








## Healthy eating for haemodialysis

This resource is for people with kidney disease on haemodialysis. Haemodialysis removes water and waste products by filtering your blood. It does not fully replace the role of the kidneys, and not all of the water and waste is filtered out. For this reason, diet changes may be needed to help you feel better and for your overall health.

### What diet is recommended?

There is **no standard** diet for people on dialysis, and each person is different. Information on the internet about 'kidney diets' often contains incorrect information and may not be right for you. Your Dietitian will talk to you about the best diet for you, based on your health needs and blood results. Research findings have changed over the years, and now recommend a healthy dietary pattern e.g. Mediterranean diet. This is in line with diet advice for the general population. These are some general tips:

-  Eat a variety from all the food groups - especially plant-based foods and wholegrains
-  Aim for a colourful mix of fruit (2 servings a day) and vegetables (5 servings a day)
-  Check you are eating enough protein (see explanation page 4)
-  Use herbs and spices to flavour foods instead of salt
-  You may need to limit the amount of fluid that you drink (see explanation page 2)
-  Cook fresh, home prepared meals as much as possible. Eat less unhealthy options such as ultra- processed foods, takeaways, and soft drinks
-  Plan what you will eat on dialysis days as you might be tired or away from home for a long time e.g. freeze meals ahead of time or have your main meal before dialysis

Aim to cover half of your plate with a variety of colourful **vegetables** and choose two serves of **fruit** every day.



Aim to cover a quarter of your plate with **protein** foods.

Aim to cover a quarter of your plate with **wholegrain** foods.

Image source: <https://food-guide.canada.ca/en/>

## **My weight goes up and down – what does that mean?**

When kidneys do not work well, they do not make enough urine to remove all the fluid from the body. This causes fluid weight gain. When you first start dialysis you might still be passing lots of urine, but over time you will pass less, or even no urine at all.

For people on dialysis, there are two types of weight:

- **Dry weight** refers to your weight when there is no excess fluid in your body (weight of your skeleton and flesh). When first starting dialysis, finding your dry weight may take a few treatments. Your healthcare team will aim to get you back to your dry weight at the end of each dialysis session.
- **Fluid weight** is the weight gained between dialysis treatments from foods and fluids you take in. You should aim for a weight gain of no more than 1kg per day between treatments (approximately). Your healthcare team will aim to take off the fluid weight during dialysis. Sometimes it might not be possible to remove all excess fluid, especially if you are drinking large amounts. Gaining too much fluid can cause:
  - High blood pressure (and increased pressure on the heart)
  - Shortness of breath
  - Swelling
  - Cramps, dizziness, headaches, feeling 'washed out', and nausea during dialysis

## **What should I do if my dry weight is changing?**

Your dietitian can help if:

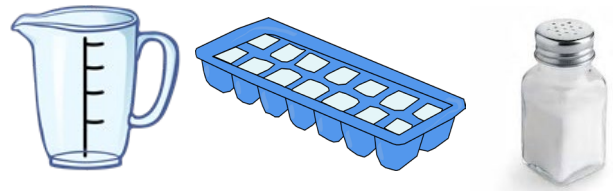
- Your dry weight is going down without trying because you are not eating enough, have a poor appetite or nausea, or your dialysis is not filtering all the waste
- Your dry weight is going up and you are trying to control this to be listed for a kidney transplant or for other health reasons

## **How much fluid should I drink?**

The recommended amount is different for different people. People on dialysis are usually asked to cut down how much they drink – this is called a fluid restriction or allowance. It is recommended to regularly measure your urine over 24 hours to help estimate your fluid restriction. Fluid includes all liquids and anything that becomes liquid at room temperature. For example, water, ice, tea, coffee, milk drinks, milk in cereal, juices, ice cream, ice blocks, custard, soft drinks, cordials, soups, gravy and jelly.

## How can I limit my fluid intake?

- Use jugs, water bottles and measuring cups to accurately measure your fluid intake
- Spread your fluid allowance over the day – save some for later on!
- Drink from small rather than large cups
- Have less water with tablets or take with a spoon of pureed fruit or yoghurt instead
- Freeze some of your allowance. Ice blocks last longer and help quench thirst
- Keep a moist face washer in the fridge or freezer and use it as a rub down to keep cool
- Stay out of the heat
- Choose a low salt diet
- Brush your teeth to freshen your mouth
- Keep lips from getting dry by using lip balm
- Try sugar-free mints, peppermints or chewing gum to keep your mouth moist
- Avoid using mouthwash containing alcohol as this can dry your mouth even more



## How much salt should I eat?

Too much sodium (found in salt) increases thirst, making it difficult to keep to your fluid restriction. Sodium is only needed in very small amounts - there is plenty in natural foods, and no need for the large amounts added in packaged foods. Less than **2300mg of sodium** per day is recommended - many people struggle to keep to this limit. For example, a ham and cheese toasted sandwich has 1700mg, and 2-3 pinches of added salt has 1500mg.

You should aim to reduce your salt intake.

- **Stop adding salt** in cooking or at the table. Use fresh/dried herbs and spices instead e.g. pepper, parsley, garlic, onion, chilli, lemon juice (check blends don't contain salt).
- Limit takeaways and ultra-processed foods e.g. deli meats, sausages – these all contain a lot of salt. Instead choose tinned fish in springwater, eggs, home cooked meats. If you are eating out, choose poached eggs, grilled fish, roast meals, salads or sandwiches.
- Fresh is best e.g. home cooked chicken pieces instead of a rotisserie or BBQ chicken.
- Limit salty snack foods e.g. chips, biscuits, crackers, bhujia mix etc. Instead have fresh fruit, yoghurt, muesli bars, plain roasted chickpeas, unsalted nuts or unsalted popcorn.
- Choose low salt, reduced salt, and no added salt options e.g. margarine/butter, stock, baked beans, tinned tomatoes, sauces (but avoid table salt alternatives e.g. Lite Salt)

Your taste buds will adapt to a low salt diet, so give it time!

## How much protein should I eat?

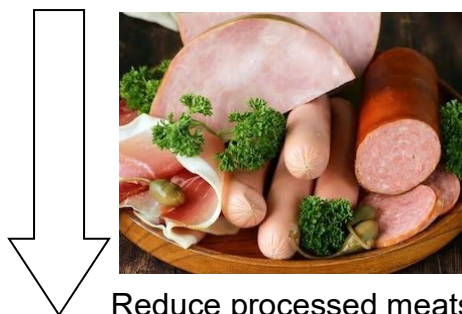
Protein is needed to keep your muscles strong and recover from illness or injury. When you start dialysis, your protein needs may increase. Check with your dietitian if you are eating enough. Some people might already be eating too much.

The **type of protein** you eat is most important. Many people need to reduce intake of:

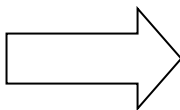
- Processed meats e.g. ham, bacon, sausages, deli meats, rotisserie chicken etc
- Red meat (aim for less than 350g per week or a small portion a few times a week of lean steak, chops, mince, or roast meats)

Instead, you should choose variety over the week, especially plant-based choices:

- Tofu and plant-based proteins like legumes and pulses e.g. chickpeas, black beans, lentils, 4 bean mix, baked beans etc
- Nuts and seeds
- Fish, particularly oily varieties e.g. salmon and sardines
- Chicken
- Eggs (aim for up to 7 per week)
- Dairy foods e.g. milk, yoghurt, cheese



Reduce processed meats



Choose plant-based proteins, nuts, fish, eggs, chicken, and fresh meats

## What about potassium and phosphate?

- These are nutrients processed by the kidney.
- Potassium helps to control heartbeat. Phosphate helps keep bones strong.
- Sometimes these can build up too high in the blood if not enough is filtered by dialysis.
- Your levels will be checked in monthly blood tests conducted at dialysis. Your Doctor or Kidney Team will refer you to the Dietitian if you need to make any diet changes.
- Not everyone needs a low potassium or low phosphate diet. Please **do not restrict your diet unless you have been advised to** (based on your blood tests).



- Many people on dialysis are prescribed phosphate binder medications e.g. Calcium Carbonate, Renagel. These need to be taken **with food** as they work by attaching to the phosphate in food, stopping it from going into your blood.

### Can I eat while I am on the dialysis machine?

Most people can eat during dialysis treatment. You might be encouraged to bring a healthy lunchbox from home, or your unit may provide a light meal or snack. This is especially important if you are out of the house for many hours on dialysis days.

Some people might suffer with low blood pressure during dialysis. If this happens repeatedly, your doctor or nurse might recommend avoiding large amounts of food or fluid whilst on dialysis, to see if this helps. Some people prefer to wait until after their dialysis is completed to have a meal.

#### Did you know.....

The foods you eat take many hours to be digested and absorbed so you can't eat processed foods while on the machine and think it won't impact your blood levels.



### What about exercise?

Now that you have started dialysis, you will be sitting for many hours during the week. So it's even more important to plan some physical activity into your schedule. Try to put together 150 minutes of moderate exercise or 75 minutes of vigorous exercise per week. Suitable types of exercise include:

- Walking at a pace at which you can talk comfortably
- Mowing the grass and housework
- Dancing, swimming, water aerobics, or cycling

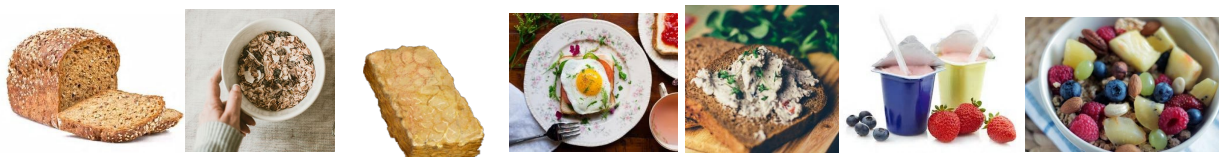


Gentle exercise during dialysis is safe e.g. resistance bands, leg pedal machine etc.

Consult with your doctor before starting an exercise program. Also discuss with your health care team how to care for your fistula and any exercise precautions that may be needed.

## Meal Ideas

### Breakfast Options



- Porridge: rolled oats with fruit and/or nuts/seeds, or cracked wheat with mixed vegetables and nuts and spices
- Wholegrain breakfast cereal (e.g. Weetbix, Vitabrits, All Bran, Sultana Bran, Sustain, Fibre Plus, Just Right, Special K, untoasted muesli) with milk/yoghurt
- Toast (wholemeal or multigrain) with ricotta/cottage cheese OR 2 eggs OR grilled tomato/spinach/mushrooms and herbs OR salt-reduced baked beans
- No added sugar yoghurt with fruit, nuts/seeds or untoasted muesli
- Congee: cooked rice, dried shrimps and scallops, mushrooms, with herbs

### Light Meal Options



- Sandwiches (wholemeal or multigrain) with bread, roll, wrap or pita with salad. Use canned fish in springwater, beans/legumes, hummus, falafel, eggs, turkey or chicken breast as a filling.
- Salad vegetables with canned beans/legumes, canned fish in springwater or eggs with extra virgin olive oil.
- Wholegrain crackers (e.g. rice cakes, Vita-Weat, Ryvita) with avocado, ricotta/cottage cheese, eggs, salad, hummus, canned fish in springwater
- Omelette or quiche with salad

### Main Meal Options



- Fish, chicken, lean beef, lamb, veal, pork or kangaroo: roast, stir-fry, baked or grilled in extra virgin olive oil with salad or vegetables and canned beans/lentils.
- Stew or casserole with lean meat, chicken, legumes/beans and vegetables (use salt reduced stock or gravy) served with rice, pasta, barley, wholegrain bread or ½ cup boiled taro
- Wholemeal pasta with vegetables and extra virgin olive oil or tomato-based sauce. Try replacing mince/chicken/meatballs with canned lentils/beans or tuna/seafood some days.
- Chickpea/chicken/meat/fish curry with vegetables, herbs and spices served with naan or Roti or rice
- Tacos/burritos with chicken/beef and cheese, bean mix, salsa, salad, avocado and natural yoghurt
- Homemade pizzas (wholemeal base, pita bread, or English muffin) and tomato paste. Try vegetable toppings such as onion, eggplant, capsicum, mushrooms with chicken/prawns and bocconcini cheese and herbs
- Noodles (e.g. rice, soba) with tofu, seafood, chicken, egg, and vegetables and herbs and spices

## Snack Options



- Fruit (fresh, canned or frozen)
- Handful of unsalted nuts or seed mix
- Yoghurt (no added sugar)
- Fresh vegetable sticks with hummus or tzatziki
- Muesli or nut bar
- Unsalted popcorn
- Roasted chickpeas/broad beans
- Wholegrain crackers or bread and avocado, pesto, boiled egg, cottage/ricotta cheese, hummus
- Plain biscuits/cakes, pikelets, raisin toast

## Further Information and Recipes

- Kidney Health Australia <https://kidney.org.au/>
- Australian Heart Foundation <https://www.heartfoundation.org.au/recipes>
- Unpack The Salt <https://unpackthesalt.com.au/recipes/#recipes>
- Kidney Kitchen  
<https://www.kidneycareuk.org/about-kidney-health/living-kidney-disease/kidney-kitchen/recipes/>
- International Federation of Kidney Foundations <https://ifkf.org/world-kidney-recipes/>
- Oldways – Cultural Food Traditions <https://oldwayspt.org/traditional-diets>
- Spice It Up <https://www.myspiceitup.ca/>

Things I can do to improve my diet for kidney disease:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

**For further information contact your Dietitian or Nutritionist:** \_\_\_\_\_