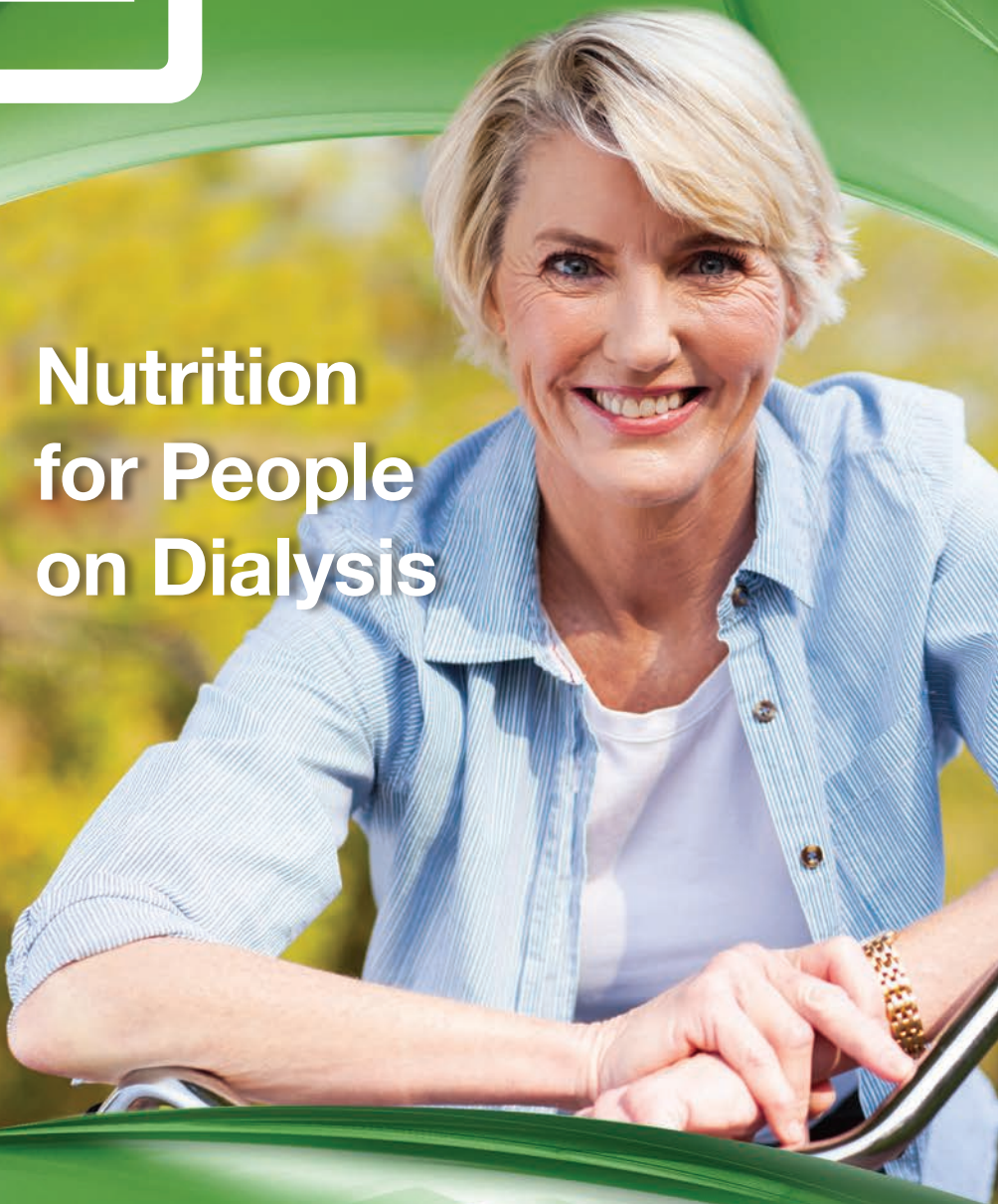




Nutrition for People on Dialysis



Common questions about your kidneys and dialysis

What do your kidneys do?

Kidneys are important because they:

- Remove toxins and wastes from your blood
- Send wastes out of your body through urine

Your kidneys also take care of your body's balance of:

- Water
- Minerals (such as calcium and phosphorus)
- Electrolytes (such as sodium and potassium)

What happens when your kidneys don't work normally?

Most people have two kidneys—one on the right side of the lower back and the other on the left.

If a kidney is damaged or diseased and doesn't work normally, wastes build up in the blood and act like toxins.



What is chronic kidney disease (CKD)?

Chronic kidney disease (also called renal disease) is when the kidneys don't filter enough waste from the blood.

The most common causes of CKD are diabetes, high blood pressure, genetics, drug side effects, and blockage caused by kidney stones.

Some people don't have any signs or symptoms of CKD, but others may notice:

- Nausea
- Vomiting
- Tiredness
- Loss of appetite

When the kidneys can't work on their own, dialysis—a treatment that removes the excess waste out of your body—is usually needed.

What is dialysis?

Your dialysis treatment, or Haemodialysis, takes excess wastes and fluid out of your body—just like your kidneys would. During dialysis, your blood will pass through a machine's special filter. The filter removes excess water, waste products, minerals, and electrolytes from the blood. In peritoneal dialysis, your blood is cleaned inside your body.



Why does it matter what you eat?

When kidneys can't remove wastes out of the body, they build up and act like toxins. To keep wastes from building up, you have to watch what you eat between dialysis treatments.

Choosing healthy foods, with the help of your dietitian or healthcare professional, helps lower these wastes and may make you feel better in between treatments.

What is my albumin level?

Albumin is a type of protein in the blood. Every month at dialysis, your albumin level will be tested. Albumin is a good measure of your overall nutritional well-being. Improved nutritional well-being may help increase your energy levels. With the right levels of albumin, you lower your risk for complications like infections or hospitalisation.

Talk to your dietitian or healthcare professional to find out what your target albumin level should be and ask about nutritional options to help you reach that target.

Your diet and nutrition on dialysis

To make sure you are making the most of what you eat and drink, work closely with your dietitian or healthcare professional to form a daily meal plan.

Calories	Make sure you are getting enough calories every day because they are important to keep your energy level up.
Protein	Your body needs protein to build muscle and lower your risk for infection. Now that you are on dialysis, you will need more high-quality proteins, such as lean meat.
Vitamins/ Minerals	The kidneys are important in processing several vitamins and minerals. Some vitamins and minerals may need to be limited.
Fluids	Fluids can build up quickly between dialysis treatments and cause bloating and discomfort. The right amount of fluid intake can help you feel your best.
Blood Sugar	If you have diabetes, the carbohydrates you eat should be balanced with your medicines and activity level to keep your blood sugar levels under control.

Nutritional balance your body needs



Recommended dialysis diet	Nepro HP
Adequate calories	✓
High in protein	✓
Low in potassium	✓
Low in phosphorus	✓

Ask your dietitian or healthcare professional for more information about Nepro HP.

A nutritional answer for you

Use Nepro HP to help meet your nutritional needs while on dialysis

A nutritional drink designed for you, Nepro HP helps you get back the protein and other nutrients you may have lost during dialysis. Use Nepro HP if you are too tired after dialysis to make yourself a meal, have lost weight without trying, or need a quick and easy meal replacement.

Nepro HP:

↑	Helps raise and maintain albumin levels ¹
↑	Helps improve nutritional status ¹



Nepro HP flavours

- Vanilla (220mL bottle, 500mL Ready-to-Hang)
- Strawberry (220mL bottle)

Nepro HP: Advanced renal nutrition for dialysis patients

Calories

1.8kcal/mL

(401kcal/220mL bottle)

Helps meet your increased energy needs

Protein

8.10g/100mL

(18g/220mL bottle)

Helps meet your protein needs and replaces protein lost during dialysis

Tailored vitamin and mineral profile

Helps comply with diet restrictions for people on dialysis

Slow release carbohydrate blend (CarbSteady)

Helps aid control of blood sugar levels

Enriched with Fibre and FOS*

Supports normal bowel function and good gut health



Find out more

Ask your dietitian or healthcare professional for more information about Nepro HP.

Fluids and dialysis

How to manage thirst

When your kidneys aren't working right, they can't get rid of the excess fluids in your body. Dialysis helps remove those excess fluids that have built up between treatments.

When you drink or consume too much fluid, you may get:

- Cramps during your dialysis session
- High blood pressure
- Shortness of breath

What counts as a fluid?

Whatever you drink throughout the day counts as fluids. But you may be surprised that all of the following count as fluids too.

These are all fluids:

- Ice cubes
- Ice cream
- Custard and Milk Pudding
- Jelly
- Soup
- Sauces and Gravy

Fluid Tip

Remember, when you are on dialysis, fluid counts as anything that turns to liquid at room temperature.

Your dialysis diet checklist

Protein

Choose foods high in protein but low in sodium.

You may have been on a low-protein diet before dialysis, but now your body needs more protein to replace the protein you lose during dialysis treatments. With the right amount of protein, you can avoid risk for health complications like infections, weakness, and fatigue.

To maintain a healthy level of protein, eat foods rich in protein like eggs, fish, meat, and chicken. Ask your dietitian or healthcare professional how much protein you need daily.

Protein Tip

Look for high-protein foods that have 14 or more grams of protein per serving.



Protein: good choices



Lean beef



Fish, seafood



Poultry



Pork



Eggs, egg
substitutes

Protein: poor choices



Hot dogs,
organ meats,
corned beef



Sausages, bacon,
salami



Cooked dried
beans, peas



Yoghurt, milk,
cream



Cheese pizza,
pasta, soup

Potassium

Choose foods low in potassium.

Potassium is a mineral found in many fruits and vegetables. It helps your nerves, muscles, and heart work properly. For people on dialysis, the kidneys can no longer remove high levels of potassium. Extra potassium can build up in the blood and make you sick. Remember, it's important to control the amount of high-potassium foods you eat.

Potassium may or may not be listed on food labels. If potassium is not listed, it does not mean that it is not in that food. Some foods with higher levels may be on your plan if they are good sources of protein. Ask your dietitian or healthcare professional about your potassium needs. Look for high-potassium ingredients, such as those listed in the “poor choices” section on the following page.

Potassium Tips

Avoid salt substitutes and other seasonings that may contain potassium.

Read labels on “low-salt” or “low-sodium” foods to be sure potassium ingredients, like potassium chloride, are not added.

Cut vegetables into small pieces, soak them in a large volume of water for 1-2 hours before cooking, drain and cook normally. Alternatively, boil them and drain off the water.

Potassium: good choices



Apples,
berries,
grapes,
oranges,
pears,
plums,
pineapple,
watermelon,
honeydew melon



Cranberry juice,
apple juice,
grape juice



Carrots, peas,
green beans,
courgettes,
eggplant,
cucumbers,
lettuce,
beetroot (canned)



Ice cream,
whipped cream,
jelly,
sherbet,
marshmallows



Cheese

Potassium: poor choices



Bananas,
peaches,
rockmelon,
apricots,
nectarines,
papaya,
kiwifruit,
dried fruit,
mangoes



Tomatoes,
avocado,
cabbage,
spinach,
potatoes,
pumpkin,
sweet potato,
asparagus,
cauliflower,
broccoli,
mushrooms,
vegetable juice



Dried beans,
peas, lentils,
seeds



Yoghurt,
custard,
milk



Chocolate,
licorice

Phosphorus

Choose foods low in phosphorus.

When your kidneys aren't working right, phosphorus can build up in your blood. Too much phosphorus can lead to bone and heart problems. Phosphorus is found in cheese, milk, nuts, cola drinks and chocolate. Talk to your dietitian or healthcare professional and be sure you are choosing foods low in phosphorus.

Phosphorus may or may not be listed on food labels. If phosphorus is not listed, it does not mean that it is not in that food. Ask your dietitian or healthcare professional about your phosphorus needs. Some foods with higher levels may be on your plan if they are good sources of protein.

Phosphorus Tip

Check your food labels carefully and avoid foods with additives containing phosphorus. Commonly used in fast foods, meats, cheeses, baked goods, drinks, and processed foods, phosphorus-high additives include dicalcium phosphate, hexametaphosphate, and pyrophosphate.

Phosphorus: good choices



Beef, lamb, pork,
chicken, eggs



White bread,
pasta, white rice,
couscous, corn
or rice cereals,
porridge



Tomatoes,
lettuce, eggplant,
cauliflower,
beetroot (cooked)
green beans,
cabbage,
carrots,
cucumbers,
peppers, onions



Apples,
blueberries,
grapes,
pineapple,
canned fruit
pears,
watermelon,
rockmelon,
mangoes



Ginger ale,
lemon-lime soda,
apple juice,
marshmallows,
boiled sweets

Phosphorus: poor choices



Processed meats
(e.g., hot dogs),
bacon, corned
beef, organ
meats



Dairy (e.g., milk,
cheese, yoghurt,
ice cream,
milk-based
puddings)



Dried beans/peas
(e.g., kidney
beans, split peas,
lentils), nuts,
peanut butter,
whole-grain
breads



Chocolate,
dried fruit



Cola drinks,
hot chocolate

Sodium

Choose foods low in sodium.

Sodium is found in many processed foods and is a major part of table salt. Too much sodium increases thirst and causes fluid buildup in the body, which can hurt your heart.

Instead of using salt, season foods with sodium-free spices and herbs and avoid foods high in sodium. Many low-sodium products have added potassium. Look for potassium chloride in the ingredient list. If it is listed, be aware that the product will have a high-potassium content.

Sodium Tip

Choose low-sodium foods and don't add extra salt.

Sodium: good choices



Fresh herbs and salt-free spices (e.g., garlic powder, onion powder, paprika, chillies, ginger)



Unsalted snacks (crackers, popcorn, pretzels, corn chips)



Lean beef, pork, poultry, fish, low-salt deli meats, beans, peas, lentils



Homemade soups or low-sodium canned soups, canned vegetables without added salt, fresh or frozen vegetables



Plain dry noodles and rice

Sodium: poor choices



Table salt, seasoning salt, garlic salt, bottled barbecue sauce, steak sauce, soy sauce, dressings, marmite, vegemite



Fast food, frozen dinners, take-away, many restaurant foods



Salted snacks (potato chips, corn chips, crackers, pretzels, popcorn)



Cold cuts/deli meats, ham, bacon, sausages, hot dogs, regular corned beef, salami, instant soup mix



Pickles, chutneys, pickle relish, olives

Making every day count

Make the most of what you eat and drink by working closely with your dietitian or healthcare professional to form a daily meal plan.

Calories: Make sure you are getting enough calories every day because they are important to keep your energy level up.

Protein: Your body needs protein to build muscle and lower your risk for infection. Now that you are on dialysis, you will need more high-quality proteins, such as lean meat.

Phosphorus: Talk to your dietitian or healthcare professional and be sure that you are choosing foods low in phosphorus. Too much phosphorus can lead to bone and heart problems. It is found in cheese, milk, cola drinks and chocolate.

Potassium: It is important to control the amount of high-potassium foods you eat. Ask your dietitian or healthcare professional about your potassium needs. Avoid salt substitutes and other seasonings that may contain potassium.

Fluids: Fluids can build up quickly between dialysis treatments and cause bloating and discomfort. The right amount of fluid intake can help you feel your best.

Blood sugar: If you have diabetes, the carbohydrates you eat should be balanced with your medicines and activity level to keep your blood sugar levels under control.

Talk to your dietitian or healthcare professional about what your daily targets should be

Calories

Target calories per day _____

Protein

Target grams per day _____

Phosphorus

Target milligrams per day _____

Potassium

Target milligrams per day _____

Fluids

Target millilitres per day _____





Reference

1. Caglar K, et al. *Kidney Int.* 2002;62(3):1054-1059.

Use Nepro HP under medical supervision. For supplemental or sole-source nutrition.

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