

# Managing Potassium for Your Health

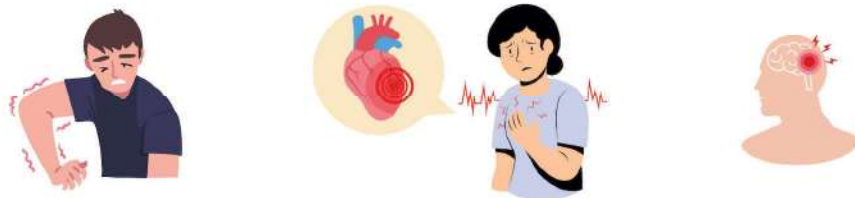
## What does potassium do?

Your heart, muscles and nerves need the right amount of potassium to work well.



## What happens when I have high levels of blood potassium?

When your kidneys are not working well, they may not be able to remove excess potassium from the body. High blood potassium can cause irregular heartbeat, muscle weakness or even sudden death. If your blood potassium is above the recommended level of 3.5 – 5.0 mmol/L, you may need to limit your potassium intake.



## How much potassium can I have?




The amount of potassium that is best for you depends on:

- How much potassium you eat now
- Your blood potassium level
- Your body size
- The medicine you take
- How well your kidneys are working
- The amount of urine you make
- The type of dialysis treatment



## What are the food sources of potassium?

Potassium is present in almost all foods.

<b>Natural food sources</b> 	<b>Processed food with potassium additives</b> 
<p>Potassium is found in fruits, vegetables, legumes, nuts and wholegrains. Your body does not digest and absorb all potassium.</p> <p>These foods also contain nutrients and fibre good for your body.</p>	<p>Potassium is <u>added</u> to food as preservatives to enhance food stability, taste and colour.</p> <p> These additives can increase blood potassium levels more than that potassium in natural foods.</p>

## How do I identify food with potassium additives?

Processed and packaged foods may contain hidden potassium additives. Avoiding them can help control your potassium levels.

Read the food labels to find out about the potassium content. Foods with high potassium additives typically contain 200mg or more potassium per serving. It is best to keep to less than 100mg per serving.

<b>Nutrition Facts</b>	
8 servings per container	
Serving size 8 fl oz (240mL)	
Amount per serving	<b>100</b>
<b>Calories</b>	
% Daily Value	
Total Fat 0g	0%
Sodium 5mg	0%
Total Carbohydrate 24g	9%
Total Sugars 24g	
Includes 21g Added Sugars 43%	
Protein 0g	
Potassium 30mg	0%

You can also look for the word “potassium” in the ingredient list.

Examples of potassium additives include:

- Potassium chloride
- Potassium lactate
- Potassium phosphate
- Potassium citrate
- Potassium sorbate

## Can you find the potassium additive in this ingredient list?



Oat base (water, oats 10%), sunflower oil, calcium carbonate, **dipotassium** phosphate, sea salt, vitamins (D2, riboflavin and B12)

Here are some examples of foods that may contain potassium additives:

Food categories	Examples
Processed meats	 <p>Ham, sausages, bacon, deli meats, vegetarian meat substitutes</p>
Processed cheese and cheese products	 <p>Shredded cheese, cheese slices, cheese sauce, cheese spreads/ dips</p>
Electrolyte beverages/ sports drink	
Instant powdered drink mixes	 <p>Milk tea, coffee, malted drinks, hot chocolate</p>
Instant meals or soups	
Salt substitutes	
"Low sodium" processed foods	 <p>Low sodium meat products, canned soups, reduced salt stock cubes</p>











## Potassium food list

The tables on the following pages will help you identify fruits, vegetables, and other foods that are high in potassium. Please ask your dietitian about the right serving size for high-potassium fruits and vegetables if your favourite foods are on the list.

### Fruit group

You can enjoy 2 servings of lower-potassium fruits every day.

 Lower-potassium fruits (< 250mg per serving)			
 Apple 1 small (150g)	 Apricot 1 small (38g)	 Blueberries 1 cup (104g)	 Cherries 8 pieces (75g)
 Ciku 1 piece (54g)	 Chinese red dates 10 pieces (22g)	 Dragon fruit ½ fruit (150g)	 Dried apricot 3 pieces (26g)
 Dried prune/ plum 2 small (22g)	 Figs 2 pieces (100g)	 Grapes ½ cup (85g)	 Water apple 4 whole (212g)

\*1 cup = 1 standard measuring cup (250ml)



Kiwi  
1 medium  
(88g)



Dates  
4 pieces  
(21g)



Lemon  
1 medium  
(110g)



Lime  
5 small  
(175g)



Longan  
15 small pieces  
(95g)



Lychees  
5 pieces  
(95g)



Mango  
½ medium  
(116g)



Mangosteen  
5 whole  
(381g)



Nectarine  
1 whole  
(80g)



Orange  
1 medium  
(150g)



Pear  
1 small  
(150g)



Persimmon  
½ medium  
(95g)



Pineapple  
1 wedge  
(140g)



Plum  
2 small  
(160g)



Raisins/ sultanas  
2 tablespoons  
(23g)



Rambutan  
5 pieces  
(176g)



Raspberries  
1 cup  
(123g)



Strawberries  
1 cup  
(160g)



Watermelon  
1 wedge  
(250g)

\*1 cup = 1 standard measuring cup (250ml)



## Higher-potassium fruits ( $\geq 250\text{mg}$ per serving)



Avocado  
½ whole  
(272g)



Banana  
1 medium  
(122g)



Custard Apple  
1 medium  
(145g)



Dried  
goji berry  
10 pieces (20g)



Duku  
10 whole  
(282g)



Durian  
5 seeds  
(189g)



Guava  
½ medium  
(163g)



Honeydew  
1 wedge  
(200g)



Jackfruit  
4 seeds  
(94g)



Langsat  
10 pieces  
(292g)



Mandarin  
orange  
2 small (240g)



Papaya  
1 wedge  
(225g)



Passion fruit  
3 whole  
(105g)



Peach  
1 medium  
(138g)



Pomegranate  
1 whole  
(240g)



Pomelo  
3 pieces  
(225g)



Rockmelon  
1 wedge  
(180g)



Soursop  
⅓ whole  
(146g)

List adapted from The National Kidney Foundation, Singapore



**People with kidney problems should avoid eating star fruits.**



## Vegetable Group

You can enjoy 2 servings of lower-potassium vegetables in your diet every day.



### Lower-potassium vegetables (< 350mg per serving)

1 serving:

- 100g (¾ cup) cooked or raw non-leafy vegetables
- 150g raw leafy vegetables



Asparagus



Bamboo shoot  
(fresh/ canned  
and drained)



Beansprouts



Beetroot



Bell pepper/  
Capsicum



Black fungus  
(fresh/ soaked)



Brinjal/  
Eggplant



Broccoli



Cabbage (white)



Carrot



Cauliflower



Celery



Chilli



Chives



Cucumber



Drumstick  
fresh pods





French bean



Gourd, all types  
(e.g. snakegourd,  
loofah, bittergourd,  
bottlegourd)



Green peas  
(frozen/ canned  
and drained)



Hairy  
cucumber



Ladies fingers/  
Okra



Leek



Lettuce



Long bean



Mixed  
vegetables  
(boiled/ frozen)



Mushrooms (fresh/  
soaked/ canned and  
drained)



Onions



Pumpkin



Radish



Rhubarb



Shallots



Snow/ snap/  
garden peas



Spring onion



Sweet corn



Sweet potato



Tapioca



Tomato



Turnip



Wintermelon



Zucchini





## Higher-potassium vegetables ( $\geq 350\text{mg}$ per serving)



Arrowhead



Arrowroot



Artichoke



Arugula/ Rocket



Bok choy/  
Pak choi/  
Shanghai Green



Brussel  
sprouts



Cabbage  
(red)



Chinese cabbage/  
Napa cabbage/  
Wongbok



Chye sim/  
Mustard green



Drumstick  
leaves



Fern shoot



Four angle bean/  
Winged beans



Kai lan/ Kale/  
Chinese broccoli



Kangkong/  
Water  
spinach



Kau kee/  
Wolfberry  
leaves



Lotus root



Petai



Potato



Seaweed



Spinach



Sweet potato  
leaves



Water chestnut  
(fresh)



Watercress



Yam/ Taro









## Things to take note of while enjoying your greens:

Tip 1: Soups made from lower-potassium vegetables still contain potassium. You should take no more than 1 cup (250ml) of these soups per day.

Tip 2: If you eat salads, limit to one small bowl per day.

## Other high-potassium foods

Besides fruits and vegetables, there are other foods that contain potassium. If your potassium levels are high, you may need to limit these foods as well.

High-potassium foods	Tips to reduce intake
<p data-bbox="375 942 594 982"><b>Wholegrains</b></p>  <p data-bbox="337 1178 638 1213">Wholegrain cereals</p>  <p data-bbox="261 1373 444 1457">Wholegrain bread</p>  <p data-bbox="529 1373 712 1457">Wholegrain biscuit</p>  <p data-bbox="318 1640 396 1675">Oats</p>  <p data-bbox="558 1640 683 1675">Chapati</p>  <p data-bbox="402 1814 570 1850">Brown rice</p>	<ul data-bbox="805 942 1377 1136" style="list-style-type: none"><li>• Eat a smaller portion or choose alternatives with lower-potassium such as barley, daliya or buckwheat (e.g. soba noodle)</li></ul>  <ul data-bbox="805 1451 1333 1591" style="list-style-type: none"><li>• Switch some wholegrains to white bread, white rice, thosai, idiyappam or plain crackers</li></ul> 

## High-potassium foods

## Tips to reduce intake

### Dairy and soy products



Milk



Yogurt



Soy milk



Cream soup



Milk/ Soy pudding

- Limit all of these to a total of 1 cup (250 ml) or less per day
- Choose oat or rice milk (check the ingredient list for potassium additives)



### Nuts, nut butters and seeds



Nuts and seeds



Peanut butter

- Eat these sparingly and limit to 2 tablespoons (30ml) a day or up to ½ cup (125ml) in a recipe



### Beans and lentils



Chickpeas



Lentils

- Limit to ½ cup (125ml) cooked, once a week. If you have a meal with beans, leave off the meat.



- Discuss with your dietitian if you are a vegetarian



## High-potassium foods

## Tips to reduce intake

### Beverages



Fresh/ canned  
fruit and  
vegetable juices

Herbal  
medicine  
drinks



Cocoa and malted drinks

- Avoid herbal medicine drinks and fruit/ vegetable juices
- Swap cocoa or malted drinks with plain tea or coffee without milk, or plain lemon tea



### Snacks



Potato chips/ snacks



Vegetable crisps



Dried fruits



Bombay mix



Chocolate products

- Replace with wheat/ corn/ rice-based snacks such as tortilla chips, plain popcorn or rice cakes



- Swap chocolate with vanilla or lemon-flavoured products



- Eat in moderation as snacks are generally high in salt and/or sugar

High-potassium foods	Tips to reduce intake
<p><b>Coconut and its products</b></p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Coconut water</p> </div> <div style="text-align: center;">  <p>Coconut milk</p> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;">  <p>Coconut cream</p> </div> <div style="text-align: center;">  <p>Kaya</p> </div> </div>	<ul style="list-style-type: none"> <li>• Consume them in small quantities</li> <li>• Avoid coconut water or limit to ½ cup (125ml)</li> </ul> <div style="text-align: center; margin-top: 20px;">  </div>

### What should I know in making food choices?

- Fruits and vegetables are very important parts of your diet. Eating the right amount can help regulate your potassium levels. Please continue to eat adequately from the lower-potassium group.
- A low-potassium food can become high-potassium if you eat a large amount. Be mindful of the portion you eat.
- Instead of avoiding high-potassium foods completely, you may reduce the portion and eat it less frequently. Your dietitian can help you pick some from the high-potassium food list.
- Limit intake of processed food as they tend to contain potassium additives. Always check the food label and ingredient list.



## What else can I do to manage my potassium levels?

Certain cooking methods can reduce the amount of potassium in food. You may use these methods to prepare higher-potassium foods. Remember to eat in smaller portions, as potassium is not completely removed!

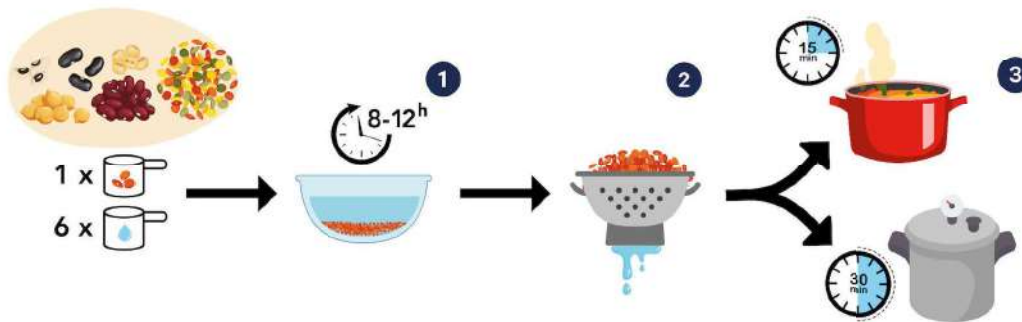
### Draining

Drain and rinse all canned vegetables and legumes before consuming.



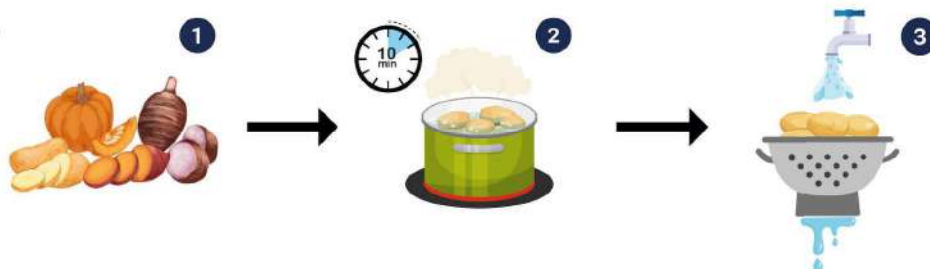
### Soaking

Soak dry legumes such as beans, chickpeas and lentils in plenty of water (1 cup beans to 6 cups water) at room temperature for 8 - 12 hours. Drain and rinse legumes before cooking. Cook for 30 minutes in a regular pot or 15 minutes if using a pressure cooker.



### Boiling

Boil higher-potassium root vegetables such as potato, yam and pumpkin for 5 – 10 minutes in plenty of water. Drain and rinse them before eating. You can do this in advance for vegetables that you might add to soups or stews.





## Boiling twice ("double boiling")

In a big pot of water, boil peeled and cut pieces of higher-potassium root vegetables. Drain, add fresh water, and boil again. Drain and rinse before consuming. This cooking method may reduce the potassium in the food by about 50 percent.



### Do you know?

- All vegetables are different and they do not lose the same amount of potassium when soaked or boiled
- Many vegetables do not need soaking or boiling because the process causes loss of water-soluble vitamins
- Do not reuse the drained water, and refrain from consuming the soup or gravy in dishes as they can be high in potassium



Your diet may change depending on your blood test results. Your dietitian will review your results and make suggestions if needed.

Contributed by Nutrition & Dietetics Service, Allied Health Services

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