

A Guide to a Low Potassium Diet Incorporating South Asian Foods

Approved by

BDA The Association
of UK Dietitians



Renal Nutrition

Specialist Group



Introduction

This diet sheet has been developed by the Renal Nutrition Group, of the British Dietetic Association. The Renal Nutrition Group (RNG) is the leading source of expertise for renal nutrition advice in the UK and is made up from specialist expert renal dietitians.

What is potassium?

Potassium is a mineral that is found naturally in many foods. Some potassium is needed as part of a healthy diet. It is required to ensure healthy working muscles, including the heart.

**Your potassium level should be 3.5 – 5.5mmol/l
(3.5 – 6.0mmol/l if on haemodialysis)**

Why do I need to control the amount of potassium in my blood?

Too much potassium in your blood can be dangerous as it affects the rhythm of your heart and can cause your heart to stop beating if levels are very high.

Why is the level of potassium in my blood too high?

The level of potassium in your blood is controlled by the kidneys. When your kidneys are not working properly, the potassium level in your blood may rise. It is quite common for people with kidney problems to have too much potassium in their blood.

Can I tell if my potassium is high?

There are usually no symptoms to indicate if your potassium is high and the most reliable way to tell is by having a blood test.

What should I do to control my blood potassium levels?

You can control your blood potassium levels by:

- Following a low potassium diet
- Ensuring regular bowel habit as some potassium is removed this way
- If you have diabetes, ensure good blood sugar control
- If you are on dialysis, keeping to your scheduled sessions and times

How do I follow a low potassium diet?

This booklet provides information on foods high in potassium, and those that need to be limited. It offers lower potassium alternatives to keep your blood potassium levels within range. Your dietitian will advise you on the changes that you need to make.

Will the low potassium diet include healthy eating advice?

This resource only focuses on a low potassium diet. We aim to include low potassium foods that are suitable swaps for foods commonly eaten, e.g. doughnut can replace fruit cake. For this reason, some of the foods in the low potassium section may be high in sugar, salt or fat. Please take into consideration any other diet that you may be following when making choices from the suitable/ low potassium columns. If there are any questions, please discuss with your renal dietitian.

Carbohydrate (Starchy foods)



Carbohydrates, also known as starchy foods, provide energy, vitamins and fibre. You should try to include something starchy at each meal to provide you with energy.

Examples of carbohydrates include:

- Potato, sweet potato, cassava and yam
- Rice, pasta and other grains, for example, semolina, bulgar wheat, barley, sago
- Breakfast cereals, upma, pawa
- Bread, chapatti, paratha, puri and hoppers

Starchy root vegetables

Some starchy root vegetables like potato, sweet potato, cassava and yam are particularly high in potassium and need to be limited in the diet. Choose up to one boiled serving per day, see table below.

Other starchy foods based on wheat or rice are lower in potassium and are good alternatives. If you do not usually eat high potassium starchy root vegetables, you may be able to have more potassium foods elsewhere in your diet.

Choose up to one boiled 150g serving per day	Limit
Cassava	Baked/fried/roasted/steamed/pressure cooked cassava, taro, green banana, potato, sweet potato, yam
Colacasia/ taro	
Green banana	Frozen/oven/microwave/ shop-bought chips
Potato	Instant mashed potato varieties
Sweet potato	Manufactured potato products, e.g. hash browns, potato waffles, wedges, croquettes, fritters
Yam	

Cooking instructions for starchy root vegetables

- The starchy root vegetables in the table above should be **boiled** in water to lower their potassium content. Discard the water after boiling and do **not** use for stock, soups, dhals and sauces.
- The skins on potatoes provide a good source of fibre and B vitamins. However, if your potassium levels are often high, peel your potatoes and cut into small pieces before boiling, as this helps to remove more potassium.
- Baking, frying, roasting and steaming starchy root vegetables does **not** reduce potassium. Pre-boiling helps to remove some potassium before cooking in this way.
- Microwaving is only suitable for reheating starchy root vegetables that have previously been boiled.

Rice, pasta, noodles and other grains

- Wheat, pasta and noodles are low in potassium and can be eaten freely.
- All varieties of rice are low in potassium, for example flaked/ puffed/ red rice.
- Some examples of low potassium grains include; **boiled** barley, bulgar wheat, sago & semolina.
- Grains such as quinoa, bajra, jowar and ragi have a higher potassium content, so use sparingly.
- Soya flour and soya beans should be avoided due to very high potassium levels.

Breakfast cereals

- Cereals made from wheat, oats, rice and corn are lower in potassium and can be eaten regularly.
- Cereals containing bran/ dried fruits/nuts/chocolate are higher in potassium and should be limited.
- Milk and yoghurt added to cereals should be counted within your dairy allowance (see dairy section).
- If you have diabetes, choose lower sugar breakfast cereals.

Breads

- Bread, rolls, pittas, wraps and crackers without nuts and seeds are low in potassium and can be eaten regularly.
- Breads containing nuts/ dried fruits/chocolate/coconut/seeds are high in potassium and should be limited such as peshwari naan and pittu.
- Indian breads such as, chapatti, thepla, puri, idli, dosa and hoppers are low in potassium.
- Stuffed vegetable parathas and masala dosas with potato fillings should be limited due to their higher potassium content.

Fruit and Vegetables

Fruit and vegetables are a good source of vitamins, minerals and fibre and form a large part of a healthy balanced diet. The potassium content of all fruit and vegetables varies and these are listed in the table below as low, medium, high and very high.

- Aim for a total of 4-5 portions of fruit, vegetables or salad daily or as advised by your dietitian.
- Choose most of your fruit and vegetables from the low or medium columns. If choosing from the high column, you may need to reduce the number of fruit and vegetable portions you have that day.
- Fruit and vegetables listed as being very high in potassium should be avoided.
- All vegetables should be boiled, rather than steamed or microwaved. Boiling allows some of the potassium to come out into the water which should then be thrown away, **not** used for sauces or gravies.
- Vegetables should also be boiled and drained before adding to curries.
- Canned vegetables and fruit should be drained before cooking or eating.

Vegetables and Salad

A portion of vegetables is 80g and boiled unless stated otherwise in the table below. If one portion of vegetable is not taken, then you can swap for a portion of fruit or a handful of salad.



Fruit and Vegetables

Low

Beetroot (pickled) 4 slices
Cabbage 2 tbsp
Cauliflower 3 florets
Cucumber
Fenugreek leaves
Karela (canned)
Kantola (canned)
Lettuce (raw) handful
Marrow
Mixed vegetables frozen
Okra (canned)
Olives (green) 10 -15
Onion (raw) 1 small
Pumpkin 2tbsp
Radish (raw) 3
Runner beans
Spring onions (raw) 3
Sugar snap peas 2 tbsp
Swede 2 tbsp
Tindora/Ivy gourd (fried)
Watercress (raw) 40g

Medium

Aubergine (fried/ baked) ¼
Broad beans 3 tbsp
Broccoli 2 medium florets
Butternut squash
Cabbage (raw) 2 tbsp
Carrots 1 medium
Celery (raw) 1 stick
Courgette
Curly kale
Gourd – ash, bottle/ dhudi, ridge/ turya
Mangetout (raw/fried) 2 tbsp
Peas 2 tbsp
Pepper (raw) ½
Sweetcorn(canned/ fresh /frozen) 3 tbsp
Tomato (raw) 1 medium
Tomatoes ¼ of a 400g can
Turnip

High

Asparagus (fried) 3 spears
Beetroot 1 small
Brussel sprouts
Drumstick leaves
Green/ French beans 3 tbsp
Karela/ Bitter gourd
Leek (raw) ½ a stalk
Mushrooms (raw/fried) 6 medium
Parsnip 2 tbsp
Spinach (not the baby variety)

tbsp = tablespoon

Very High

Avocado
Artichoke
Betel leaves
Kantola
Karela (fried)
Okra (stir-fried)
Patra leaves
Spinach, baby variety (boiled/raw)
Tomato puree

Tomato is used as a base in many South Asian curries. Canned plum tomatoes that are drained are lower in potassium than fresh tomatoes. It is recommended that you use canned whole plum tomatoes and drain off the juice before adding to curries, and avoid tomato puree.

Fruit and Vegetables



Fruit

A portion is based on 80g unless stated otherwise in the table below. If one portion of fruit is not taken, then you can swap for a portion of vegetables or a handful of salad. Canned fruit should be **drained** before eating. As a general rule, **dried fruit, fruit or vegetable juices and smoothies** should be **avoided** as they are concentrated sources of potassium.

- Starfruit can be toxic for patients with kidney disease, please avoid.
- Grapefruit can interfere with some medication, please check with your doctor or pharmacist.

Low	Medium	High	Very High
Apple 1 small	Blackberries 16	Apricots 2	Banana
Blueberries	Cherries 20	Custard apple	Coconut
Clementine 1	Grapefruit ½	½ medium	Dates
Fig 1	Grapes 16	Jack fruit	Gojiberries
Fruit pie filling (various) ¼ of 410g can	Guava 1 small	Nectarine 1 medium	Prunes
Fruit cocktail 1/3 of 415g can	Kiwi 1	Orange 1 medium	Rhubarb stewed
Lemon/ lime 1	Loquats 6	Plums 2 small	
Mandarin ½ of 298g can	Lychees 5	Pomegranate ½	
Passion fruit 2	Mango 2 slices	Sharon fruit / persimmon 1	
Peach 1 small	Melon ½ slice		
Pineapple canned 2 rings/12 chunks	Papaya ½ slice		
Satsuma 1	Pear 1 small		
Watermelon ½ slice	Pineapple 1 slice		
	Raspberries 16		
	Sapodilla / chikoo 1		
	Strawberries 7		

Protein



Protein is necessary for growth and repair of muscle. Your dietitian will suggest the amount of protein you require daily.

General advice on protein foods:

- Choose lean meat, chicken, fish or eggs.
- Cured, smoked, salted, tinned and processed meats and fish are high in salt. These foods should be kept to a minimum.
- A portion of beans, pulses, dhal, paneer, Quorn, tofu or soya products can replace a portion of meat, chicken, fish or eggs. Canned and drained pulses and beans tend to be lower in potassium than dried varieties.
- Nuts and seeds are high in potassium and may need to be restricted. If you need to use small amounts in cooking, please discuss with your dietitian.
- Lentil flours can be used as an ingredient in main dishes.

Soups



Soups

Packet and tinned soups are not encouraged due to their high salt and potassium content, and they can displace more nutritious foods in the diet. Additionally, if you are on a fluid restriction, they would also count towards your daily fluid allowance.

Please do not consume herbal/ayurvedic soups or tablets as their side effects are not known in patients with kidney disease.

Dairy Products and Dairy Alternatives



Milk and dairy products play an important role within the diet as they contain protein and essential nutrients such as calcium, that is needed for healthy bones. Dairy alternatives such as plant and grain based milks are a lower source of protein.

- Milk is high in potassium and therefore should be limited.
- A recommended allowance of up to 300ml (1/2 pint) milk can be taken daily; this includes cow's, sheep's and goat's milk.
- Milk in cereals, milky puddings, yoghurts, yoghurt drinks, raita, lassi, buttermilk, milk-based probiotics and milk-based sauces should be counted within this allowance.
- Most rice and oat milks are low in potassium.
- Milk made from nuts containing less than 10% nut, for example almond milk, is low in potassium.
- Unsweetened soya milk contains approximately half the amount of potassium compared to dairy milk.
- Milkshakes, dried milk powder, evaporated milk, condensed milk, coconut milk and creamed coconut are all high in potassium and therefore should be restricted.
- All types of cream and cheese and paneer can be eaten as usual on a low potassium diet.

Snacks



Some snacks can be high in energy (calories), sugar, fat and salt, such as confectionery, cakes and crisps. Therefore they should make up only a small part of your overall diet. However, if you have a poor appetite or are losing body weight, high calorie snacks can be helpful in maintaining or improving your weight. Your dietitian will be able to guide you in making the best snack choices.

Savoury Snacks

- Potato and vegetable crisps are naturally high in potassium and should be avoided.
- Crisps made with lentil /soya/quinoa flour are also high in potassium.
- Crisps/snacks made from corn, wheat or rice tend to be lower in potassium.
- Some potato and non-potato crisp varieties have potassium chloride added as a salt substitute. If potassium chloride appears on the ingredients list please avoid.

South Asian Snacks

Some South Asian snacks serve as mini meals and are an important part of the Asian diet and culture. As with all food items, the potassium content varies and so they are listed in the table as low, medium and high. In accordance with your weight, dietary intake and potassium levels, your dietitian will recommend which snacks are best for you to consume.

Snacks

Low

Breadsticks 3
Corn fritter 1
Cream crackers 2
Dhokla 2 squares
Masur 3 tbsp
Mumra (puffed rice) 4 tbsp
Papdi 1
Pawa (rice flakes) ½ bowl
Popcorn ½ bowl
Tortilla chips 1 small packet
Upma ½ bowl
Vermicelli (roasted) 4 tbsp

Medium

Chakri 1
Farsi puri 1
Meat/veg samosa 1
Papadum/papad 1
Papdi nu lot (rice flour dumpling)

tbsp = tablespoon

High

Bhajia
Bombay mix
Banana/plantain/cassava crisps
Cassava chips (mogo)
Dal dhokli
Fried peas
Gathiya/sev
Lentil cutlet
Pakora
Patra
Potato/lentil/soya/quinoa crisps
Nuts
Roasted channa
Soya beans
Whole green gram



Sweet Snacks

Healthy eating advice includes reducing your sugar consumption, and choosing low sugar or sugar free varieties where possible. South Asian sweets can be high in potassium, so as a general rule, avoid those that contain evaporated or condensed milk/chocolate/nuts/dried fruit/dried milk powder or coconut milk; and choose or make your own using lower potassium ingredients.

If you have diabetes, it is recommended you limit your intake of sugary foods.

In accordance with your dietary intake, your dietitian will guide you as to which snacks are safe for you to consume.

Snacks

Cakes/Desserts - Low

Cake (plain, cream) 1 slice

Doughnut 1

Fruit pie 1 serving

Jelly

Meringue

Sweets - Low

Boiled/ chewy sweets, fruit pastilles 10

Jellies, marshmallows, mints, sherbet

Sweet popcorn 1/2 bowl

Turkish delight

South Asian sweets - Low

Asmi

Gulab jamun 1

Jalebi 2

Jelly halva

Siro/ karah 70g

Shandesh 70g

Zarda 70g

Biscuits - Low

Biscuits (plain wafer, jam or cream) 2

Milky puddings (as part of milk allowance) - Low

Custard, ice cream, yoghurt, kheer, rasmalai, semiyan, payasam

Cakes/Desserts - High

Cakes containing chocolate, coconut, nuts, dried fruits

Flapjack

Trifle

Sweets - High

Sweets containing chocolate, nuts, coconut, dried fruits

Chocolate, all varieties

Liquorice

Nut brittle

Sesame snacks

South Asian sweets - High

Aggala

Barfi

Biscuits - High

Biscuits containing nuts, chocolate, dried fruits

Milky puddings (as part of milk allowance) - High

Milky puddings made with dried, evaporated or condensed milk, chocolate, coconut and dried fruits

Drinks



If you are following a fluid restriction, ensure that you count your entire fluid intake as part of your daily allowance.

Please consult your doctor if you are unsure about your fluid allowance.

Non-alcoholic drinks

Low

Barley water

Fizzy drinks

Fruit squash

Tonic water

Teas, all varieties

High

Coconut water

Coffee

Drinking chocolate

Fruit and vegetable juices/ smoothies

Malted drink powder with milk e.g. Horlicks, Ovaltine, Milo

Milkshake

Alcohol

Low

Liqueurs

Shandy

Sherry

Spirits

Vermouth

High

Beer, Bitter

Cider

Lager

Guinness

Port

Stout

Wine

Miscellaneous

Some common miscellaneous foods are listed here. If you use these regularly in cooking, or consume large quantities, please seek advice from your dietitian.

Low

Apple sauce

Gravy granules/ stock cube

Herbs, spices

Honey/ syrups

Jam/ preserves/ lemon curd

Mint sauce

Mustard/ mayonnaise/ salad cream

Pickles/ chutney

Sandwich pickle

Stuffing (without dried fruit)

Vinegar

High

Black treacle

Brown sauce

Chocolate spreads

Instant soup powders

Nut butters

Pesto

Tahini

Tamarind paste

Tomato ketchup/ puree

Yeast extracts e.g. Marmite, Vegemite

Herbs, curry spices, coriander, chilli, garlic and ginger can be used as required.

Processed foods are high in salt and should be limited, for example, soya sauce, stock cubes and MSG (Mono Sodium Glutamate).

Salt substitutes e.g. Lo-Salt, So-Lo, Low Sodium Salt contain potassium in place of sodium.

It is important that all salt substitutes are avoided.

If you need further information on a low potassium diet, please contact your dietitian.

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