



Eating a plant-based diet with a kidney (renal) transplant

Kidney failure (sometimes called renal failure), happens when the kidneys stop working, and are unable to carry out all their vital jobs.

When this happens, **harmful waste products build up in the body, which is fatal without treatment. A kidney transplant is one treatment for kidney failure.**

Why eat a plant-based diet?

If you have a **kidney transplant** what you eat and your **lifestyle** is important for **looking after your transplant** and general health.

To prevent your body **rejecting your kidney transplant** you will need to take medication and some people get **side effects** from this medication. **These side effects include:**



A **larger appetite** which can lead to **unwanted weight gain.**



Increased risk of bone problems.



Increased risk of developing diabetes (called post-transplant diabetes).



Increased levels of blood cholesterol which increases your risk of **cardiovascular disease** (a condition that affects the heart and blood vessels).

A **healthy plant-based diet is high in fibre.** Fibre helps to keep you feeling fuller for longer. This helps to maintain or lose weight if needed. Fibre is also beneficial for lowering cholesterol, managing diabetes, lowering the risk of developing diabetes, and maintaining a healthy blood pressure. In addition, many plant foods are a source of calcium, which helps to support healthy bones.

All these foods contain the same amount of energy (calories).

As you can see, plant foods are **more filling** for the same number of calories when compared to fats and animal foods (meat and dairy).



If you have a **kidney transplant** and wish to eat a **plant-based diet**, then you may find the following information a **useful guide.**

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A healthy plant-based diet has a greater emphasis on...



What is a plant-based diet?



Animal products can be high in fat, are **absent** in fibre and **low** in the protective substances you find in plants.



Ultra-processed food can have added fat, sugar, salt and chemical additives.

What can I eat?

Eat a variety of vegetables and fruit every day.



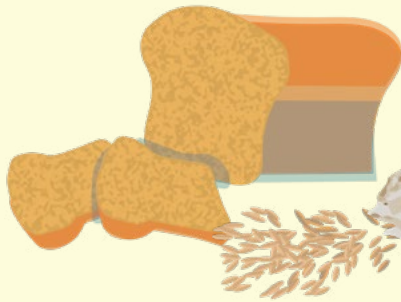
Aim for at least **5 portions** every day, **more if possible.**

Note: it is advisable that you **avoid star fruit**. Star fruit has a toxin, **caramboxin**, that can build up in the body and become harmful to those with kidney disease.

Grapefruit and grapefruit juice, pomelo, pomelo juice and star fruit can affect the level of medication in your blood and therefore **these should be avoided**.

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Enjoy a variety of starchy foods



Ideally choose whole grain, high fibre varieties such as whole wheat pasta, brown rice, and wholemeal breads or chapatis.

Or you could choose grains such as oats, barley, quinoa, buckwheat, bulgur wheat, millet or whole wheat couscous.

Porridge or cereals such as wheat biscuits, shredded whole grains, or a no added sugar muesli are great options for breakfast.



You could also eat



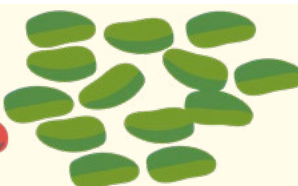
Where possible eat the potato skin to benefit from the extra fibre.

Limit ultra-processed potatoes such as oven/packet chips, potato waffles or croquets.



Instead opt for baked, boiled or mashed potatoes. It's best to keep the skins on.

Eat plant sources of protein such as



Beans, pulses (peas and beans)

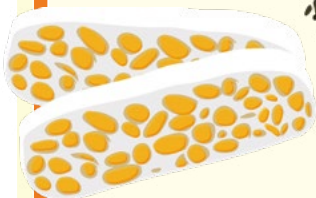
Soya/edamame beans

Soya chunks

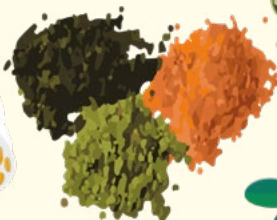
Seitan

Mycoprotein

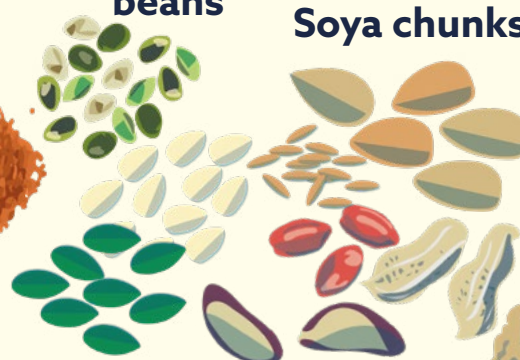
(eg Quorn) and other meat alternatives can also be included occasionally but be careful as these are often high in fat and salt, and sometimes contain additives.



Tempeh



Lentils



Unsalted nuts and seeds



TOFU

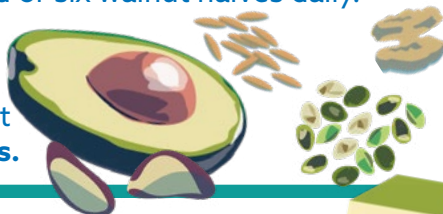
Tofu

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Choose healthy sources of fat such as avocado, nuts and seeds.

Eat some flaxseed, hemp seed, chia seed or walnuts daily in place of oily fish to ensure a source of omega-3 fats. You will need about one tablespoon of chia seed or ground flaxseed, two tablespoons of hemp seed or six walnut halves daily.

For cooking, choose a vegetable oil such as rapeseed or olive oil but only use small amounts.



Limit processed foods

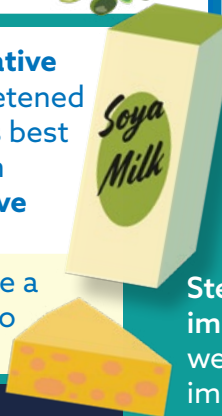
high in sugar, fat, white flour and phosphate additives. Such as cakes, pastries, biscuits, and sweets, even if they claim to be plant-based or are homemade.

Limit palm oil and coconut oils, as these are high in saturated fats which are less healthy.



Consider choosing a plant-based dairy alternative such as oat or soya drink. Ideally choose unsweetened varieties, with added calcium and vitamin D. It is best to limit plant drinks and dairy alternatives (such as yoghurt), to 300ml (1/2 pint) a day if they have phosphate additives listed in the ingredients.

If using a plant-based cheese, be aware these are a processed food, often high in less healthy fat, so best to only have in small amount.



Bone health

After your kidney transplant you may be at increased risk of diseases which affect your bones.

Steroid therapy and some immunosuppression can also weaken bones. It is therefore important to minimise the risk of your bones thinning and of fractures by eating enough calcium and getting enough vitamin D, which helps you absorb calcium. Being a healthy weight, regular exercise and avoiding smoking or too much alcohol can also help to look after your bones.

For information on plant-based sources of calcium see the factsheet on bone health linked below (page 6).

Reducing salt

Limit using salt and eating salty foods as this may help to lower your blood pressure. It is best to eat no more than 5g (one teaspoon) of salt a day. This includes salt already added to foods.

Tips to reduce salt in your diet include:

Limit processed, convenience and take away foods.

Cook meals from scratch wherever possible.

Reduce or avoid adding salt to home cooking or at the table, this includes all types of salt, e.g. rock, sea, Himalayan pink, garlic and kosher.

Limit the use of high salt condiments such as sauces, soy sauce, miso.

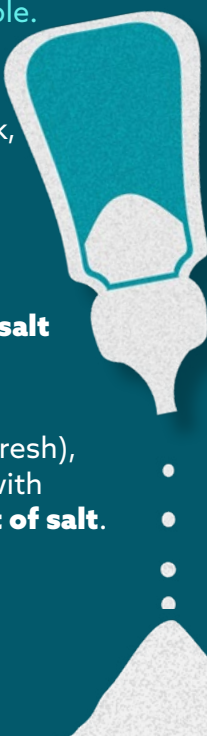
Where recipes call for stocks or sauces, choose zero salt, low salt or the reduced salt alternatives that are widely available.

Flavour food

using a variety of spices, herbs (dried and fresh), vinegars, lemon or lime juice. Be careful with seasoning mixes as these can contain a lot of salt.

Give your taste buds time to adapt to less salt, this may take 4-6 weeks.

Check and compare food packaging and labels to find those with the lowest amount of added salt.



Checking food labels

for fat, sugars, saturated fat, salts and fibre.

	FIBRE			
High in fibre	More than 6g			
Source of fibre	More than 3g			
	FAT	SUGARS	SATURATES	SALTS
Low Healthier choice	3g or less	5g or less	1.5g or less	0.3g or less
Med OK most of the time	3.1g to 17.5g	5.1g to 22.5g	1.6g to 5g	3.1g to 17.5g
High Just occasionally	More than 17.5g	More than 22.5g	More than 5g	More than 1.5g

All measures per 100g

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Other diet and lifestyle considerations

Potassium and phosphate

Before your transplant you may have cut down on foods and drinks high in the minerals potassium and phosphate.

Once your new kidney is working well it is likely you can return to eating many foods naturally rich in these minerals.

Studies show that eating large amounts of an additive called **phosphate** can be **damaging** to people with a kidney transplant.

It's best, where you can, to **limit processed foods**, as these often contain **phosphate additives**. Shown as **'phosph'** as part of a word in the ingredients list (for example; **phosphoric acid** or **polyphosphate**).

What to drink

Drinking enough fluid so that you stay hydrated is important for keeping your kidney transplant working well. Your transplant team will guide you on the amount of fluid you need.

It is best to limit sugary drinks or adding sugar to your drinks.

If you drink fruit juice or smoothies then **limit to 150ml a day.**



Tea and coffee both contribute to fluid but limit caffeine to 300mg a day or consider decaffeinated drinks as caffeine can increase your blood pressure. 300mg is approximately **2-3 coffees** depending on strength,

Food Hygiene and Safety

The medication you take for your kidney transplant reduces your body's immune system, which means you may be at a **higher risk of food poisoning.**

You should receive **guidance on food safety** soon after your kidney transplant. If you have **not received guidance on food safety**, speak to your **transplant team.**



Alcohol

There is no safe level of drinking, however, if you do consume alcohol, then to **lower your risk of harm** you should **keep within the government guidance of no more than 14 units per week for both men and women.**



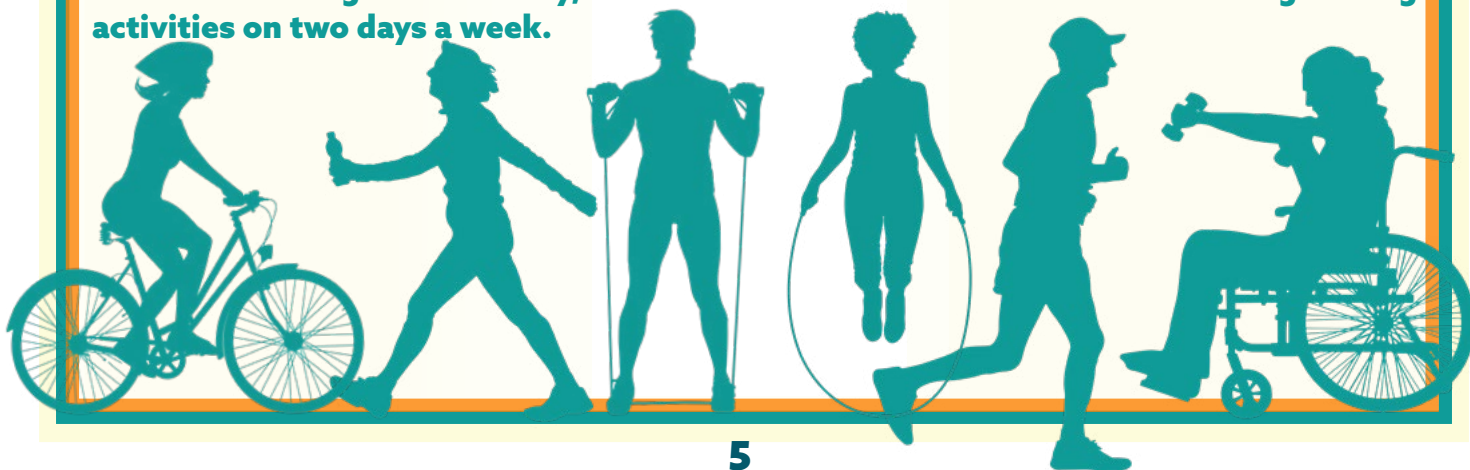
Always check alcohol consumption is safe with your medication. If you do not consume alcohol there is **no health benefit** to starting now.

Exercise

Being active helps to maintain a healthy weight and maintain healthy bones, as well as many other health benefits.

The weekly exercise guidance for adults is

At least 150 minutes moderate intensity e.g. a 30-minute brisk walk 5 times a week, or 75 minutes vigorous activity, or a mixture of both. As well as muscle strengthening activities on two days a week.



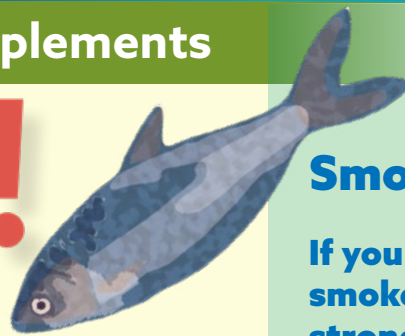
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Vitamin and mineral supplements

There are **no specific vitamin and mineral supplements required for a kidney transplant**. However, if eating an exclusively plant-based diet, you need a regular source of **vitamin B12, vitamin D, and iodine**. Therefore, it is **best to seek guidance from your kidney dietitian** on these vitamins and mineral.



You should **avoid taking a fish liver oil supplement** as these may cause unsafe levels of **vitamin A** in the body.



Smoking

If you currently smoke, then it is **strongly advisable that you stop**.



Failing kidney transplant

If your kidney transplant has started to fail, then you should **seek advice from a kidney dietitian**, who can help you **manage any complications along side your plant-based diet**.

Unless discussed with your transplant team, it is **best to avoid taking over the counter vitamins and herbal supplement** as some can be **toxic to the kidney** or **interact** with your **transplant medication**.

Links to other useful resources



[Plant-Based Eatwell Guide](#)

[BDA Food factsheet Plant-Based diet](#)

[Vegetarian, vegan and plant-based diets](#)

[BMI calculator](#)

[Weight loss tips](#)

[Bone health factsheet](#)

[Hypertension factsheet](#)

[Type 2 diabetes factsheet](#)

[High cholesterol factsheet](#)

[Kidney Kitchen](#)

[Kidney Beam](#)

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