

Reducing Potassium in Chronic Kidney Disease

For people eating a
plant-based, vegetarian or vegan diet



Introduction

This leaflet is aimed at people who normally (usually) eat a plant-based, vegan or vegetarian diet **and have been advised by their healthcare team to reduce their potassium levels.**

Potassium can build up in your body if your kidneys are not working well. In addition, some people may be taking medicines which can increase potassium as a side effect. There are several ways to help prevent and manage high levels of potassium in your blood, this includes reducing the amount of potassium in your diet.

Why do I need to lower my potassium?

Potassium is a mineral found in many foods and drinks. When it is absorbed into the blood it helps to keep your muscles and heart working properly. Your kidneys help to control the amount of potassium in your blood. Too much potassium, or too little potassium can be dangerous for the heart.

Normal blood potassium is 3.5-5.5mmol/l (3.5 – 6mmol/l, if receiving haemodialysis)



What causes potassium levels to rise?

There can be many causes of a high potassium level in the blood. It is not just about the foods you eat. Constipation, high blood glucose (sugars), some medications and not enough dialysis can all contribute to an increase in your potassium levels. It is worth discussing all these causes with your dietitian or doctor before making changes to your diet.

It may also be necessary to make changes to the foods and drinks that you eat to reduce the potassium content of your diet.

This leaflet will go through the steps you can take to lower your blood potassium levels whilst continuing to enjoy a healthy, balanced plant based, vegan or vegetarian diet.

Steps to lowering potassium level

There are 6 steps you can take to lower your potassium level, and each step is explained in more detail in this leaflet.

The 6 steps are as follows:

Step 1

Discuss your medication and dialysis (if receiving) with your healthcare team.



Step 2

Treat constipation and maintain healthy bowel habits.



Step 3

Avoid high blood glucose levels (if you have diabetes).



Step 4

Avoid potassium additives.



Step 5

Cooking methods; boil potatoes, pulses and vegetables where possible.



Step 6

Limit high potassium foods and choose foods low in potassium.



Step 1

Dialysis and medications

If you have dialysis the most important way to keep your potassium levels safe is to always attend or complete your dialysis as recommended by your healthcare team.

Always take any medications you have been given to help with potassium. You may be prescribed sodium bicarbonate, this medicine can help to lower your blood potassium levels.

Step 2

Healthy Bowels

Regular bowel movements can prevent potassium building up in the blood. If you regularly suffer from constipation, you may benefit from eating more fibre or discussing a fibre supplement with your dietitian. Fibre is found in fruit, vegetables, wholegrains, beans, pulses, lentils, nuts and seeds. Try to eat the recommended 5 portions of fruit and vegetables per day, one portion being a medium sized whole fruit or 80g. *See step 6 for further guidance.*



Step 3

Blood sugar control (for those with diabetes)

If you have diabetes and your blood glucose levels are regularly high, then this can cause high levels of potassium in the blood. Your dietitian or diabetes team can provide more advice on this.

Step 4



The main food additives to avoid are:

Potassium chloride is sometimes used to replace salt in a food item. Avoid salt substitutes such as SoLo®, Lo-Salt®.

Check the ingredients of savoury snacks, ready meals or packet foods for Potassium Chloride (E508), Potassium Citrates (E332), and Potassium Phosphate (E340).

You may be able to find a similar product which does not contain added potassium.

Step 5



Cooking method

Potatoes and vegetables: Boiling potatoes and vegetables in a large amount of water helps lower potassium content. Steaming, microwaving, air frying or pressure cooking, doesn't lower the potassium content. If you can, peel and cut into small pieces before boiling, as this helps remove more potassium. Do not use the cooking water for stocks, sauces or curries.

Once they have been boiled, you can roast, fry, air fry, or microwave potatoes, and vegetables. There is no need to soak, double boil or over boil.

Pulses: Soak dried pulses for up to 12 hours. Use a large amount of water. Discard and refresh the water before cooking. Canned pulses are lower in potassium than dried. Remember to drain and rinse before use.



Step 6



If your potassium remains high, limit high potassium foods and choose foods low in potassium

'If you've tried steps 1-5 and your blood potassium remains high, you may need to limit foods that are high in potassium. Try eating them less often and in smaller amounts. You may be able to replace some foods with lower potassium alternatives. The table below provides guidance on how to do this.

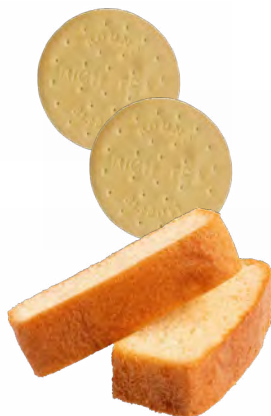
Please note: This is not a full list – please discuss other foods that you eat with your dietitian.

Food group

* Low potassium

High potassium

Snacks:



Corn, rice, wheat or maize based snacks
Popcorn
Boiled or jelly sweets
marshmallows
mint
Plain biscuits and cakes such as rich tea
digestives
shortbread
custard creams
sponge cake
madeira cake
angel cake

Potato, vegetable or lentil-based crisps and snacks

Chocolate
Fudge
Nuts



Cakes or biscuits with a lot of dried fruit and/or nuts or chocolate

Snacks made with gram or chickpea flour e.g. sev, gathia, chevra

Bombay mix
Dried fruit



***Some snacks may contain potassium additives, which are best avoided, see above.**

Drinks:



Tea
Fizzy drinks
Squash

Spirits are lower in potassium than other alcoholic drinks

Coffee
Fruit juice
Smoothies
Hot chocolate
Malted milk drinks
Milk shake
Coconut water
Wine
Beer, cider
Sherry

Alcohol: There is no safe level of drinking. If you do consume alcohol, limit to no more than 14 units per week.

Salt substitutes:



Garlic
Chilli
Herbs
Pepper

Salt substitutes e.g. Lo-Salt®

Food group

Low potassium

High potassium

Ultra Processed foods:

Soup (tinned and packet)
Pot and packet noodles
Crisps

Carbohydrates (Starchy foods):

Boiled potatoes
Mashed potatoes
Tinned potatoes
Potatoes that have been boiled before roasting, airfrying or frying

Potatoes, taro, cassava, plantain, yam which have not been boiled

Jacket or baked potatoes

Boiled cassava, yam, plantain, taro or sweet potato

Oven, microwave or shop-bought chips

Limit potato and starchy vegetables to maximum 1 portion (150g) per day

Hash browns, potato waffles, frozen chips, roast potatoes and potato wedges

Pasta, rice, noodles, millet, buckwheat, bulgur wheat, couscous

Gram/chickpea/bean flour/soya flour and products made with these such as poppadoms and bhajis








Quinoa limited to 100g cooked per day

Breakfast cereals containing dried fruit, nuts or chocolate

Bread, crackers, crisp bread

Chapatti, plain naan.

Wheat biscuits, porridge, shredded wheat or rice or corn-based cereals

Food group	Low potassium 	High potassium 
<p>Dairy and dairy alternatives:</p>  	<p>Crème fraiche Cream</p> <p>Cheese - all types</p> <p>Limit milk, milk products and plant-based milk alternatives to a total of ½ pint per day (300ml), this includes: Yogurt</p> <p>Milk puddings (eg rice pudding) Custard</p>	<p>Condensed milk Evaporated milk Milk powder</p> <p>Coconut milk (tinned for cooking) Creamers eg Coffee Mate, Coffee Compliment</p> 
<p>Protein food / pulses</p>    	<p>Beans, lentils and chickpeas Canned and drained beans and pulses are often lower in potassium than dried</p> <p>Tofu and tempeh</p> <p>Eggs</p> <p>Paneer</p> <p>Seitan</p> <p>Nuts and seeds up to 30g a day Quorn</p> <p>Check plant-based meat alternatives for potassium additives</p>	<p>Soya mince</p> 

Food group

Low potassium

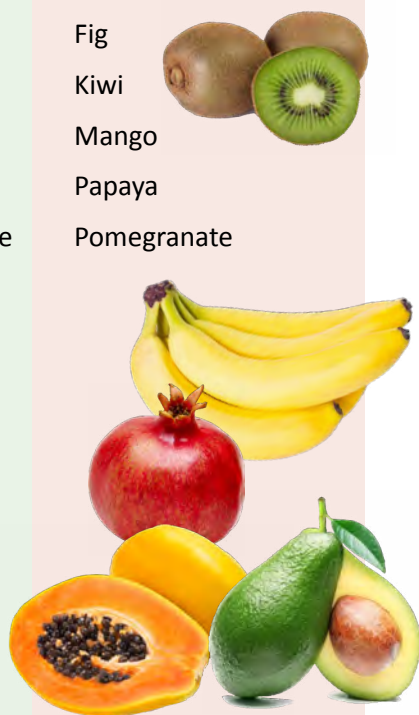
High potassium

Fruit:



Apple
Blueberries
Galia melon
Grapes
Honeydew
Nectarine
Peach
Pear
Plum
Satsuma or clementine
Strawberries
Watermelon
Tinned fruit, drained

Apricots
Avocado
Bananas
Cantaloupe Melon
Coconut
Fig
Kiwi
Mango
Papaya
Pomegranate



Dried fruit (including raisins, currants, apricots, prunes)



You may be advised to limit the portion sizes of some fruits, even some of the lower potassium fruits.

Food group

Low potassium

High potassium

Vegetables:

Tomatoes limit to **1 medium sized tomato a day** or **400g tin of chopped tomato** could be used in a recipe **to serve 4 people**

Aubergine
Beansprouts
Broccoli
Cabbage
Carrots
Cucumber
Green beans
Green salad
Methi
Onions
Peas
Peppers
Sweetcorn canned

Beetroot
Brussels Sprouts
Callaloo
Drumstick pods/leaves
Fennel
Guar
Karela
Mushrooms
Okra
Parsnips
Passata
Spinach
Sundried tomatoes
Sweetcorn on the cob
Tomato puree



Helpful resources and Further information



Kidney Kitchen:

See Kidney Care UK, Kidney Kitchen for a range of suitable recipes supported by instructional videos.

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



Sticky tofu kebabs with rice



Meringue with mango and lime cream



Stuffed scary pepper faces



Vegetable laksa with sugar snap peas and pak choi



Online recipe cards

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For people eating a
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My dietitian is:

Contact details:

