

# Cool ways to keep food

We give you the lowdown on how to buy and use a fridge-freezer, including which new features to look out for and the safest way to store your food

You can buy a fridge-freezer that will quickly chill your wine, vacuum seal your food to make it last longer and alerts you when the fridge door is left open. These days, fridge-freezers can do much more than simply chill and freeze your food, but which features are worth having?

In this report, we look at how to buy and get the most out of an appliance, and also consider some of the issues that members regularly ask us

about. For example, what problems might there be with keeping a fridge-freezer in a garage or another unheated room?

Our tests give a detailed picture of how well fridge-freezers perform. We've also started testing more often to ensure we can report on the most up-to-date models, and that as many fridge-freezers as possible will be available when you go shopping. Go to [www.which.co.uk/](http://www.which.co.uk/)

for regularly updated results.

No built-in models quite made the grade as Best Buys this month. However, see 'Which should you choose', p64, for the two best models in this test.

In next month's Which?, we will consider some of the issues surrounding built-in kitchen appliances in more detail, together with some recommended Best Buys.

## What you should look for



### Fridge

#### ■ Can holder

If you drink beer or cola in cans, you'll like these space-savers. Several models on test have them, including the Bosch KGN34X01GB (9).

#### ■ Humidity box

The Hoover (10) and John Lewis (17) models have manual sliders to control humidity. Low humidity helps keep cooked meat, dairy products and fish fresh for longer. High humidity prevents fruit and veg drying out.

#### ■ Meat chiller

Prolongs the freshness of meat.



#### ■ Split shelves

One whole shelf can be split to make two half-depth shelves. This is handy when you want to store something tall without losing a whole shelf. Small, delicate or rarely-used foodstuffs can be placed on these half shelves at the back of the fridge.



#### ■ Water cooler

These are much more common in American-style fridges. The Electrolux (4) and Beko (13) are the only models on test that have them.

The Electrolux has a well-designed door with movable compartments that can be adjusted to suit your needs.

In the Beko, however, there are fixed shelves that severely limit how many larger items (such as four-pint milk bottles) you can store, as the water cooler takes up the rest of the space.

#### ■ Wine racks

Many models have these in plastic or metal.



### Freezer

#### ■ Door pouches

These pouches are the perfect size for ice packs and save you hunting through drawers for them.



#### ■ Fridge-freezer alarms

There are two types. One warns you if you leave the fridge or freezer door open, the other lets you know if your food gets too warm. The Miele KFN8452SD (2) has both alarms.

#### ■ Ice party

A setting which helps to rapidly chill a bottle of wine in the freezer. An LED flashes to remind you to take it out when it's ready.



#### ■ Soft-fruit tray

A tray to freeze soft fruit separately. Gardeners with raspberry canes and chefs who like to impress will get the best out of this. This shallow tray either sits on the top of a drawer, sliding back and forwards for easy access,

or is a shallow drawer at the top of the freezer.

The trays can be used for storing ice cube trays away from other frozen food.

### Fridge-freezer

#### ■ Holiday setting

This saves money while you're away and is useful if you have holidays of two weeks or more and want to leave the fridge empty but the freezer full. Fridge temperature increases to 12°C, while the freezer stays at -18°C.

#### ■ Super freeze/super cool

These controls get food to the right temperature as fast as possible to stop it losing taste or texture. They keep stored food from warming, maintaining freshness and preventing bacteria growth.





### 1 FREESTANDING

## 84% John Lewis JLFFW1807 £449

The fridge cools fresh food quickly in less than eight hours, but this isn't as fast as the Miele (2). What it lacks in speed, it makes up for in stability – we found that once you set the thermostat it shouldn't need adjusting again, however much the room temperature changes between 10°C and 32°C. The freezer keeps food frozen for 30 hours in a power cut. Unusually, there are two big drawers, one for salad and one for dairy food. It's available at John Lewis.

**WE LIKE** John Lewis models are too new for us to have reliability data. However, their manufacturer has average reliability in our survey.

**Cheapest store** John Lewis **Size** 185x60x66cm **Fridge capacity** 180 litres **Freezer capacity** 65 litres



### 2 FREESTANDING

## 82% Miele KFN8452SD £569

The Miele cools food in four hours and 25 minutes, one of the quickest performances for a machine this size. The fridge and freezer stayed at the right temperature when we dropped the temperature in the room. The thermostat will need adjusting in a hot room, otherwise salad items could be frosted with ice. There are separate thermostats for the fridge and freezer, so you can adjust them in really hot weather to stop this happening. The Miele is available from Comet and John Lewis.

**WE LIKE** Food stayed frozen for 33 hours in a power cut – the best performance on test.

**Cheapest store** John Lewis **Size** 180x60x67cm **Fridge capacity** 189 litres **Freezer capacity** 72 litres



The Hotpoint FF187E makes the best of the available fridge space



### 3 FREESTANDING

## 81% Hotpoint FF187E Future £349

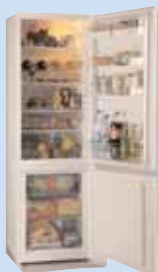
This Hotpoint makes the best of the available fridge space with two adjustable shelves. The bottle shelf has plastic fingers to grip different-sized bottles. Ice trays hidden in the front of the freezer drawers seal when full, which will stop spillages on the way back to the freezer. It also prevents other food tainting the ice. The fridge and freezer maintain their temperature well, but this model wouldn't keep food frozen during a power cut as long as our other Best Buys. It's available at Argos, Comet, Currys and John Lewis.

**WORTH KNOWING** Can racks in the door free up valuable shelf space.

**Cheapest store** John Lewis **Size** 188x60x66cm **Fridge capacity** 148 litres **Freezer capacity** 84 litres



## Which should you choose?



### Best built-in machines

#### JOHN LEWIS JLBIF1802 £649

There are no built-in Best Buys in this test, but the John Lewis (17) was the best. It cools food quickly and keeps a stable temperature. The freezer keeps food frozen for more than a day in a power cut. It works well under normal conditions, too. But it warmed too much when the room became hot (above 32°C). Unless you adjust the thermostat, ice cream may melt around the edges, for example. **SCORE 67%**

#### MIELE KDN9713ID £797

A high-temperature alarm on this Miele (18) warns you if the freezer gets too warm, and there are alarms to let you know if the doors have been left open. **SCORE 63%**



### Best for fresher food

#### HOTPOINT FF48T FUTURE £499

There are three boxes for vacuum sealing food on the Hotpoint (6). You can put your food in the box, place it on the vacuum shelf, close the door and seal the boxes one by one.

The manufacturer claims that it can prolong the food's freshness by seven to ten days. This is the only model on test that has this feature.

Raw unchilled meats and fish (particularly smoked salmon) should be cooled in the fridge before vacuum sealing. This is to prevent an extremely rare organism called clostridium botulinum flourishing in the airless environment. Open pâté must never be vacuum packed at home, as there is a risk of listeria. **SCORE 73%**

**4 FREESTANDING****79% Electrolux Inspire ENB35405****£470****WHICH? BEST BUY**

A water dispenser on the outside of the fridge is among the useful features of this Electrolux. If you grow your own fruit and vegetables you might also like the large freezer, which can freeze a whopping 19.5kg of fresh food in 24 hours. However, its performance in a power cut is not as good as other Best Buys. A digital display on the front lets you check the temperature, but it's a stable machine anyway. It's available at Comet and Currys.

**WE LIKE** A warning light tells you if the internal temperature is too high.

**Cheapest store** Currys **Size** 186x60x66 **Fridge capacity** 187 litres **Freezer capacity** 65 litres

**5 FREESTANDING****79% Indesit BAN 12NF £320**

This is our cheapest Best Buy and a good budget option. It lacks some features you'd find in more expensive models, but both the fridge and freezer keep a steady temperature well.

It's a No-Frost model, so there's no messy defrosting to worry about, and a warning light flashes if you accidentally leave a door open. The design of the freezer makes finding ice cubes easy. It doesn't cool fresh food as fast as some of our other Best Buys. It's available at Argos and Currys.

**WHICH? BEST BUY**

**WE FOUND** The big freezer lets you freeze 8kg of food in 24 hours.

**Cheapest store** Argos **Size** 175x60x65 **Fridge capacity** 147 litres **Freezer capacity** 78 litres

**Checklist****Fridge-freezer care****■ Cleaning**

Clean the inside regularly with warm, soapy water and a soft sponge.

**■ Vacuum**

It's a good idea to vacuum under and behind your fridge-freezer every six months. The dust that collects around it stops heat getting in and out as efficiently as possible. This makes your fridge-freezer work harder and increases electricity bills.

**■ Keep it cool**

Every fridge-freezer has a climate class, which tells you the range of room temperatures it's designed to cope with. You will see this on the machine's packaging. As a room gets warmer, the fridge gets colder to



make up for it. Poorer models can freeze solid if the room gets too hot. This will wreak havoc on salads, for example, as well as stored medicine. The reverse happens on cold days when the temperature in a poorer machine, can rise above the recommended 5°C. Adjusting the thermostat on hot and cold days will help.

**■ In the garage?**

Keeping a fridge-freezer in a garage or unheated room would mean you'd need to alter the thermostat two or three times a day in summer to prevent fluctuations in temperature. In winter the machine would work harder to keep food cold, using more electricity.

**Side-by-side fridge-freezers**

We didn't test these this time, but here are two from previous tests

**MAYTAG TRILOGY G32026PEK**

**£1,999** The spacious fridge has two doors that open separately. But the slide-out frost-free freezer is small and harder to organise compared with an upright freezer, as it has only two deep wire baskets. The temperature is stable when the room heats to 32°C or drops to 10°C. It's cheap to run at £26 a year. We don't have enough reliability data on Maytag to make this a Best Buy. It's available from Currys for £1,999. **SCORE 79%**

**LG GRL207TUJA £799**

The freezer in this LG model is one of the quickest we've tested, though it can't freeze food as quickly as a standard upright freezer. The fridge has plenty of storage space, including three adjustable shelves, three crispers for vegetables and salad items, and a horizontal bottle rack. There's more good storage and a chilled water dispenser in the door. It's available from Comet and Currys for £799. **SCORE 76%**

**SAVE MONEY ON OUR BEST BUYS****Exclusive member discounts**

This March, Hughes Direct is offering Which? members an exclusive discount on the Hotpoint FF187EG or FF187EP for £299 including delivery (other colours available at an extra cost). There is a special offer on the Miele KFN8452SD

for £485 including delivery. For more details on this offer and other member-only discounts from Hughes Direct, log on to [www.hughesdirect.co.uk/which](http://www.hughesdirect.co.uk/which) or call 01473 321883. Offer valid until 30 April 2008, subject to availability.



## USING THE TABLE

The more stars the better.

### Specification

**Price** For Best Buys we give the cheapest widely available high-street price as we went to press. Prices for other models are a guide to what you to pay. See

[www.which.co.uk/shopping](http://www.which.co.uk/shopping) for the latest prices. **Size** Including hinges, with doors closed. Some manufacturers recommend allowing extra space, usually less than 10cm, for air circulation.

**Capacity (fridge/freezer)** The amount of usable space.

**Energy label** Manufacturer's claimed energy rating. **Running costs** Estimate based on current electricity prices. **Room temp**

Optimum room temperature range for the fridge-freezer.

### Test performance

**Stability** How well both the fridge and freezer maintain internal temperature when the room temperature changes.

**Cooling** How quickly the fridge cools food from room temperature; how quickly fresh food is frozen by the freezer.

Models rated ★★★★★ are better at preserving food quality and texture. **Noise** How noisy the model is when it starts and stops its cooling cycle; none of the models in this test was noisy.

**Storage** How easily you can move any shelves and compartments. **Defrost** Ease of

defrosting. A machine scores ★★★★★ if it's frost free.

**Reliability** Best Buy brands are expected to have above average or average reliability in our annual survey. A blank means there was insufficient data to judge reliability.

### Score

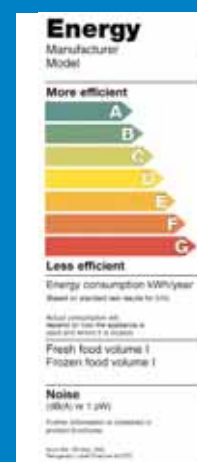
This ignores price and is based on:

Temperature stability	20%
Cooling and freezing	20%
Ease of use	15%
Noise and vibration	15%
Performance on recommended setting	10%
Insulation	10%
Uniform fridge temperature	10%

## Changing the

All fridge-freezers have labels that show how energy efficient they are.

White goods such as these are rated A++ to C, with A being the most efficient. Manufacturers feel that their machines have become so efficient that they have outgrown the 18-year-old system and have asked the EU to update it.



MODEL	SPECIFICATION							WHICH? TEST PERFORMANCE				
	PRICE (£)	SIZE (cm) (h x w x d)	CAPACITY FRIDGE (litres)	CAPACITY FREEZER (litres)	ENERGY LABEL	RUNNING COSTS (£/yr)	ROOM TEMP (°C)	STABILITY FRIDGE	STABILITY FREEZER	COOLING FRIDGE	COOLING FREEZER	STORAGE
<b>FREESTANDING</b>												
1 JOHN LEWIS JLFFW1807	449	185x60x66	180	65	A	26	10 to 38	★★★★★	★★★★★	★★★★★	★★★★★	★★★★
2 MIELE KFN8452SD	569	180x60x67	189	72	A	26	10 to 43	★★★★	★★★★★	★★★★★	★★★★★	★★★★
3 HOTPOINT FF187E Future	349	188x60x66	148	84	A	27	10 to 38	★★★★★	★★★★★	★★★★★	★★★★	★★★★
4 ELECTROLUX Inspire ENB35405	470	186x60x66	187	65	A	24	10 to 38	★★★★★	★★★★★	★★★★★	★★★★★	★★★
5 INDESIT BAN 12NF	320	175x60x65	147	78	A	30	10 to 38	★★★★★	★★★★★	★★★★	★★★★	★★★★
6 HOTPOINT FF48T Future	499	191x71x72	208	92	A	34	10 to 38	★★★★★	★★★★★	★★★★★	★★★	★★★★
7 HOTPOINT FF175B Future	300	176x60x65	145	74	A	30	10 to 38	★★★★★	★★★★★	★★★★★	★★★	★★★★
8 WHIRLPOOL ARC7453	400	188x60x61	176	70	A	25	16 to 38	★★★★★	★★★★★	★★★★★	★★★★	★★★★
9 BOSCH KGN34X01GB Exxcel	419	186x60x65	159	76	A	26	10 to 43	★★★★★	★★★★★	★★★★★	★★★★	★★★
10 HOOVER HCF6200	400	201x60x62	185	80	A	24	16 to 38	★★★★★	★★★★★	★★★★★	★★★	★★★★
11 BEKO CDA554	270	171x54x63	142	67	A	20	10 to 32	★★★★★	★★★★★	★★★★★	★★★★	★★★★
12 BEKO CDA653F	330	189x60x65	128	91	A	24	10 to 32	★★★★★	★★★★★	★★★★★	★★★★	★★★★
13 ZANUSSI-ELECTROLUX ZNB323	299	175x60x64	180	66	A	24	10 to 38	★★★★★	★★★★★	★★★★★	★★★★	★★★★
14 BEKO CDA539F	250	153x54x63	108	63	A	18	10 to 32	★★★★★	★★★★★	★★★★★	★★★★	★★★★
15 BOSCH KGN33V00GB Classixx	349	170x60x62	158	52	A	21	10 to 43	★★★★★	★★★★★	★★★★★	★★★★	★★★
16 HOOVER HCF5176	350	177x54x61	133	80	A	23	10 to 32	★★★★★	★★★★★	★★★★★	★★★★	★★★★
<b>BUILT-IN</b>												
17 JOHN LEWIS JLBIF1802	649	178x55x55	165	53	A	24	10 to 38	★★★★★	★★★★★	★★★★★	★★★★	★★★★
18 MIELE KDN9713ID	797	177x56x55	170	51	A	23	10 to 43	★★★★★	★★★★★	★★★★★	★★★★	★★★★
19 BOSCH KIV38V00	349	177x54x54	182	47	A	22	18 to 43	★★★★★	★★★★★	★★★★★	★★★★	★★★★
20 WHIRLPOOL ART471/A/4	432	178x55x57	158	53	A	23	10 to 38	★★★★	★★★★★	★★★★★	★★★★	★★★★

## energy labels



A numerical labelling system could be introduced in 2009. The proposed move could turn A class into 7, A+ to 8 and so on.

The energy efficiency of fridge-freezers is indicated by a system of green to red bands on a label which can be found on the machine or the packaging it comes in. This system is expected to be retained.

Side-by-side or American fridge-freezers are rated differently as they have much larger capacities than conventional fridge-freezers.

		SCORE %
DEFROST	RELIABILITY	
★★★★★		84
★★★★★	Average	82
★★★★★	Average	81
★★★★★	Average	79
★★★★★	Average	79
★★★★★	Average	73
★★★★★	Average	72
★★★★★	Below average	71
★★★★★	Average	66
★★★★★	Average	66
★★	Average	62
★★★★★	Average	62
★★★★★	Average	62
★★★★★	Average	61
★★★★★	Average	61
★★★★★	Average	55
★★★★★		67
★★★★★	Average	63
★	Average	56
★★	Average	45

## Where to put your food

Safe and effective ways to organise food storage



### ■ EGGS

The shells are porous – if you leave them next to something with a strong smell, the eggs will absorb it. Keep them at the top of the fridge in their box or a plastic egg tray.

### ■ FRUIT AND VEGETABLES

Don't put bananas in the fridge, as they will go black. Most other fruit and veg can be chilled in the crisper drawer at the bottom of the fridge. This holds moisture around fruit and veg, preventing it escaping every time you open the fridge door. It's also the coolest part of the fridge. If you have two crispers, you can store fruits separately from veg, in case the latter are contaminated with soil.

### ■ LIQUIDS

Cover any liquids you place in the fridge. Uncovered liquids evaporate, making the fridge work harder and more expensive to run.

### ■ MEAT (COOKED)

Keep this in the middle of the fridge, above raw meats.

### ■ MEAT (RAW)

Seal or tightly wrap raw meat and place it on the glass shelf at the bottom of the fridge, above the crisper. Wrapping it stops the juices from dripping and contaminating other foods, and stops the meat drying out. This is also a good place for it to be defrosted. Don't put uncooked meat directly on shelves.

### ■ MILK

Keep milk in the bottom of the door. Our reliability survey shows that 17 per cent of fridge-freezer and 29 per cent of fridge breakdowns are caused by damage to the door. Slide the biggest bottle to the side closest to the hinge to put less strain on the door.

### ■ OPENED TIN CANS

Don't store these in a fridge. Tip leftovers in a plastic tub and cover. Acidic or salty foods attack tinplate in the presence of air and contaminate food.

### ■ WRAPPING

Wrap everything apart from uncut fruit and veg to prevent the food from drying out.

## Contacts

**Beko** 0845 600 4904  
www.beko.co.uk

**Bosch** 0870 240 0060  
www.bosch.co.uk

**British Frozen Food Federation**  
01476 515300

www.bfff.co.uk

**Electrolux** 0870 535 0350  
www.aeg-electrolux.com

**Hoover** 0870 950 2943  
www.hoover.co.uk

**Hotpoint** 0870 150 6070  
www.hotpoint.co.uk

**Indesit** 0870 150 6070  
www.indesit.co.uk

**John Lewis**  
0845 604 9049  
www.johnlewis.com

**Miele** 0870 755 4466  
www.miele.co.uk

**Whirlpool**  
0870 600 8989  
www.whirlpool.co.uk

**Zanussi-Electrolux**  
0870 572 7727  
www.zanussi-electrolux.co.uk