

Low Potassium Diet

Liverpool University Hospitals
NHS Foundation Trust

Department of Nutrition & Dietetics

Lower Lane
Liverpool L9 7AL
Tel: 0151-525-5980

Disclaimer to staff: The distribution of this leaflet is only permitted by members of Aintree Dietetic Department.

Leaflet provided by:

Name.....

Grade/designation.....

Disclaimer for patients: If you have been provided with this leaflet by someone other than a Dietitian, please contact the dietetic department on 0151 529 3473

Potassium

What is potassium?

Potassium is a mineral that everyone has in their blood. It is represented by the chemical symbol K^+ . It appears naturally in many foods and drinks.

When your kidneys are not working properly this potassium cannot be filtered out properly in the urine, so potassium levels can build-up in the blood.

Is a high blood potassium level dangerous?

Yes. A high potassium level in the blood can cause irregular heart beat and increases your risk of having a heart attack. You could be admitted to hospital if your potassium level is high.

How can I control my blood potassium levels?

You need to follow a low potassium diet in order to keep your blood potassium at a safe level. Your Dietitian will discuss your diet with you and tell you which foods you should avoid or cut down on.

Can anything else affect my blood potassium levels other than my diet?

Yes. Other causes of high potassium levels could include: certain medications, bowel habits, blood transfusions, uncontrolled diabetes. This will be discussed with you if relevant.

Cooking Tips to Help Lower Your Potassium Intake

Potatoes (including sweet potatoes and yam) and vegetables all contain potassium. You cannot avoid potassium altogether, but potatoes and vegetables helps to reduce the potassium content of these foods. Boiling allows the potassium to come out of the food and into the water. You then throw this water away.

1. Peel and cut potatoes into small pieces before cooking and boil in a large amount of water. Once cooked, throw the cooking water away. **Do not** use this water for making gravy, sauces or soups. You **do not** need to boil potatoes twice (double boiling), boiling once in a large amount of water is sufficient to lower the potassium content.
2. Microwave, pressure cookers, steamers or stir-frying should **not** be used for cooking potatoes and vegetables from raw, but can be used to reheat food that has already been boiled.
3. Partly boil potatoes for ten minutes before making chips or roast potatoes.
4. Only have potatoes at one meal a day. Rice, pasta, plain couscous and noodles are low in potassium and can eaten instead.
5. Avoid potato products that have not been boiled, e.g.
 - X Ready meals containing potato (unless advised otherwise by your Dietitian)
 - X Chip shop chips/oven chips/frozen roast potatoes
 - X Oven chips or roast potatoes that have not been pre-boiled first
 - X Jacket (baked) potatoes
 - X Potato croquettes
 - X Potato waffles
 - X Hash browns
 - X Potato crisps
 - X Potato bread

Fruit and Vegetables

All Fruit and vegetables contain potassium. It is important to eat fruit and vegetables as they provide a good source of vitamins, minerals and fibre to keep you healthy and to ensure you have regular bowel habits. We do not advise that you avoid eating fruit and vegetables just because they contain potassium as they are an important part of a healthy diet.

Certain fruit and vegetables contain more potassium than others. Some fruits should be avoided altogether as they are very high in potassium. **The tables on the next 2 pages give you the portion sizes for fruit and vegetables which are allowed. It also tells you what fruit and vegetables to avoid altogether.**

Lower potassium fruit and vegetables are coded with a * so these can be eaten in larger quantities.

You should aim for _____ Portions of fruit and vegetables per day.

- X **Star fruit should be avoided by people with kidney problems as it has been shown to cause neurological problems when eaten by people with a reduced kidney function.**
- X **Avoid all Nuts and Seeds as these are high in both potassium and phosphate**

Fruits to Avoid:

Bananas, sharon fruit, durian fruit, melon, papaya, avocado, figs, pure fruit juices, fruit smoothies, coconut, star fruit, guava, blackcurrants, redcurrants and dried fruit eg. Raisins/sultanas/ figs/ dried dates and dried apricots, molasses.

Fruit Portions - All fruit can be raw unless otherwise stated. If you eat tinned fruit, it is important to drain off the fruit juice as this is high in potassium. Tinned fruit is often lower in potassium.

Fruits allowed ✓	Portion size
Apples	1 medium or 3 tablespoons stewed apple
Apricots	1 medium fresh apricot (avoid dried apricot)
Blackberries*	20 berries
Blueberries*	2 handfuls – approximately 200g
Clementines/tangerines/mandarins/satsumas	2 fruits or ½ large tin
Cherries*	15 fresh or 1 large can of cherries
Cranberries*	20 Fresh berries stewed or 20 dried cranberries
Damson	1 fruit stewed
Fruit cocktail	1 small tin (drain off juice)
Grapefruit	½ fresh or ½ tin of grapefruit
Grapes*	15 grapes
Gooseberries	Stewed 140g or raw 75g (¾ cup size)
Kiwi	1 small
Kumquats	5 fruits
Lemons/Limes	No restriction
Lychees*	6 fresh fruits or 1 large tin (drain off juice)
Mango	½ small
Nectarine	1 medium
Orange	1 medium
Passion fruit	4 small passion fruits
Peaches	1 medium
Pears	1 small or tinned 4 pear halves
Pineapple	1 slice of fresh pineapple or 4 tinned rings
Plums	2
Pomegranate	1 fresh
Prunes	3 tinned prunes (discard juice) avoid dried prunes
Raspberries*	20 berries
Rhubarb	2 tablespoons of stewed or ½ tin rhubarb
Strawberries*	½ tin or 8 small strawberries

*Indicates lower in potassium options.

Vegetables to avoid: Vegetable juices, bamboo shoots, roasted vegetables, Karela (bitter melon/gourd), seaweed (fresh/dried), Dried mushrooms, tomato puree, sundried tomatoes

Vegetable portions – all vegetables should be boiled unless otherwise stated

Vegetable/Salads allowed ✓	Portion Size
Asparagus	3 spears
Artichoke	1 boiled
Aubergine, fried	6 thin slices
Beetroot	4 slices pickled beetroot or 1 small boiled beetroot
Beansprouts*	Handful of raw or fried beansprouts
Broccoli	2 small spears
Brussel sprouts	5 small sprouts
Butternut squash	¼ squash boiled
Cabbage*	5 heaped tablespoons shredded
Carrots*	2 medium size carrots boiled or 1 medium carrot raw
Cauliflower*	10 small florets
Celeriac	2 tablespoons shredded
Celery	2 sticks
Coleslaw	2 heaped tablespoons
Courgette	1 small courgette boiled (Avoid fried courgettes)
Cucumber *	20 thin slices
Corn on the cob/sweetcorn	1 small cob or 3 heaped tablespoons tinned sweetcorn or 4 baby corn
Coleslaw	2 tbsp
Curly Kale	3 tablespoons shredded
Gherkins*	4 pickled whole gherkins (may be salty if in brine)
Green beans/runner beans*	4 heaped tablespoons
Leeks	1 small stem boiled
Lettuce (all types)	Handful
Marrow *	6 heaped tablespoons boiled
Mushy peas	3 tablespoons tinned/frozen
Olives, fresh or in jar	Can be high in salt, so best to use as a garnish
Onions or Shallots	2 tablespoons fried
Okra	6 fingers fried, 8 fingers if par boiled first
Parsnips	1 tablespoon boiled
Peppers (capsicum)	½ raw/cooked pepper
Peas	2 heaped tablespoons or 4 heaped tablespoons petit pois
Pumpkin	3 tbsp mashed (boiled first) 2 tablespoons roasted
Radish*	10 small radishes raw/cooked
Spinach	2 tablespoons boiled (avoid raw/steamed spinach)
Spring onion*	6 stems
Swede*	8 tablespoons
Turnip	2 tablespoons
Tomato	1 small tomato or 4 cherry tomatoes or 1/4 large tin of tomatoes
Mushrooms (fried) *	9 button mushrooms or 1 large Portobello mushroom
Waterchestnuts	½ small can
Watercress, fresh*	3 handfuls

Foods to avoid and suitable alternatives

Please note if you have diabetes then not all of the foods in these groups will be suitable for you. Sugar free, diet or reduced sugar varieties are available for many of the foods and drinks outlined.

Food Group	Avoid X	Suitable alternatives ✓
Cereals If you have diabetes, avoid sugary cereals	Ready Brek All Bran, Branflakes, Sultana Bran Muesli, Raisin Split Cereals and cereal bars containing chocolate, cocoa, coconut, dried fruit or nuts.	Any without chocolate, cocoa, coconut, dried fruit or nuts. Ideas : Porridge oats, Weetabix, Shredded Wheat, Shreddies, Cornflakes, Special K, Rice Krispies, Ricicles, Frosties, Cereal bars without nuts/dried fruit e.g. Special K, Rice Crispie Squares, Nutrigrain, Yoghurt Breaks
Breads	Scones with fruit Pain au chocolate Bread containing a lot of seeds and nuts, Potato bread, Malt loaf	Limit Naan bread to ½ Naan a day Pancakes, croissants, crumpets pitta bread, rye bread, bagels, wheaten/soda bread, chapattis, tortilla wraps, white/brown/wholemeal granary bread, breadsticks, melba toast, Rice cakes, water biscuits.
Cakes and puddings	Malt bread, banana loaf, banoffee, chocolate cake and biscuits, fruit cake (eg. Tea loaf, mince pies), date and walnut loaf, coconut cake, Eccles cake, fruit scones, Chelsea buns, Bakewell tart.	Most are suitable provided they do not contain chocolate, cocoa, dried fruit, coconut or nuts. Plain/jam sponge, Madeira, cherry cake, cream horn, doughnut, apple slice, Danish pastry, lemon meringue pie, meringue, plain biscuits, shortbread. Some chocolate coated biscuits are lower in potassium but must only be eaten in small quantities. e.g. Jaffa cakes, bourbons once or twice a week.
Other savoury foods	Poppadoms Tinned pasta in tomato sauce e.g. Ravoli, Spaghetti hoops Pot noodle Potato crisps, Vegetable crisps, Twiglets, Oatcakes, Nuts and seeds Vegetable pakora Biscuits containing nuts and/or chocolate Bombay Mix, Twiglets Nut roast	Yorkshire puddings, Dumplings Pastry, Sago, tapioca, semolina, flours, Taco shells, Pasta, Rice Plain couscous (no dried fruit) Plain fresh/dried noodles Unsalted rice cakes e.g. Snack a Jacks. Corn crisps (eg. Wotsits, Monster Munch, Doritos, Wheat Crunchies, Plain popcorn, Pretzels (unsalted), water biscuits, unsalted crackers, melba toast, Limit Ryvita to 2 slices a day. (some of these foods are high in salt so limit these)

Food Group	Avoid X	Suitable alternatives ✓
Dairy/ alternatives	Evaporated, condensed milk and dried milk powder. Coconut milk.	Milk - within allowance of half a pint per day Butter, margarine, Yoghurts Creams: double cream, single cream, whipping cream, clotted cream, crème fraîche.
Meat and fish products	Ready meals containing potato, beans or pulses	All types are suitable
Beans and lentils (eg. Chickpeas, baked beans, red lentils, refried beans)	Beans, lentils, pulses are all high in potassium. They can be eaten at a meal only if you are not eating meat or fish at that meal. E.g. If you are vegetarian beans and lentils are a good source of protein and can be eaten as part of your main meal.	Quorn, tofu. If you are a vegetarian you may be able to eat some nuts and pulses. Your Dietitian will help you with this.
Drinks Choose reduced sugar/diet drinks if you have diabetes or watching your weight Remember your fluid allowance	Cocoa Malted drinks, e.g. Horlicks, Ovaltine and Bournvita Drinking chocolate, Complan, Build-Up drinks Fresh fruit juices (except for max 1 small glass of cranberry juice), Hi Juice cordial, tomato/other vegetable juices, coconut milk, coconut water.	One cup of coffee per day or Camp coffee (low in potassium, but high in sugar, so avoid if you have diabetes) All types of tea (including fruit, peppermint and herbal teas) Cordial and squash Fizzy drinks soda, tonic, mineral water. Limit Ribena to 1-2 glasses or 1 small carton a day Limit cranberry juice to 1 small 150ml glass a day (count as 1 portion of fruit and veg)
Alcohol (Remember some medicines do not mix with alcohol. Ask your doctor or pharmacist if you are not sure. Do not drink alcohol if your Doctor has advised you not to.)	Red wine, beer, bitter, lager, cider, port, stout. Government guidelines on alcohol recommend: 14 units or less per week split over 3 or more days. You can find more information on http: www.drinkaware.co.uk	Spirits, sherry, sparkling wine, e.g. Champagne, Cava, Lambrusco Spirits tend to be lower in potassium. Wines, sherry and ale do still contain potassium, so only have these in very small amounts. Your Dietitian can discuss this with you. Remember your fluid allowance and alcohol guidelines. Follow your doctor's advice on alcohol as some medications can interact with alcohol.

Food Group	Avoid X	Suitable alternatives ✓
Confectionary (if you have diabetes, avoid these foods)	Chocolate, toffee, black treacle, liquorice, fudge, marzipan, creamed coconut, chocolate spread. Nut brittle.	Jam, honey, golden/maple syrup, marmalade, lemon curd, sweets, e.g. boiled sweets, mints, marshmallows, chewing gum, Turkish Delight, fruit pastilles, jellies, wine gum, fruitella, starburst, cough sweets. These foods are high in sugar so please limit if you have diabetes.
Sauces and miscellaneous	Salt substitutes, e.g. Losalt, Herbamare salt replacer Bovril, Marmite, Oxo Pot Noodles Gravy mixes Packet soups Potash Satay sauce Soy sauce/fish sauce – high in salt, avoid/limit if possible Many processed foods can contain potassium chloride (KCl), read labels to check if this is the case and avoid. Your dietitian can help you with this.	Bottled sauces, e.g. tomato ketchup, BBQ sauce – use sparingly Garlic, Mayonnaise, salad cream – use sparingly Bisto Gravy Browning, Gravy powders – choose reduced salt varieties if possible Herbs, vinegar, spices, pepper (as long as they do not contain salt) Mustard, horseradish, chilli sauce, curry powder, mint sauce, apple sauce, cranberry sauce, tomato sauce made from tinned tomatoes (1/4 tin is 1 portion of your fruit and vegetable allowance)
Spreads and Dips	Nutella/chocolate spreads Peanut butter Guacamole Paté, Tahini paste Taramasalata, Hummus Yeast extract (Marmite, Vegemite) Tomato pureé	Limit below to 2-3 tablespoons: Tomato salsa Mango chutney/other chutneys Lime pickle/other Indian pickles Tzatziki

- If you require more information on diet and kidney problems the following website and book maybe useful:

www.kidneypatientguide.org.uk

Kidney Failure: the facts by Stewart Cameron, Oxford University Press. ISBN 0-19-262643-4



If you require a special edition of this leaflet

This leaflet is available in large print, Braille, on audio tape or disk and in other languages on request. Please contact:

Tel No: 0151 529 2906

Email: interpretationandtranslation@aintree.nhs.uk