

Potassium factsheet

What is potassium?

Potassium is an essential mineral that is needed by all cells of the body. It is found in some food and drinks.

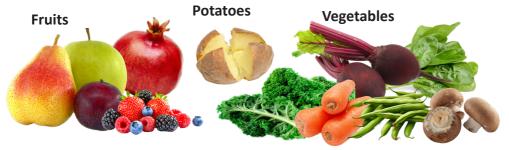
Why do I need potassium?

It has many roles in the body:

- controlling movement of muscles, and heartbeat
- control of blood pressure
- regulating the amount of fluid in your body
- sending messages to our nervous system
- helps all the cells in the body work correctly

Where do I get potassium from?

We get potassium from the food we eat. It is in many foods including:



Nuts and seeds



Pulses like beans and lentils



Meat, fish, and dairy



In the UK, the recommended intake for potassium is 3.5g (3500mg) a day.

Most people *do not get enough potassium* from their food. You can make sure you get the right amount of potassium by eating a healthy balanced diet. **This means:**

- eating plenty of fruit and vegetables fresh, dried, tinned, and frozen all count
- eating nuts, seeds, beans and pulses
- eating moderate amounts of meat, fish, and dairy
- limiting ultra-processed foods

The eat well guide is a good starting point to help you plan a healthy diet.



Healthy Foods rich in potassium: - choose more of these

Fruits	Vegetables	low fat dairy	Beans and	Plain
Fresh, dried,	Fresh,	or alternatives	pulses	unsalted
tinned or frozen	tinned or frozen	Including dairy or plant- based milk and yogurts	Whole grains (brown bread/pasta/ rice)	nuts and seeds

Ultra Processed foods: - choose less of these



Each serving (130g) contains								
	Energy	Fat	Saturates	Sugars	Salt	ı		
1046kJ 250kcal		3.0g	1.3g	34g	0.9g			
	LOW	LOW	HIGH	MED				
	13%	4%	7%	38%	15%			

Each conving (1EOg) contains

of an adult's reference intake Typical values (as sold) per 100g: 697kJ/ 167kcal

- Convenience foods, packets or jars or readymade sauces, instant noodles or pasta pots
- Crisps, salty snacks, biscuits
- Low fat dairy Ice creams, milkshakes, cakes and pastries
- Processed meats like ham, sausage, bacon, cheese triangles and slices. Plant-based meat alternatives
- Flavoured, salted and coated nuts and seeds

What is a processed food?

Processed food is not always unhealthy, for example tinned, frozen, or chopped vegetables. However, a diet high in **ultra-processed food** is usually *low in healthy vitamins and minerals*. '**Ultra-processed**' means a food has changed a lot from the original form. These foods often have added *fat, sugar, salt, and additives,* which will make them *less healthy*. Look at the food labels (traffic lights) and ingredients.

What happens if I don't get eat enough potassium from my diet?

Eating enough healthy potassium rich foods helps to lessen the unhealthy effect of sodium (salt) in the body. This is due to the way our kidneys get rid of sodium. If you don't eat enough potassium, it can lead to high blood pressure in the long term. High blood pressure increases the risk of stroke, and many heart problems.

As well as making sure we have foods containing potassium it is important to **not have too much salt** (sodium) in our diet. To keep healthy you need **less salt AND more potassium**.

What happens if my blood potassium level is too low?

A very low blood potassium level (**hypokalaemia**) is *very rare* and is usually caused by *severe malnutrition, severe bowel disorders, or overuse of some medications*. This can be dangerous because it can cause problems with the way that your heart beats in the short term and is likely to need hospital treatment.

What happens if my blood potassium level is too high?

A very small number of people are at risk of a high blood potassium. These people tend to have late-stage kidney disease. Not everyone with kidney disease will be at risk of a high blood potassium level. Do not limit potassium in your diet unless your doctor tells you to. This can cause poor nutrition.

High potassium levels (hyperkalaemia) can be dangerous. This can cause an irregular heartbeat in the short term which may cause a heart attack. Other immediate problems can be breathing problems, sickness, cramps and weakness. High blood potassium is caused by kidney disease, severe muscle breakdown, and some medications.

How can I include more potassium in my diet?

- Aim for **5 or more portions** of *fruit and vegetables a day*
- Add fruit and vegetables to every meal, such as fruit on cereal, salad in sandwiches and vegetables with main meals
- Try fruit or vegetables as a **snack** carrot sticks with hummus or soft cheese
- Add extra vegetables to your meals try adding celery to your Bolognese, or mushrooms to your chicken curry
- Dairy foods, meat and fish will also provide some potassium. Try to include plenty of vegetables as well

Try to cook from scratch some new healthy recipes just once or twice a week
until that becomes a regular habit



Key points on potassium

- Potassium is an essential mineral for our body to work properly
- We get potassium from a diet rich in vegetables, fruit, wholegrains and pulses
- Diets without enough potassium can lead to high blood pressure, other heart problems and stroke
- A diet rich in potassium is healthy for almost everyone
- Speak to your dietitian if you have kidney disease and are thinking about changing your diet

Useful resources

Eat well guide

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment data/file/528193/Eatwell guide colour.pdf



British Heart Foundation Salt resources

https://www.bhf.org.uk/informationsupport/support/healthy-living/healthy-eating/salt

British Dietetic Association Position Statement on Processed food

https://www.bda.uk.com/uploads/assets/06661eb4-b635-44a7-b3a1f753525c8f99/53f7356a-51eb-42c9-b1fbc6680230fbf3/Processed-Food-Position-Statement-FI-NAL-approved.pdf

References

Bragg, D., Allison, S. P., Lobo, D. N. (2022) Fluid and metabolism in surgery. ESPEN LLL (ESPEN) 2022 https://lllnutrition.com/mod/page/view.php?id=3859

WHO. Guideline: Potassium intake for adults and children. Geneva, World Health Organization (WHO), 2012

Committee on Toxicity. Statement on potassium-based replacements for sodium-based additives. UK, COT, 2017

Drewnowski A, Rehm CD, Maillot M, et al. The feasibility of meeting the WHO guidelines for sodium and potassium: a crossnational comparison study. BMJ Open 2015;5:e006625. doi:10.1136/bmjopen-2014-006625

Palmer. B. F, Regulation of potassium homeostasis. Clin J Am Soc Nephrol. 2015 Jun 5; 10(6): 1050–1060. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4455213/

Kardalas E, Paschou SA, Anagnostis P, Muscogiuri G, Siasos G, Vryonidou A. Hypokalemia: a clinical update. Endocr Connect. 2018 Apr;7(4):R135-R146. doi: 10.1530/EC-18-0109. Epub 2018 Mar 14.https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5881435/