

# Kidney disease: Low potassium diet

## Dietetics

Information for Adult Patients

Produced: December 2022

Updated: May 2024

Review: December 2025

Leaflet number: 1346 Version: 1.1

## What is potassium?

Potassium (K) is a mineral found in food and drinks. It helps nerves and muscles, such as your heart, to work properly. Your kidneys help to control the amount of potassium in your blood.

When your kidneys are not working properly they do not remove potassium as well. This causes the level of potassium in your blood to gradually rise (hyperkalaemia).

Too much potassium in your blood can be dangerous because it can interfere with the rhythms of your heart.

## How can I keep my potassium within a safe level?

You can help to keep the potassium level safe by being careful about what you eat and drink. Some foods may need to be avoided while others may need to be limited. If you have dialysis treatment, this will remove potassium from your body however, diet changes are often needed too. It is important to try to keep your blood potassium levels within or close to your recommended range. Discuss with your dietitian or doctor what this is for you.

The following guide will help you reduce your potassium level by controlling the amount of potassium you eat and drink.

## Hospital admission

The hospital has a renal menu with lower potassium options. If you are admitted to hospital, please ask for a renal menu.

**Health information and support is available at [www.nhs.uk](http://www.nhs.uk)  
or call 111 for non-emergency medical advice**

Visit [www.leicestershospitals.nhs.uk](http://www.leicestershospitals.nhs.uk) for maps and information about visiting Leicester's Hospitals  
To give feedback about this information sheet, contact [InformationForPatients@uhl-tr.nhs.uk](mailto:InformationForPatients@uhl-tr.nhs.uk)

## Summary of main points

### Cooking methods

- Boiling potatoes and vegetables helps to lower their potassium content, as some of the potassium moves out into the water.
- Par boil potatoes (partly cook by boiling) to lower the potassium content before frying or roasting.
- Throw the water away after boiling or par boiling; do not use to make gravy, stocks, sauces or soups.
- Avoid steaming, microwaving or baking potatoes and vegetables.

### Starchy foods

- Bread, rice, pasta, plain naan, noodles, chapatti and couscous are all lower in potassium and may be eaten freely.

### Fruits and vegetables

- These foods contain vitamins and fibre so they are important for your general health, but they also naturally contain potassium.
- Keep to 4 to 5 portions of fruit and vegetables per day as advised by your dietitian.
- Choose fruit and vegetables from the 'lower in potassium section'
- Dishes made with tomatoes, in addition to the fruit and vegetable allowance, should be served with rice, pasta or bread instead of potatoes.
- Combining tomatoes and potatoes in the same meal or day provides a very high amount of potassium and should be limited.

### Protein

- Meat, poultry, fish, eggs, beans, pulses, Quorn or tofu are good sources of protein – note the recommended quantities in the table.
- A portion of beans, pulses, Quorn or tofu may replace a portion of meat, poultry, fish or eggs.
- Try to choose canned and drained beans and pulses as these are lower in potassium than dried varieties.

### Herbs and spices

- Fresh or dried herbs and spices may be used as needed in cooking.
- Try to limit the amount of salt in foods and cooking.

## Protein

	Allowance up to:
Meat, poultry	100g (4oz) - main meal and 50g (2oz) - snack meal
Fish	150g (6oz) - main meal and 75g (3oz) - snack meal
Eggs	Eat freely – no restriction
Quorn or Tofu	150g (6oz) per meal
Beans and lentils	For example: Canned butter beans or chickpeas (3tbsp) canned red kidney beans (2tbsp). These can be taken in place of meat, poultry, fish, eggs, Quorn or tofu

- Soya mince is very high in potassium. Try not to eat products which are made from soya mince and soya flour.
- Try to limit cured or salted meats as these are high in salt.
- Nuts and seeds are high in potassium and may need to be restricted. Please discuss with your dietitian if you wish to use nuts and seeds in your cooking.

## Milk and Dairy

	Allowance up to:
Milk / soya milk	200ml (1/3pint) per day.
Yogurt	2 x 125g pots per week.
Cheese	Eat as usual. If following a low phosphate diet, limit to 50g per week.

- Try not to use condensed milk, evaporated milk, coconut milk, coconut cream or dried milk as these are higher in potassium.
- Rice, oat and nut milks (containing less than 10% nut) are lower in potassium and may be used.

## Starchy foods

Potatoes, yam and sweet potatoes are particularly high in potassium. However, the potassium content will be lowered if they are peeled, cut into small pieces and then boiled in a big pan of water. The water should then be thrown away. Avoid steaming, baking, frying, air-frying, microwaving or using a pressure cooker to cook the potatoes, yam or sweet potato.

Keep to 150g (6oz) boiled potatoes, yam or sweet potato per day. If this leaves you hungry, bread and butter, extra rice or pasta are lower in potassium and may be eaten more freely. The table below shows which starchy foods can be eaten and how to cook them to lower their potassium content.

Lower in potassium Choose	Higher in potassium Limit
Boiled potatoes / taro tuber / yam / cassava / sweet potatoes (discard the water)	Baked starchy vegetables for example, jacket potato
Boiled then fried, air fried or roasted potatoes / yam / taro tuber / cassava / sweet potatoes	Frozen, oven, retail or 'chip shop' chips
Homemade chips (if boiled first)	Manufactured potato products such as potato waffles, croquette potatoes
Mashed potato	Steamed starchy vegetables
	Microwaved starchy vegetables
	Pressure cooked starchy vegetables

## Other starchy foods

Lower in potassium	Higher in potassium
Bread (including chapattis, plain naan, pitta bread)	Peshwari naan Gram / chickpea / bean flour / soya flour products e.g. poppadum's and bhaji's.
Pasta, rice, noodles, couscous, bulgur wheat	Quinoa
Cereals (for example, Cornflakes, Rice Krispies, porridge oats, Weetabix, Shredded Wheat)	All Bran, Bran buds Cereals and cereal bars containing chocolate, dried fruit & nuts

## Vegetables

Portion sizes for vegetables
1 portion = 80g (3oz) boiled vegetables (3 heaped tablespoons)
1 portion = 80g (3oz) salad (any of lettuce, cucumber, watercress, peppers, coleslaw, onion, olives, small pickled beetroot, pickled onions)
1 portion = 80g (3oz) tinned/fresh tomatoes

Vegetables are a good source of fibre and vitamins but they are also naturally quite high in potassium. Vegetables should be boiled and the water thrown away. It is better not to use this water to make stocks, soups, sauces or gravies as it contains potassium from the vegetables. Choose vegetables that are lower in potassium from the list on the next page.

Avoid microwaving, baking, using a pressure cooker or steaming the vegetables.

If stir frying vegetables from raw, serve the dish with a low potassium starchy food e.g. pasta, rice, noodles or bread and not with potatoes.

Some vegetables contain more potassium than others – use the following table as a guide. Try to choose options from the lower potassium column. Keep to 4 to 5 portions of a combination of fruit and vegetables per day.

<p style="text-align: center;"><b>Lower in Potassium Choose (boiled unless stated otherwise)</b></p>	<p style="text-align: center;"><b>Higher in Potassium Limit</b></p>
<p>Asparagus – 3 spears Aubergine Baby sweetcorn Beansprouts Broccoli Butternut squash Carrots Cabbage Cauliflower Courgette Cucumber (raw) Curly Kale Frozen mixed vegetables Leeks Mangetout Marrow Mushrooms (canned) Onion Peas Pepper - Green, red or yellow (raw) Pumpkin Radish (3 raw) Runner beans Spring greens Spring onion (3 raw) Sugar snap peas Swede Sweetcorn - canned Turnip Water chestnuts (half a tin)</p>	<p>Artichoke Avocado Baked beans Beetroot (raw / boiled) Broad beans Brussels sprouts Celeriac Chard Edamame beans Green beans Mushrooms Parsnips Spinach Sundried tomatoes Sweetcorn on the cob</p>

## Fruit

Fruit is a good source of fibre and vitamins but is also naturally quite high in potassium. Use the following list to help choose fruits that are lower in potassium. A portion of fruit is 80g. The portion sizes are shown in brackets. Keep to 4 to 5 portions of a combination of fruit and vegetables per day.

**It is recommended that all patients with kidney disease avoid star fruit as it may cause harmful effects.**

Lower in Potassium Choose	High in Potassium Limit
Apple (1 small) Blueberries (20) Blackberries (15) Cherries (12) Clementines (2) Gooseberries (12) Grapes (14) Grapefruit (half) Guava (1) Kiwi (1) Lemon / lime (few slices) Melon (honeydew, watermelon or galia – 1 small slice of 100g) Oranges (1 small) Passion fruit (2) Peaches (1) Pears (1 small) Pineapple (2 small slices) Plums (1) Raspberries (15) Sharon fruit (1) Strawberries (8) Tangerines/satsumas (1) Tinned fruit (1 small tin- drained juice)	Apricot Avocado Bananas Blackcurrants Coconut Damsons Dates Dried fruit - all (e.g. sultanas, prunes, raisins) Elderberries Figs Mango Melon (Cantaloupe) Nectarines Papaya Prunes Pomegranate Redcurrants Rhubarb

## Seasonings and condiments

The following may be used as needed in cooking (quantities have been suggested in brackets):

- Fresh and dried herbs
- Pepper, spices, vinegar, mayonnaise, salad cream, mustard, mint/apple sauce (1tbsp)
- Piccalilli, sweet pickles, cranberry sauce (1tsp)
- Pesto sauce —maximum of 1 jar (190g) per recipe serving 4 people
- Tomato ketchup and brown sauce (1tsp)

Tomato puree is very high in potassium. It is recommended that you avoid using tomato puree in cooking.

## Salt

Take care with the amount of salt used. You may add a pinch in cooking but avoid adding at the table. **Salt substitutes (for example, Lo Salt, Ruthmol, and Selora) are high in potassium and should be avoided.** Stock cubes are also high in salt and should be avoided where possible. Very low salt stock cubes are available if needed.

## Potassium additives

Some foods now contain potassium additives which may be easily absorbed and raise your potassium level. Reducing your intake of potassium additives in food and drinks will help to lower your potassium level.

- Eat more freshly prepared food rather than processed food. This will avoid potassium additives completely.
- Potassium additives are added to many foods and drinks. They can increase potassium levels in your blood. Check food labels to identify them. Sometimes, you can make a simple switch of food brands to avoid them.
- Many food manufacturers are lowering the salt content of foods by switching sodium chloride (salt) for potassium chloride instead. Check labels and avoid potassium additives.

Potassium additives		
Potassium chloride	E508	Other potassium additives such as potassium sorbate and acesulfame K tend to have less of an effect on potassium levels
Potassium phosphate	E340	
Potassium citrate	E332	
Potassium lactate	E326	



## Sauces

White sauces and cheese sauces should be made from allowances of milk and cheese. Tomatoes are used as a base for many dishes. Canned plum tomatoes when drained are lower in potassium than fresh tomatoes. It is recommended that you drain off and discard the juice from canned plum tomatoes before adding these in cooking. Dishes made with tomatoes additional to the vegetable allowance should be served with rice, pasta or bread instead of potatoes (no potatoes should be taken on that day). Do not use more than 1 x 400g tin tomatoes per recipe serving 4 people.

Note: Many ready prepared sauces are high in salt.

## Drinks

If your doctor or dietitian has given you a fluid restriction then all drinks should be included as part of this restriction. Use sugar free drinks if you have diabetes or are watching your weight.

Note: Check with your doctor to see if it is alright for you to drink alcohol.

Lower in Potassium Choose	High in Potassium Limit
Fizzy drinks (for example, cola, lemonade) Squashes Tea & herbal teas Spirits (for example, whisky, gin, brandy), if taken.	Fruit juice / vegetable juice Ribena & blackcurrant drinks Cider Coconut based drinks Cocoa & drinking chocolate Malted milk drinks (for example Horlicks, Ovaltine)
Coffee is high in potassium - limit to 1 cup per day.	
Limit wine, sherry, port, lager, beer, stout to a small glass, if taken. Try to have 2 to 3 alcohol free days per week.	

## Savoury snacks

Many savoury snacks are high in salt so even those lower in potassium should not be included too often in the diet. Check the labels for potassium additives.

Lower in Potassium Choose	High in Potassium Limit
Corn / Maize / wheat based snacks Tortilla chips Pretzels Popcorn Breadsticks / crackers Rice snacks / rice cakes	Potato crisps Vegetable crisps Bombay mix Nuts – all (for example, peanuts, pistachios, cashews, etc.) Seeds

## Biscuits, cakes and sweets

Some of these may be high in fat and / or sugar. You may wish to limit these foods if you are following a healthy eating diet, trying to lose weight or have diabetes.

Lower in Potassium Allowed	High in Potassium Limit
Doughnuts Jam tarts Plain or cream sponge cake Biscuits – plain, wafer, ginger, shortbread, jam or cream filled Meringue Swiss Roll Plain flapjack Plain cereal bar	Biscuits / cakes / flapjack containing chocolate, dried fruit or nuts Burfi Carob / chocolate Fudge / toffees Liquorice

## Miscellaneous

Lower in Potassium Allowed	High in Potassium Limit
Jam / marmalade Honey, syrup Butter / margarine / low fat spreads Oils	Black treacle Bovril / Marmite Tomato puree Soup (tinned & packet)

**Remember this is not a complete list and if there are foods you would normally eat which are not mentioned on this sheet please ask the dietitian.**

## Where can I find further information?

Kidney Care UK [www.kidneycareuk.org](http://www.kidneycareuk.org)

Kidney Kitchen <https://www.kidneycareuk.org/about-kidney-health/living-kidney-disease/kidney-kitchen/>

Kidney Beam <https://beamfeelgood.com/kidney-disease>

You can also access your blood results via Patient View by registering here:

[www.patientview.org](http://www.patientview.org) or <https://my.patientsknowbest.com/>

## Feedback

We aim to ensure that our dietary information sheets are up to date, relevant and easy to follow. We welcome comments and feedback on our dietary information sheets so speak with your dietitian or contact us by writing to:

Renal Dietitians office  
Leicester General Hospital  
Gwendolen Road  
Leicester  
LE5 4PW

## Contact details

If you have any questions or concerns about lowering potassium in your diet, please contact your renal dietitian (Monday to Friday 9am to 4pm). If you are calling outside of these times, please leave a message and we will call you back.

Contact number for Leicester Renal Dietitians: 0116 258 8002

If you are under the care of a Renal Dietitian outside of Leicester, please contact your local service.

اگر آپ کو یہ معلومات کسی اور زبان میں درکار ہیں، تو براہ کرم مندرجہ ذیل نمبر پر ٹیلی فون کریں۔  
على هذه المعلومات بلغةٍ أخرى، الرجاء الاتصال على رقم الهاتف الذي يظهر في الأسفل  
જો તમને અસ્ય ભાષામાં આ માહિતી જોઈતી હોય, તો નીચે આપેલ નંબર પર કૃપા કરી ટેલિફોન કરો  
ਜੇ ਤੁਸੀਂ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਭਾਸ਼ਾ ਵਿਚ ਚਾਹੁੰਦੇ ਹੋ, ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਹੇਠਾਂ ਦਿੱਤੇ ਗਏ ਨੰਬਰ 'ਤੇ ਟੈਲੀਫੋਨ ਕਰੋ।  
Aby uzyskać informacje w innym języku, proszę zadzwonić pod podany niżej numer telefonu

If you would like this information in another language or format such as EasyRead or Braille, please telephone 0116 250 2959 or email [equality@uhl-tr.nhs.uk](mailto:equality@uhl-tr.nhs.uk)