Healthy eating for haemodialysis

Haemodialysis removes water and waste products from your blood by running it through a filter. It only partially replaces the functions of the kidneys. There are a number of issues relating to the food and drinks you eat that are important to consider.

If you have just started dialysis, this information may be confusing. Your Dietitian will go through this handout with you and can answer questions you have about your diet.

This handout will give you information on the following:

- **Healthy Eating**: This is important to prevent you from losing weight
- **Protein**: This is important to keep you healthy and strong
- **Potassium**: You may need to cut down potassium in your diet
- **Salt (sodium)**: You may need to cut down salt in your diet
- **Phosphate and phosphate binders (tablets)**: You may need to cut down phosphate in your diet and binders may be needed when you eat food
- **Fluid**: Cutting back on fluid is important to protect your heart
- **Diabetes**: Eating well for your diabetes and monitoring your blood sugars is still important while you are on dialysis
- **Heart health**: It is recommended to have unsaturated fats in your diet

**Healthy eating**
The amount of food you need to eat may increase when you start dialysis. It is important to eat a variety of different foods. Eating enough food is important because it will:

- Stop you losing weight without trying
- Give your body energy to do the activities you enjoy
- Help your body use protein for building muscles and tissues

**Protein**
The amount of protein you need to eat may also increase when you start dialysis. Eating protein-rich foods at every meal can make it easier for you to eat all the protein you need. Your Dietitian can work out how much protein you need. Protein in your diet helps to:

- Protect your body from illness and infection
• Help your body build muscles and repair tissue
• Keep you feeling strong and healthy

**The best sources** of protein are:
• Meat, including red meat, chicken and fish
• Eggs
• Milk and milk products e.g. custard, yoghurt and cheese
• Tofu and legumes eg kidney beans, chick peas and lentils

**You may need to see the Dietitian if:**
• You are losing weight without trying
• Have poor appetite or nausea
• You are unable to eat enough
• Are underweight

**Note:** You may need to take nutritional supplement drinks that are high in protein and energy. Your Dietitian can recommend a drink which is best suited to you.

**Potassium**
• If your kidneys are not working properly, potassium may build up in your blood. There are usually no symptoms of a high potassium level. Regular blood tests will check your potassium level. You can manage your potassium levels by some of the foods you eat.
• High levels of potassium are very dangerous, and may cause your heart to beat irregularly and even stop beating. Your blood tests help us to monitor your potassium levels. It is important you are aware of potassium in different foods.

**Fruits and vegetables**
• All fruits and vegetables are high in potassium, if you eat large amounts
• Aim for **two (2) serves** of fruit each day. For example: 1 serve is a piece of fruit the size of a small apple or orange, ½ cup tinned fruit or juice
• Aim for **five (5) small serves** of vegetables each day. For example: 1 serve is ½ medium sized potato or ½ cup of cooked vegetables

<table>
<thead>
<tr>
<th>High potassium fruits</th>
<th>High potassium vegetables</th>
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<tbody>
<tr>
<td>Apricots</td>
<td>Artichoke</td>
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<tr>
<td>Avocado</td>
<td>Baked beans</td>
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<tr>
<td>Banana</td>
<td>Brussel sprouts</td>
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<tr>
<td>Custard apple</td>
<td>Cauliflower</td>
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<tr>
<td>Dried fruit</td>
<td>Chickpeas</td>
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<tr>
<td>Mulberry</td>
<td>Kidney beans</td>
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<tr>
<td>Rockmelon</td>
<td>Hot chips (Potato)</td>
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<tr>
<td>Stone fruit</td>
<td>Pumpkin</td>
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<tr>
<td>Tropical fruit salad</td>
<td>Spinach</td>
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<tr>
<td>Mango</td>
<td>Tomato</td>
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</tbody>
</table>
You can decrease potassium in fruit and vegetables by:
1. Peeling all fruit and vegetables
2. Chopping vegetables into small pieces
3. Boiling vegetables well – do not microwave, steam or stir fry and discard the water
4. Drain the juice from tinned or stewed fruit

<table>
<thead>
<tr>
<th>Other high potassium foods to be aware of</th>
<th>Other high potassium foods to be aware of</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treacle, molasses, golden syrup</td>
<td>Potato crisps, hot chips</td>
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<tr>
<td>Nuts</td>
<td>Yoghurt</td>
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<tr>
<td>Peanut butter, Vegemite/Marmite</td>
<td>Milk or soy milk: have less than 1 cup (250mL) each day</td>
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<tr>
<td>Seeds - sunflower, pumpkin</td>
<td>Evaporated or condensed milk</td>
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<tr>
<td>Dried fruit and nut mixes</td>
<td>Percolated coffee</td>
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<tr>
<td>Cocoa</td>
<td>Red wine</td>
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<tr>
<td>Chocolate, chocolate chips</td>
<td>Fruit cake</td>
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<tr>
<td>Coconut milk or cream, fresh coconut</td>
<td>All Bran, Bran Plus, muesli or cereal with a lot of dried fruit and nuts</td>
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<tr>
<td>Heavy grain breads, dark rye bread</td>
<td>Salt substitutes</td>
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<tr>
<td>Fresh vegetable juices, tomato juice</td>
<td>Tomato soup, tomato sauces, tomato paste</td>
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<tr>
<td>Thick and homemade vegetable soups</td>
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Note: Packaged foods no longer display potassium on the nutrition information panel. This does not mean that a food is free or low in potassium.

Your Dietitian can discuss a potassium restriction in more detail if you are having problems controlling the level of potassium in your blood.

**Salt (sodium)**

Salt makes you thirsty, which will make it difficult for you to keep to your fluid allowance. Here are some tips for reducing the amount of salt you eat:

- Aim to avoid adding salt in cooking and to meals
- Choose fresh, home-cooked meats
- Use “Salt Reduced” or “No Added Salt” products
- Avoid salty foods like:
  - Processed meat (bacon, sausages), smoked fish or smoked meats
  - Salted biscuits, nuts and crisps
  - Packet and tinned soups, packet sauces, 2 minute noodles, stocks
  - Most take-away foods
- Some foods labelled “reduced salt” can still contain high levels of sodium. Check the nutrition panel – a sodium (Na) content less than 150 mg per serve is desirable
Phosphate and phosphate binders (tablets)

Phosphate is a mineral that combines with calcium to form the hard structure of bones and teeth. Normally, the kidneys control the levels of phosphate in your blood. When your kidneys are not working, the level of phosphate in your blood can build up. High levels of phosphate can cause severe itchiness, lumps of calcium and phosphate in the bones, joints and blood vessels, causing brittle bones and painful joints bone disease.

Making lower phosphate food choices where possible can help to lower the level of phosphate in your blood. Phosphate binders (tablets) are an important way to control blood phosphate levels. These work by binding the phosphate in food so that less is absorbed from your intestine (and it passes out in your bowel motions).

It is important to take your phosphate binders (Caltrate, Calsup, Alutabs, Renagel, Lanthanum) as they have been prescribed. This may include with main meals and snacks, depending on what you are eating.

Fluid

- It is important to manage your fluid intake so that excess fluid does not build up in your body
- Fluid includes all liquids and anything that becomes liquid at room temperature. For example: water, ice, tea, coffee, milk, ice cream, iceblocks, custard, juices, soft drinks, cordials, soups, gravy and jelly
- Some solid foods, such as porridge, rice, pasta and fruit, contain large amounts of fluid. If you eat large serves of these foods, count these as part of your allowance
- Changes in your weight that occur over a couple of days are usually due to your fluid intake
- Changes in your weight that occur slowly over longer periods of time (weeks to months) are more likely to be changes in your actual dry body weight
- You should aim for a weight gain of no more than 1kg per day between dialysis sessions
- Your fluid allowance differs depending on dialysis, urine output and kidney function
Hints for fluid control

- Use jugs and measuring cups to accurately measure your fluid intake
- Keep a moist face washer in the fridge or freezer and use it as a rub down to keep cool
- Spread your fluid allowance over the day - don’t drink it all at once!
- Brush your teeth to freshen your mouth
- Drink from small rather than large cups
- Suck on lollies or a slice of lemon instead of drinking. Try mints, peppermints or chewing gum
- Stay out of the heat. If you need to go outside, choose the cooler part of the day
- Keep lips from getting dry by using lip balm
- Choose foods low in salt - fruit, fresh vegetables, fresh meats, chicken, fish, eggs, porridge, rice, pasta and “low salt” or “no added salt” foods. Look for sodium content less than 150 mg per serve on the nutrition panel. Do not add salt at the table or in cooking
- Freeze some of your fluid allowance. Ice or iceblocks, sucked slowly, last longer than a drink, and are better at quenching thirst. You can freeze water, lemon juice and soft drinks. Remember that ice is fluid and should be measured e.g. 1 cup of ice equals ½ cup water. Your fluid allowance differs depending on dialysis, urine output and kidney function

Diabetes

If you have diabetes, it is still important for you to eat well and manage your blood sugar levels. To do this, make sure you:

- Check your blood sugar levels regularly
- Take your diabetes medication
- Attend regular diabetes appointments

Heart Health

It is very important for everyone with kidney disease to maintain a healthy heart and blood vessels. Eating the right kinds of fats and oils can help. Remember if using fat, choose a polyunsaturated or monounsaturated fat as these are best for your cholesterol levels. Saturated fats increase your cholesterol and so should be avoided.
### Recommended

**Unsaturated fats**
- Most vegetable oils eg. safflower oil, sunflower oil, olive oil, canola oil, etc

### Not recommended

**Saturated fats**
- Butter, ghee, dripping, lard, copha, suet
- Fats on meats and chicken
- Solid vegetable cooking fat eg. Supafry, Hifry
- Cream
- Coconut and palm oils

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You may need to see a Dietitian if:
- You have more questions about your diet
- Your appetite is poor or you’re losing weight without trying to
- If your fluid, potassium or phosphate levels are too high

You should see your Dietitian at least once every 6 months

Your Dietitian is: _______________
Contact phone number: _____________