

## Low potassium diet

# Information for patients, parents and carers





caring about children

## When the kidneys are not working as well as they should the level of potassium in the blood can build up.

This can be dangerous as potassium can affect the way the heart beats. For this reason foods with high potassium content should be avoided. Fruit, vegetables and potatoes are the richest sources of potassium in the diet but other foods also contain potassium.

## Five key points to remember when following a low potassium diet

- Limit to five servings a day of fruit/vegetables (try to choose from the **GREEN** section).
- Boil all vegetables, drain thoroughly and discard all vegetable water (do not use the water in soups or gravy).
- Any potatoes must be peeled, cut and double boiled (if possible) and the cooking water discarded. Try to limit frying, cooking in a tagine or using a pressure cooker as these methods do not reduce the potassium content.
- Limit milk to 200mls / day (unless otherwise stated).
- Avoid salt substitutes (e.g. LoSalt) as these contain potassium.

Choosing low potassium foods can help lower your blood potassium levels. The foods in this booklet have been colour coded to help you choose lower potassium containing foods and how often you can have them.

- Foods high in potassium avoid or limit to once a week.
- Foods moderate in potassium can have twice a week or as advised within the list.
- Foods lower in potassium can have daily.

## Meat, fish and alternatives

High	Moderate	Low (Approx. 50g)
<ul> <li>Mackerel (160g)</li> <li>Salmon (200g)</li> <li>Fish cakes</li> <li>Fish tinned in tomato sauce</li> </ul>	<ul> <li>Tomato based meals (e.g. lasagne, spaghetti bolognaise, curry – tomato based)</li> <li>Lamb / pork chops</li> <li>Grilled steak</li> <li>Lentils, chickpeas, kidney beans and other pulses can be eaten daily as an alternative to meat</li> </ul>	<ul> <li>Beef, lamb, pork, chicken, turkey, duck (roasted)</li> <li>Chicken / turkey in breadcrumbs e.g. chicken nuggets or turkey dinosaurs x3</li> <li>Meat or chicken pie (Homemade)</li> <li>Haddock fillet</li> <li>Shepherd's pie</li> <li>Stew or casserole</li> <li>Sausages*, sausage rolls*</li> <li>Burgers*, ham*, bacon*, pepperoni*, salami*</li> <li>Quorn, tofu, other meat substitutes</li> <li>Curry (non tomato based)</li> <li>* See additional information at end of the leaflet</li> </ul>

## **Dairy foods**

High	Moderate	Low (Approx. 70g)
<ul> <li>Condensed milk</li> <li>Evaporated milk</li> <li>Dried Skimmed milk</li> <li>Milk Powders</li> </ul>	<ul> <li>Milk based desserts (60g) e.g. custard, rice pudding, mousse, ice cream</li> <li>1 x 120g pot of yogurt or 2 x 60g pots of fromage frais</li> <li>Milk or Milk Alternatives - no more than 200mls (1/3 pint) daily (or 100mls if also restricting phosphate)</li> </ul>	<ul> <li>Cream (double / single)</li> <li>Soft cheese - full fat</li> <li>Cottage cheese</li> <li>Cream cheese</li> <li>Crème fraiche</li> <li>Eggs</li> </ul>

### Vegetables

All vegetables contain potassium; however some contain more than others. It is important to continue to eat these as part of a healthy balanced diet, however choosing lower potassium options and limiting to 2-3 small portions a day will help control your potassium levels (a portion is 1-2 tablespoons or a small bowl of green salad).

## **Vegetables (cont)**

High	Moderate	Low (Approx. 70g)
<ul> <li>Tomatoes (fresh and canned), passata, tomato puree, tomato based sauces e.g. pasta sauce</li> <li>Mushrooms, spinach, beetroot, Brussels sprouts, asparagus, butternut squash, celeriac, celery, okra, plantain, yam, parsnip</li> <li>Baked beans, kidney beans, butter beans, tinned vegetables</li> <li>Tofu (steamed / fried)</li> <li>Broad beans</li> <li>Plantain</li> <li>Sweet potato</li> <li>Yam</li> </ul>	<ul> <li>Fresh / frozen vegetables. Limit to 1-2 portions per day from the following list:         <ul> <li>Aubergine, cauliflower, green beans, broccoli, cabbage (35g), courgette, sweetcorn, peas (frozen and mushy), fried onion, gherkins, leeks, radishes, swede, turnip, watercress</li> </ul> </li> </ul>	<ul> <li>Fresh / frozen vegetables:         <ul> <li>Carrots, swede, leeks, frozen mix of carrots, peas and sweetcorn, green &amp; red peppers, cucumber (5 slices), iceberg lettuce, raw onions, gherkins, chickpeas, celery (1/2 stick), pumpkin, beansprouts</li> </ul> </li> <li>Green pesto (1/4 jar)</li> <li>Hummus (50g)</li> </ul>

## Fruit

All fruits contain potassium; however some contain more than others. It is important to continue to eat these as part of a healthy balanced diet, however choosing lower potassium options and limiting to two small portions a day will help control your potassium levels.

High	Moderate	Low (Approx. 70g)
<ul> <li>Banana, avocado, rhubarb, melon (honeydew, galia, cantaloupe, water melon), large orange, damsons, blackcurrants, gooseberries, star fruit<sup>†</sup>, grapefruit<sup>†,</sup> mango, kiwi, peaches</li> <li>Dried fruit e.g. currants, apricots, figs, dates, prunes</li> <li>Sweet mincemeat</li> <li>Fruit juice</li> </ul>	<ul> <li>Fresh fruit: apricot, plum, 10 x grapes, 5 x strawberries, medium orange, one small bowl of blueberries, lime, lemon, passion fruit</li> <li>Raisins / sultanas (1 small box)</li> <li>Peach (canned in syrup)</li> <li>One small tin of fruit in syrup (150g if eaten without the syrup or 200g if eating with the syrup)</li> </ul>	<ul> <li>Fresh Fruit: small apple, 9 x cherries, small pear, 12 x blackberries, satsuma / clementine, 10 x raspberries, lychees</li> <li>10 x olives</li> </ul>

**†** Star fruit should be avoided in renal disease

**†** Grapefruit should be avoided if taking immuno-surpressant medicines

## Starchy foods

High	Moderate	Low (Approx. 70g)
<ul> <li>Steamed potatoes, roast potatoes, jacket potatoes, new potatoes in skin, sauté potatoes</li> <li>Manufactured potato products hash browns, potato waffles, croquettes, frozen roast potatoes, potato wedges, smiley faces / alphabet letters</li> <li>Tinned pasta in tomato sauce</li> <li>Branflakes, All Bran</li> <li>Weetos, Coco Pops, Crunchy Nut Cornflakes, any cereal containing fruit or nuts e.g. fruit and fibre, muesli, sultana bran, Raisin Wheats</li> <li>Ready Brek</li> <li>Malt loaf</li> <li>Baked beans</li> <li>Plantain</li> <li>Sweet potato</li> <li>Yam</li> </ul>	<ul> <li>Boiled or mashed potatoes (not instant) or sweet potato - one serving per week</li> <li>Yorkshire pudding</li> <li>Pizza (2 slices once a week or 1 slice, twice a week</li> <li>Wholemeal / brown bread, rice, pasta</li> <li>Crispbread</li> </ul>	<ul> <li>White bread (all kinds)</li> <li>Pitta bread, crumpets, bagels, croissants, tortilla wraps, chapatti, paratha, naan bread, pancake</li> <li>White rice, pasta, plain noodles, couscous</li> <li>Dumplings</li> <li>Savoury crackers e.g. cream crackers, Mini Cheddars</li> <li>Bread sticks</li> <li>Breakfast cereals, e.g. cornflakes, Rice Krispies, Veetabix, Frosties, Cheerios, Shreddies, Sugar Puffs, puffed wheat</li> <li>Porridge made with water</li> <li>Polenta, risotto, semolina, tapioca</li> </ul>

## Puddings and sweet things

High	Moderate	Low (Approx. 70g)	Hi	igl
<ul> <li>Choose only 1 of this group per week</li> <li>Plain / milk / white chocolate (small bar 50g)</li> <li>Mars Bar</li> <li>Twix (2 fingers)</li> <li>Bounty</li> <li>Cakes and biscuits containing dried fruit, nuts, coconut, coffee, chocolate</li> <li>Black treacle, chocolate spread, peanut butter, molasses</li> <li>Chocolate, fudge</li> <li>Liquorice</li> <li>Marzipan</li> <li>Toffee</li> </ul>	<ul> <li>Chocolate covered animal biscuits</li> <li>Milky Way</li> <li>Smarties</li> <li>Crunchie</li> <li>Kit Kat / Blue Riband</li> <li>White chocolate buttons (small bag)</li> <li>Creme Egg ( x1 / week)</li> </ul>	<ul> <li>Pie or crumble         <ul> <li>any fruit used should be tinned in syrup</li> </ul> </li> <li>Doughnut, jam tart, shortcake, cream biscuits         <ul> <li>e.g. custard cream, Jammie Dodgers, Party Rings, wafer biscuits</li> </ul> </li> <li>Plain biscuits         <ul> <li>e.g. digestive, rich tea</li> </ul> </li> <li>Sponge cake e.g. Madeira cake, lemon drizzle cake, sponge cake with cream or jam filling, Swiss roll, Fondant Fancies</li> <li>Jelly, mousse</li> <li>Sugar, jam, honey, marmalade</li> </ul>		

High	Moderate	Low (Approx. 70g)
		<ul> <li>Sweets e.g. mints, barley sugar, Jelly Babies, jelly Babies, jelly Tots, Randoms, Fruit Pastilles, Fruit Gums, Fruit- tella, Chewits, Midget Gems, Love Hearts, Polos, Mentos, Skittles, Haribo jelly sweets, boiled sweets, marshmallows, Turkish delight (no chocolate)</li> <li>Lollies e.g. Chupa Chups, Drumstick, Swizzels Double Lolly, Push Pop, Sherbet Dip</li> </ul>

## Drinks

High	Moderate	Low (Approx. 70g)
<ul> <li>Fresh fruit juice / smoothies</li> <li>Robinsons Fruit Creations</li> <li>Ribena, high juice squash</li> <li>Isotonic and sport drinks e.g. Lucozade Sport / Lucozade Energy</li> </ul>	<ul> <li>Moderate</li> <li>Coffee (2g instant – black)<sup>†</sup></li> <li>Some fizzy drinks (Tango / Fanta 330ml)</li> </ul>	<ul> <li>Water</li> <li>Tea (black, green, herbal)<sup>†</sup></li> <li>Squash / cordial</li> <li>Clear fizzy drinks</li> <li>(Sprite, Irn bru, 7Up)</li> <li>Iced Tea <sup>†</sup></li> <li>Ovaltine made</li> </ul>
<ul> <li>/ Gatorade</li> <li>Relentless / Prime</li> <li>Some Fizzy drinks (Coke, Vimto)</li> <li>Drinking chocolate, cocoa, Horlicks,</li> </ul>		with water
<ul> <li>Milkshakes</li> </ul>		

**†** Children under 12 years of age should not have caffeine containing drinks.

## Savoury snacks

Foods To Avoid	Foods To Limit	Foods To Choose
Potato crisps - all flavours		<ul><li>Plain popcorn</li><li>Corn and</li></ul>
<ul> <li>Quavers, Hula Hoops, Squares, Pom Bears</li> </ul>		maize snacks, e.g. Monster Munch roast
N.B. the following corn snacks contain potassium chloride:		beef flavour, Space Raiders, Mini Cheddars,
<ul> <li>Skips, Wotsits, Wheat Crunchies, Frazzles, Nik Naks, Hoops and Crosses salt and</li> </ul>		Hoops and Crosses (not salt and vinegar), Sunbites, Velvet Crunch, tortilla chips
vinegar flavour, Monster Munch flamin hot or pickled onion flavour		Some corn and maize snacks contain potassium chloride. You should try to avoid
<ul> <li>Salted popcorn, Bombay mix</li> <li>Nuts</li> </ul>		these if possible. Supermarkets' own brand versions may not contain
		potassium chloride, check the label.

#### **Miscellaneous**

Foods To Avoid	Foods To Limit	Foods To Choose
<ul> <li>Mushroom soup, tomato soup</li> <li>Instant snacks e.g. Pot Noodle, Super Noodles</li> <li>Peanut butter and nut butters</li> <li>Salt substitutes e.g. Lo Salt, So-Low, Reduced Sodium</li> <li>Pickles and sauces e.g. brown sauce, pickled onions, Branston pickle, piccalilli, beetroot</li> <li>Molasses</li> </ul>	<ul> <li>Gravy*, soup* (except tomato and mushroom)</li> <li>Tomato ketchup - no more than one dessertspoon per day</li> </ul>	<ul> <li>Salad cream, mayonnaise</li> <li>Coleslaw</li> <li>Butter, margarine, cooking oil, olive oil</li> <li>Yeast extract</li> <li>Jam / Marmalade</li> <li>Honey</li> <li>Sugar</li> <li>Vinegar (1 tbsp)</li> </ul>

## **Additional information**

- Potatoes and vegetables should be boiled rather than steamed, pressure cooked, microwaved or stir-fried. This helps to "wash out" some of the potassium
- Use a large volume of water to boil potatoes and vegetables. Throw the water away, don't use it for making gravy
- All vegetables and potatoes should be peeled before cooking
- No extra vegetables should be served if vegetables are included in the main dish e.g. stew or casserole
- Curry contains more potassium than other meat dishes and so should be served with rice or chapatti, not potato
- Protein foods such as meat, fish, eggs, cheese, and milk are also high in potassium but are essential for good health. Eat them as part of a main meal but avoid eating extra as snacks
- Foods marked with \* contain a lot of salt. You should try not to eat more than three to four of these salty foods each week.

### **Potassium additives**

- May be added to processed foods to preserve, sweeten, stabilise foods etc. They can more than double the potassium content of food.
- Check ingredients list for 'potassium' e.g. Potassium Chloride, Potassium Sorbate or the following E numbers.

#### **Potassium additives**

Preser	vatives	Sweeteners	
E202	Potassium sorbate	E950	Acesulfame K
E212	Potassium benzoate	E954	Saccharin
E224	Potassium metabisulphate		
E228	Potassium hydrogen sulphite	Emulsifiers, stabilisers, thickeners and gelling agents	
E249	Potassium nitrite	E402	Potassium alginate
E252	Potassium nitrate	E470a	Fatty acid salts
E283	Potassium propionate		

Other	Others			
E261	Potassium acetate	E515	Potassium sulphates	
E326	Potassium lactate	E522	Aluminium potassium sulphate	
E332	Potassium citrates	E525	Potassium hydroxide	
E336	Potassium tartrates	E536	Potassium ferrocyanide	
E337	Sodium potassium tartrate	E555	Potassium aluminium silicate	
E340	Potassium phosphates	E577	Potassium gluconate	

E351	Potassium malate	E622	Monopotassium glutamate
E357	Potassium adipate	E628	Dipotassium guanylate
E501	Potassium carbonates	E632	Dipotassium inosinate
E508	Potassium chloride		

• Potassium additives do not have to be listed on ingredients by law. Generally processed 'fast foods' and takeaways contain additives therefore it is best to choose fresh, home cooked foods.

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