

# Potassium - for people with diabetes

A patient Information guide  
on lowering the potassium in  
your diet



You have been asked to follow a low potassium diet. This booklet has been designed to enable you to continue to enjoy your food whilst following a low potassium diet.

### **What is potassium?**

Potassium is a mineral that is essential for life. It is found in our blood and food. It is important for the normal function of all nerves and muscles, including the heart. Potassium is present in most food and drinks; it has no taste or smell.

### **Why is the amount of potassium in my blood high?**

The kidneys normally help to control the level of potassium in our blood. When the kidneys are not working properly, the level of potassium in the blood may become too high. This can be dangerous as it can affect the way the heart beats.

**We are aiming to help keep your potassium between:**

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### **Other causes of abnormal potassium levels**

Other factors may also cause an abnormal potassium level. These can include recent blood transfusions, medication, muscle breakdown, constipation and poorly controlled diabetes.

If you are experiencing constipation or struggling to control your diabetes, seek further medical advice.

## Other dietary requirements

You have been asked to follow a low potassium diet. However if you have diabetes, coeliac disease, are following a weight reducing diet or have other dietary needs it is important that these diets continue. The dietitian will discuss this with you.

## Food labelling

Potassium is not listed under the nutritional values on food and drink labels. However you may want to use the ingredients list as a guide. The ingredients are listed in order of quantity, therefore should it list a high potassium food first you may wish to avoid it.

### Example: Tomato based curry sauce

Water, **tomatoes**, onions, **concentrated tomato puree**, **concentrated whole tomatoes**, garam masala, vegetable oil, modified starch, garlic puree, ginger and spices.

Tomatoes appear at the beginning of the ingredients, and because tomatoes are a high potassium food, the curry sauce will therefore be high in potassium.

- You could avoid this food and choose a suitable alternative
- Or make sure you accompany this meal with a low potassium food such as bread, rice or chapati
- If this is a treat then make sure you have reduced your potassium intake during the day to account for this meal

## Salt substitutes

In order to reduce the salt (sodium) content of foods, manufacturers are using salt substitutes to achieve this. LoSalt or potassium chloride are salt substitutes which are high in potassium. If they are listed as part of the ingredients the food should be avoided.

### Example: Reduced salt baked beans

Haricot beans, water, tomato puree, sugar, modified maize starch, **potassium chloride**, salt and sweetener.

## Preservatives

A preservative, potassium sorbate, is often added to food and drinks such as cordials and squashes. This does not need to be avoided.

## Eating out and celebrations

It can be difficult to choose a meal when eating out or at a time of celebration, while keeping in mind your low potassium diet.

If you require further information about this ask your dietitian for guidance.

## Protein foods

Protein foods include meat, poultry, fish, eggs, nuts, pulses and meat substitutes eg. Quorn and tofu. They can be high in potassium but are a valuable food source as they provide protein, vitamins and minerals. For this reason many are not restricted, however you may need guidance on portion sizes.

### Meat, poultry and fish

- All types (fresh or frozen) can be eaten freely. If previously advised, please follow advice regarding daily protein allowance
- Please note that cured or salted meats and fish are high in salt

### Eggs

- Can be taken freely

### Meat substitutes

- For example Quorn and tofu can be eaten

### Lentils and pulses

- These are allowed but only as an alternative to meat. Avoid having meat or fish and lentils or pulses at the same meal. If you use these in your cooking please discuss this further with your dietitian
- Boiling lentils or pulses separately before using will reduce their potassium content
- Canned pulses and lentils are lower in potassium

### Nuts and seeds

- These foods are high in potassium. If you use small amounts in your cooking please discuss this further with your dietitian. To include these foods as a snack refer to the fruit, nut and seed list

**If you are vegetarian or vegan please inform your dietitian and further advice can be given**

## Milk and dairy products

These foods are an important source of protein and calcium. They do contain potassium therefore you may need guidance on portion sizes.

Recommended allowance
<b>Milk and soya milk</b>
<ul style="list-style-type: none"><li>• Up to ..... ml of milk is acceptable daily. This can be any type of fresh, UHT or soya milk</li><li>• Milk powder can be used as an alternative to milk, when following the manufacturers guidelines</li><li>• Avoid Coffee Mate. You can use Coffee Compliment</li><li>• Avoid all tinned milk (condensed or evaporated)</li><li>• Avoid coconut milk</li></ul>
<b>Yoghurts, fromage frais and yoghurt drinks</b>
<ul style="list-style-type: none"><li>• You can include any 'light' or 'diet' option but limit to ..... 125 g carton each week</li></ul>
<b>Cream</b>
<ul style="list-style-type: none"><li>• Fresh cream can be used in small amounts</li><li>• Double cream and water can be used as a substitute for milk</li></ul>
<b>Cheese</b>
<ul style="list-style-type: none"><li>• All types can be taken in small amounts</li><li>• Watch out for salt substitutes in the ingredients</li></ul>
<b>Milk puddings and ice cream</b>
<ul style="list-style-type: none"><li>• Limit reduced sugar milk puddings to twice per week</li><li>• Plain vanilla ice cream can be taken in moderation</li></ul>
<b>Fats and oils</b>
<ul style="list-style-type: none"><li>• Any type e.g. margarine, butter, cooking oils, suet, dripping and ghee can be used</li><li>• We recommend the use of monounsaturated fats in small amounts e.g. olive oil, rapeseed oil and olive-based spreads</li></ul>

## Starchy foods

These foods are an essential part of the diet and should be included with every meal. They provide us with energy and fibre as well as minerals. Some starchy foods for example potatoes, yam and plantain are high in potassium; please see page 8 for information regarding portion sizes

Low Potassium Foods	High Potassium Foods
<p><b>Breads</b> All types e.g. wholemeal, white, granary, soda bread, pitta breads, bagels, croissants and English muffins</p>	<p>Popadoms Avoid bread containing nuts, dried fruit, sweet potato and coconut</p>
<p><b>Other starchy foods</b> Chapatis, plain naan, paratha, corn or tortilla wraps, crumpets, pikelets, scotch pancakes, Yorkshire puddings, dumplings, cream crackers and crispbreads, cous cous, pasta, rice, noodles and pittas</p>	<p>Tinned spaghetti in tomato sauce and tinned ravioli in tomato sauce</p>
<p><b>Breakfast cereals</b> Porridge made with water or milk from allowance Cornflakes, Rice Krispies, Weetabix, Shredded Wheat, Shreddies, Start, Special K, Puffed Wheat and Grape Nuts</p>	<p>Breakfast cereals containing nuts or dried fruit e.g. muesli, Fruit and Fibre, Weetabix Minis, Sultana Bran, All Bran, Raisin Splits, Jordans Crunch, Branflakes and Ready Brek</p>
<p><b>Cooking methods</b> If you need to add flour to thicken sauces try corn flour, plain flour or rice flour</p>	<p>Lentil, chickpea (besan) and soya flours are high in potassium</p>

## Starchy vegetables

This includes potatoes, sweet potatoes, yam and plantain. They contain large amounts of potassium, therefore they need to be limited in the diet. **To reduce the potassium content of these foods they should be boiled first.**

Below is a list of starchy vegetables. The quantities are equal to one portion. We recommend limiting your intake to ..... portions each day.

Food	Portion
Boiled potatoes	50 g (1 large 'egg-size')
Mashed potatoes	50 g (1 ice-cream scoop)
Instant Mash potato *	50 g (1 ice-cream scoop)
Jacket potato	25 g (avoid skin)
Manufactured chips	25 g (approx 6 chips)
Manufactured roast potatoes	25 g
Plantain	40 g
Cassava	60 g
Yam	60 g
Sweet potato	50 g
Breadfruit	40 g
Taro	80 g

(30 g = 1 oz)

Potatoes should be boiled in large amounts of water until soft. The potassium will come out into the water. **Throw the cooking water away.** Do not use the water for gravy, soup or drinking. Do not use a microwave oven, steamer or pressure cooker to cook potatoes.

Once potatoes have been boiled you can roast them or make them into chips.

\* High in salt

## Vegetables

Vegetables are an important source of vitamins and minerals as well as fibre. However, they are also a source of potassium.

**To reduce the potassium content of the vegetables they should be boiled first in a large amount of water.**

Below is a list of vegetables. The quantities are equal to one portion. We recommend limiting your vegetables to ..... portions each day.

Baked beans	1 tbsp	Sweetcorn	2 tbsp
Broad beans	1 tbsp	Tinned tomato	2 tbsp
Frozen cauliflower	2 tbsp	Turnip	2 tbsp
Fresh cauliflower	4 tbsp	Broccoli	3 tbsp
Boiled celery	2 tbsp	Cabbage	4 tbsp
Courgettes	2 tbsp	Carrots	3 tbsp
Fresh peas	2 tbsp	Frozen mixed veg	3 tbsp
Frozen peas	3 tbsp	Mange tout	3 tbsp
Green beans	2 tbsp		
Leeks	2 tbsp	Runner beans	3 tbsp
Fried onion	1 tbsp	Spring greens	3 tbsp
Onion	3 tbsp	Swede	3 tbsp
Brussel sprouts	x 6	Asparagus	2 spears
Tinned okra	x 14	Mushrooms (raw)	4 medium
Baked butternut squash	50 g	button	
Cho-Cho/	100 g	Mung	4 tbsp
Christophene		beansprouts	60 g
Water chestnuts (canned)	100 g	Ackee	100 g
		Pumpkin (raw)	200 g
		Boiled pumpkin	100 g
		Bamboo shoots	50 g
		Fresh okra	Whole
		Red or green pepper	pepper

*tbsp = tablespoon*

Avoid artichokes, beetroot (as a vegetable), celeriac, raw celery, raw okra, parsnip, spinach, callaloo (amaranth), chard and kale as they are very high in potassium.

## Salad

In place of your vegetables you may have a side salad made up from a selection of up to five of the following:

- 4 slices cucumber
- 10 g mustard and cress
- 35 g gherkin
- 3 - 4 small pickled onions
- 2 rings green or red pepper
- 2 radishes
- 3 leaves of lettuce
- 2 spring onions
- 4 slices of pickled beetroot
- A bunch of watercress

Plus 1 small tomato.

## Making tomato-based sauces

Tomato based sauces can be used if not eaten with potatoes. They can be included within rice and pasta based meals.

- 100 g of tinned tomatoes per portion can be used to make a pasta based sauce
- Alternatively 2 tablespoons of a bought ready-made tomato pasta sauce can be used per portion e.g. Dolmio, Ragu and supermarket own brand
- Tomato puree should not be used
- Vegetables from the above list can be added to the sauce

## When making stews

All potatoes and vegetables should be boiled separately,

## Fruit, nuts and seeds

Fruit, nuts and seeds are an important source of vitamins and minerals as well as fibre. However, they are also a source of potassium.

Below is a list of fresh, tinned, stewed fruit and fruit juice. The quantities are equal to one portion. We recommend limiting your fruit, nuts and seeds to ..... portions each day.

Fresh fruit	Tinned fruit
1 medium apple 1 medium pear 2 medium clementine 2 small tangerines 5 slices fresh lemon 2 small satsumas 1 small orange 5 passion fruit 1 medium peach 1 slice fresh pineapple 9 fresh strawberries 25 fresh raspberries 1 medium slice watermelon 20 blackberries 12 raw cherries ½ fresh grapefruit 1 small guava 1 small Sharon fruit 15 grapes 1 medium kiwi fruit 1 small nectarine 2 small plums 150 g punnet of blueberries	12 canned grapefruit segments 7 slices tinned peaches 4 halves tinned pears  <b>4 tablespoons of:</b> fruit cocktail fruit pie filling mandarins plums strawberries lychees mango <b>3 tablespoons of:</b> gooseberries guavas papaya rhubarb <b>Stewed fruit</b> <b>4 tablespoons of:</b> apple blackberries gooseberries <b>3 tablespoons of:</b> plums rhubarb

300 ml unsweetened pineapple juice  
 300 ml unsweetened grape juice  
 200 ml unsweetened cranberry juice  
 150 ml apple juice  
 100 ml orange juice  
 80 ml pomegranate juice  
 80 ml passion fruit juice  
 80 ml tomato juice  
 Avoid ready-made fruit smoothies

The following fruits are very high in potassium and can be included, however the portion size is small.

1 small apricot ½ small banana 2 small slices of mango ½ naseberry (sapodilla) ¼ avocado ½ slice papaya 1 small slice galia melon (100 g) 1 medium slice cantaloupe or honeydew melon (75 g)	1 dried apricot 2 raw dates 1 dried date 1 small dried fig 1½ tbsp canned prunes 1 tsp raisins
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The following nuts and seeds are equivalent to one portion.

10 almonds 7 brazil nuts 20 cashew nuts 3 chestnuts 20 g peanut butter 1 tbsp sunflower seeds 1 tbsp tahini	20 g hazelnuts 18 macadamia nuts 20 peanuts 5 pecan nuts 15 pistachio nuts 1 tbsp sesame seeds 6 walnut halves
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**Please avoid starfruit**

## Snacks and desserts

This group of foods contain a lot of fat and sugar and should therefore only be eaten occasionally. Try to choose lower sugar options whenever possible.

Low Potassium Foods	High Potassium Foods
<b>Cakes</b> Plain sponge, fairy cakes, Madeira cake and plain scones	Cakes containing dried fruit, nuts, chocolate, marzipan, coconut, cassava pone and coconut ice (sugar cake)
<b>Biscuits</b> Plain e.g. rich tea, digestive and Morning Coffee	Biscuits with chocolate, nuts, dried fruit and coconut
<b>Puddings</b> A scoop of plain ice cream, fruit (from your allowance) and cream, reduced sugar milk pudding or yoghurt (from your allowance) and sugar free jelly  The following puddings would not normally be recommended for patients with diabetes but may be taken on special occasions: Apple or plum crumble, apple pie and sponge pudding	Puddings containing dried fruit, nuts, chocolate, marzipan and coconut Sweet potato pudding  Remember to include stewed, fresh or tinned fruit within your fruit allowance

Low Potassium Foods	High Potassium Foods
<p><b>Sweets and chocolate</b>            Sugar free mints or chewing gum</p> <p>A small portion of chocolate can be included once a week e.g. two finger Kit Kat, Milky Way (26 g), single finger Twix and Blue Riband.</p> <p><b>Try to have it after a meal</b></p>	<p>Liquorice, toffees, fudge, chocolate bars e.g. Mars, Dairy Milk, Snickers, Bounty and carob            Fruit gums            Sev</p>
<p><b>Savoury snacks</b>  <b>Remember these are high in salt</b>            Tortillas, Tuc, Ritz, Krackerwheat, popcorn, plain breadsticks and pretzels  <b>Maize and wheat based crisps are lower potassium options. However, it is important to read the products ingredient list to ensure they do not contain potassium chloride</b>            Olives in oil            Mayonnaise dips, sour cream with chives and hummus</p>	<p>Potato based snacks: potato crisps, Quavers, Bombay mix, Twiglets, Monster Munch and Frazzles</p> <p>Tomato salsa and guacamole</p>

## Drinks

If you are provided with a fluid allowance, all drinks should be counted within that allowance. Remember if you add milk to tea or coffee; to use it from your daily allowance.

Low Potassium Drinks	High Potassium Drinks
<p><b>Soft drinks</b> No-added sugar fruit squash, 'diet', 'light' or 'zero' fizzy drinks e.g. lemonade, Tango and Fanta <b>Full sugar fizzy drinks such as Lucozade and cola drinks can still be taken to treat hypoglycaemia</b> Mixers such as slimline tonic water, diet bitter lemon, diet dry ginger and soda water</p>	<p>To include fruit juice see fruit portion information (page 13) High Juice squash, blackcurrant squash and coconut containing drinks</p>
<p><b>Alcohol</b> Dry white wine, sparkling wine, lager, bitter (mild), gin, brandy, vodka, whisky, rum, Baileys and Vermouth <b>Try to keep your alcohol intake to within the recommended limits</b></p>	<p>Stout, strong ale, cider, barley wine, liqueurs, red wine, sweet white wine, sweet sherry and alcopops</p>
<p><b>Hot beverages</b> Tea, fruit teas, green tea Limit to 1 cup of coffee a day Camp coffee and Chai (made with milk from daily allowance)</p>	<p>Horlicks, Ovaltine, Bournvita, cocoa, drinking chocolate, Bovril and Oxo</p>
<p><b>Nutritional supplements</b> Appropriate supplements will be prescribed if required</p>	<p>Nourishment, Nutriment, Complan and Build Up</p>

## Herbs and spices

Herbs and spices will also add to your overall potassium intake. The measurements are given as per person serving i.e. multiply the recommended amount by the number of portions the dish is estimated to provide.

*Example: 2 teaspoons of garam masala can be added to a curry to feed a family of four*

Low (use freely)	Medium (½ tsp)	High (¼ tsp)
Bay leaf	Anise seeds	Amchoor powder
Black pepper	Cayenne pepper	Chilli powder
Cardamom	Cumin seeds	Coconut powder
(ground)	Curry powder	Coriander powder
Cinnamon	Garam masala	Fennel seeds
(ground)	Garlic powder	Groundnuts
Cloves (dried)	Mint (dried)	Molasses
Coriander leaves	Parsley (fresh)	Paprika
(fresh)	Poppy seeds	Parsley (dried)
Fenugreek seeds	Red chilli	Turmeric powder
Garlic (fresh)		
Ginger (fresh / dried)		
Green chilli		
Lemon		
Mint (fresh)		
Mustard seeds		
Nutmeg (ground)		
Rose water		
Saffron		
Tamarind pulp		
Vinegar		
White pepper		

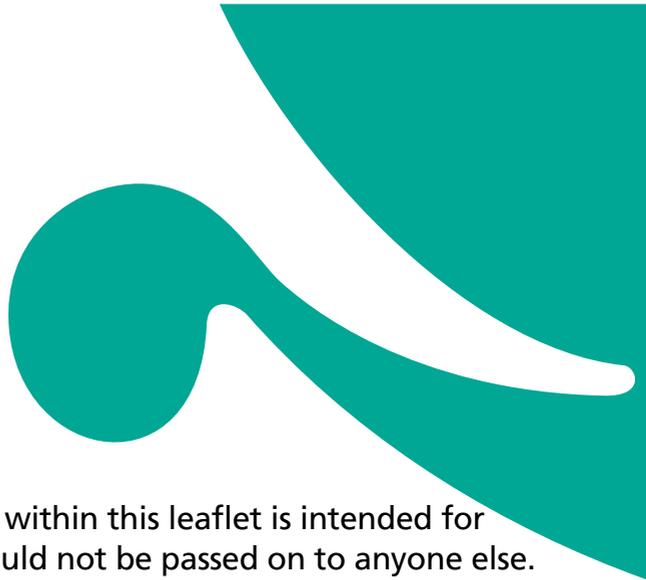
**tsp = tablespoon**

## Miscellaneous

Low Potassium Foods	High Potassium Foods
<p><b>Spreads and preserves</b> Thinly spread jam, honey or marmalade, or try using reduced sugar jam or marmalade</p>	<p>Black treacle, chocolate spread, peanut butter and marmite</p>
<p><b>Sauces and pickles*</b> Vinegar, tomato sauce, brown sauce, mayonnaise, salad cream, tartar sauce, horseradish sauce, soy sauce, mustard and piccalilli</p> <p><b>* Use these sparingly as they are high in salt</b></p> <p>Pickles and chutneys are often high in potassium therefore use sparingly e.g. 1 teaspoon</p>	<p>Tomato puree</p> <p>Avoid salt substitutes e.g. LoSalt and supermarket own brands</p>
<p><b>Soup</b> Homemade soup (recipes are available from the dietitian)</p>	<p>Tinned and packet soups should be avoided as they are high in salt</p>

*Information contained in this booklet is correct at time of printing. Manufacturers are continually changing the ingredients of their products and altering portion sizes. These changes may affect the potassium content of these foods.*





The information contained within this leaflet is intended for your specific needs and should not be passed on to anyone else.

If you have any suggestions or comments regarding this leaflet please let your dietitian know:

Dietitian .....

Contact number .....



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*Your views matter*



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