booked an appointment with a kitchen designer

- His post code and telephone number were required before they could proceed
- Kitchen design assistant was very helpful
- But went through all the options from the catalogue
- Very few products to touch and feel
- None of the products was powered
   no control electronic sounds could be heard

(John touches induction hob)

"It's just glass, useless!"

– John

# Second store visit by John

# Hyper-store of a large electrical chain

John did not book an appointment

- He was approached by a very patient and considerate sales assistant
- All the products were lined up on display
- John touched and felt each of the options with the sales assistant while asking questions
- None of the products was plugged in

   no control electronic sounds could
   be heard
- No saucepans available to try out on hobs

"These are the two models available (microwaves), everything else is either touch or knobs that go round and round"

- Sales assistant

(At the time of printing this guide)

"I know what I want now, and have already bought the microwave"

- John

# Lighting, devices & kitchen accessories

# Lighting

If you are partially sighted a well-lit kitchen is crucial. Glare can be a serious problem so keep glossy reflective finishes to a minimum. Use lighting that can be centred over your work surfaces and kitchen appliances.

See RNIB & Thomas Pocklington guide to lighting in the home for further advice. www.housingcare.org/ downloads/kbase/3037.pdf

## **Extraction hoods**

Cooking on hobs can produce significant smells and fumes. Placing an extraction hood above the cooking area is a good idea. Look for push button or slider controls that are easy to reach.

#### **Tactile markers**

(Bumpons, Tacti-Mark, Braille)
These are very useful for marking
specific settings on control dials. Some
companies offer a replacement front
control plate for some of their cooking
appliances, which have aluminium
braille bumps embossed onto them.
They can be expensive.

#### **Health Grill**

These electric devices are very popular stand alone ridged cooking plates that clasp the food from below and above, allowing any fat to be caught in a drip tray.

## **Over-long oven gloves**

These reach up to or above the elbow.

#### Silicon heat shield for oven shelves

These are an inexpensive way of protecting yourself from accidentally touching hot shelf ends in ovens. They simply slip over the ends of the shelves.

#### **PenFriend**

PenFriend is a really helpful tool that enables you to label food tins and packages using an audio label. This is played back to you using the pen in read mode.

## **Liquid level indicator**

This device sits over the side of cups, mugs or glasses and beeps at an increasing rate to indicate how full a container is.

# **Measuring spoons**

A set of measuring spoons offers a quick and simple way of ensuring the right measurements are used while cooking.

# **Temperature probe**(Talking food thermometer, iDevice)

There is a range of talking temperature probes on the market which are essential in order to ensure meat is cooked all the way through. One probe uses Bluetooth to connect to an iPhone app that speaks the temperature.

# Design advice & installation

# KITCHEN DESIGN

There are studies that analyse the activities within a kitchen to help kitchen designers choose the best layout of cookers, fridges, worktops and so on. Help in choosing the right arrangement of workspace and cooking appliances is offered by many retailers. While this is a useful service which can have a significant positive impact in the kitchen, it can lead to increased cost.

You can get free advice from an occupational therapist (OT) at a Disabled Living Centre or a home-improvement agency. Some OTs are based in hospitals, or you can ask for a referral from your GP or social services. If you can pay, a private OT can also assess you.

The College of Occupational Therapists has a list of private OTs.

You may be eligible for a **Disabled Facilities Grant** towards the cost of making changes to your kitchen.
Contact your local Council for further information.

Home Improvement Agencies may also provide useful advice. They are local organisations that help older or disabled home owners to organise adaptations, building work and home repairs. To find your local agency Tel 0845 864 5210 or www.foundations.uk.com.



Health professional giving advice at home

# **INSTALLATION**

If you are replacing like for like then you may only need a qualified handyperson. If you are thinking of replacing a free standing cooker with something more accessible then you may well need expert opinion. Redesigning your kitchen can include a lot of refitting which will increase cost.

Always have cookers, ovens and hobs installed by fully qualified electrical or gas engineers. This is essential to stay safe, and if you don't, you also run the risk of invalidating your household insurance. For gas appliances they must be Gas Safe registered.

# **Useful resources**

# **ADVICE & INFORMATION**



## Rica

Rica provides independent research and information on a wide range of products and services for older and disabled people.

Tel: 020 7427 2460

Email: mail@rica.org.uk

www.rica.org.uk



## **RNIB**

RNIB is a national organisation providing information and services for people with sight loss. It also has a catalogue of devices and gadgets for use in the home.

Tel: 0303 123 9999

Email: helpine@rnib.org.uk

www.rnib.org.uk



# **Thomas Pocklington Trust**

Thomas Pocklington Trust is a charity committed to increasing awareness and understanding of the needs of people with sight loss. Research is central to Pocklington's work. We fund, and in other ways support, social and health research aimed at identifying practical ways to improve the lives of people with sight loss, and seek to influence the policies and services that affect them.

Tel: 020 8090 9268

**Email:** 

research@pocklington-trust.org.uk www.pocklington-trust.org.uk

# **RETAILERS**

#### **B & Q**

Tel: 0333 014 3098 www.diy.com

## **Currys**

Tel: 0344 561 0000 www.currys.co.uk

#### **Homebase**

Tel: 0345 077 8888 www.homebase.co.uk

#### Ikea

Tel: 020 3645 0000 www.ikea.com

#### **John Lewis**

Tel: 0345 604 9049 www.johnlewis.com

## Magnet

Tel: 01325 744 093 www.magnet.co.uk

#### **Wickes**

Tel: 03448 922 721 www.wickes.co.uk

# Association of Independent Retailers

Tel: 01623 818808

www.kbsa.org.uk/consumer-home

# **About this guide**

The information contained in this guide is correct at the time of going to print. It will be reviewed every two years.

This leaflet is also available in audio or braille formats. To order a copy, please call 020 8090 9268 or email research@pocklington-trust.org.uk

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