





What to eat when you have kidney disease

Making changes to your diet can help slow down the progress of kidney disease.

What do the kidneys do?

The kidneys:

- remove wastes from your blood
- help keep you from holding too much water in your body
- make hormones including those that control your blood pressure

How can diet affect my kidney disease?

The foods you eat can affect how the kidneys work. When you have kidney disease, you need to limit the amount of protein you eat. You also need to limit foods high in potassium and sodium. You may need to limit foods high in phosphorus.

Your dietitian will help you choose foods that are right for you.

	Protein	Potassium	Sodium	Phosphorus
What is it?	Your body uses protein to build and repair muscle.	A mineral the muscles use to work well.	A mineral found in salt. Your body needs sodium to function properly. It helps to maintain normal blood pressure, and normal function of muscle and nerves.	A mineral that helps keep your bones strong and healthy.
Why do I need to limit my intake?	Your kidneys remove the waste products formed when protein is digested. Too much of these waste products can make you feel unwell.	Your kidneys filter the extra potassium into your urine. In kidney disease, potassium can build up in your body. A high amount of potassium can make your heart beat irregularly. Too much potassium can cause your heart to stop beating.	Your kidneys filter excess sodium into your urine. In kidney disease, excess salt can build up in your body causing you to hold water. Extra water can build up in your ankles, lungs or abdomen. This extra water makes your heart work harder and increases your blood pressure.	Some people with kidney disease have high amounts of phosphorus in their blood because their kidneys are unable to filter the excess phosphorus. Too much phosphorus can cause loss of calcium from your bones and make them weak and brittle.

How much protein should I eat each day?

Your dietitian will work with you to determine the amount of protein you need each day. The amount of protein you need depends on your body weight and your degree of kidney disease.

You need	grams of protein each day.
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To learn about which foods have protein, see pages 4 to 7. They are listed under these food groups:

- Meat and Alternatives
- Milk and Milk Products
- Bread, Grain and Starches
- Vegetables

Your dietitian will let you know how many servings to have a day from these food groups.

Potassium, sodium and your kidneys

Most people with kidney disease must limit their intake of potassium and sodium.

Foods high in potassium and sodium are listed on pages 4 to 9.

= foods high in potassium

= foods high in sodium

Phosphorus and your kidneys

Some people with kidney disease may need to limit their intake of phosphorus. Your dietitian will tell you if you need to limit foods high in phosphorus.

Foods high in phosphorus are listed on pages 4 to 9.

= foods high in phosphorus

Meat and Alternatives

(7 grams of protein per serving)

You may have	servings of meat and al	ternatives a day
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(This will give you_____ grams of protein)

Food	One Serving
Beef, lamb, pork, veal	30g (1 oz)
Poultry	30g (1 oz)
Fish, shrimp	30g (1 oz)
Salmon or tuna (water-packed, no added salt)	½ cup
Cheese (hard cheeses such as cheddar, mozzarella, swiss, gouda, colby)	30g (1 oz)
Cottage cheese	½ cup
Egg	1
Unsalted peanut butter**	1 tablespoon
Tofu	½ cup

^{*}Based on weight after cooking and after skin and excess fat has been removed

- salt-cured meats, bacon, sausage, ham, dried beef, corned beef, Hamburger Helper ${\mathbb R}$
- sardines, oysters 🕅 🛚
- liver, heart, kidney 🖺 🗓
- salted, canned, or processed meats, fish, and sardines

- canned beans and canned lentils ⋒○
- salted nuts and seeds $\[\bigcap \] \]$
- dried peas, beans and legumes ♥ ①

^{**} peanut butter is high in potassium. Limit your intake to no more than 1 tbsp 3 times a week

Milk and Milk Products

(4 grams of protein per serving)

You may have _____ servings of milk and milk products a day.

(This will give you_____ grams of protein)

Food	One Serving
Skim, 1%, 2%, or whole milk	½ cup
Cream (Half and half, light, or regular)	½ cup
Skim milk powder	1 ½ tablespoons
Soy Milk	½ cup
Cream soups	¾ cup
Yogurt, pudding	½ cup
Ice Cream	¾ cup

Most milk and milk products are high in potassium and phosphorus. This is why you may need to limit these.

- buttermilk 🕅 🥽
- eggnog ⋒♡

Breads, Grains and Other Starches

(2 grams of protein per serving)

You may have	_ servings of starch a day.
(This will give you	grams of protein)

Food	One Serving
Pasta, rice (cooked)	½ cup
Bread	1 slice
Bagel, English muffin, pita	1/2
Cold or hot cereal	¹/₂ to ¹/₃ cup
Muffin or roll	1 small
Popcorn (unsalted)	2 cups
Crackers (unsalted)	6 to 8
Melba Toast	4
Hamburger bun, hotdog bun, Kaiser roll	1/2

Avoid:

•	potato – baked, mashed, instant, fries, scalloped 🤍	
•	sweet potato and yams 🤝	
•	dark or pumperknickel breads, or other breads made with bran	
•	bread and bread products with salted tops	
•	prepackaged rice, potatoes, and noodles with salty seasonings	
•	commercial mixes of bread, pancakes, muffins, waffles, instant cooked cereal $\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	
•	granola നി	

• solted enach

salted snack foods (crackers, potato chips, pretzels, popcorn)

Note:

Potatoes are very high in potassium. You may have a small potato or $\frac{1}{2}$ cup no more than 3 times a week only if double boiled to lower the potassium.

To double boil, cut potatoes into small pieces. Boil them in water until half cooked. Change the water and boil until cooked. Throw away the water.

Vegetables

(1 gram of protein per serving)

You may have	<pre>_ servings of '</pre>	vegetables a	day.
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(This will give you_____ grams of protein)

Food	One Serving
Vegetables (except those listed below)	½ cup

•	artichokes	\bigcirc

- beet greens 😙
- brussel sprouts 🔿
- bok choy 🗇
- canned vegetables 🖺
- carrot juice
- collards 🗇
- dandelion greens 🤝
- mushrooms canned, cooked
- parsnips 💙
- peas canned, dried ♥ ①
- pickles, pickled vegetables or relish
- plantain 🗇
- pumpkin 💙
- rapini 🗇
- rutabagas
- sauerkraut 🕅
- swiss chard 🔿
- spinach cooked
- squash (winter) acorn, butternut, hubbard
- tomato, tomato juice/paste/sauce 🥽
- vegetable/V8 ® juice 🥽

You may have _____ servings of fruits and juices a day.

Fruits and Juices

(0.5 gram of protein per serving)

(This will give you .5 gram of protein)
Fruits and juices have little protein. Some people may not need to limit their intake of fruits and juices. Your dietitian will tell you if you need to limit fruits and juices.
Avoid:
 apricots – dried, canned, fresh
avocado
• banana 😙
• cantaloupe 😙
• dates 🔿
• figs 😙
grapefruit juice
• guava 🕾
• kiwi 😙
• mango 🕾
melon – honeydew
• orange 🕾
orange juice
• papaya 😁
passion fruit juice
• pear – fresh 😁
• persimmon 😙
• pomegranate 🥽
 prunes or prune juice

Fats, Oils and Sugars

Fats, oils and sugars have no protein.

Talk to your dietitian about how to include them into your diet.

Other Foods

These foods have no protein.

- salted seasonings, such as celery salt, garlic salt, onion salt and sea salt
- salty snacks, such as salted nuts, seeds, pretzels, chips and crackers
- salt substitutes like No Salt [®]
- packaged liquid or dried soups, broths, bouillons

- prepared condiment sauces and marinades such as BBQ, soy, chilli, Worcestershire and steak sauces, ketchup, and mustard
- commercial salad dressings and dips made from dehydrated mixes
- soda water and tonic water
- chocolates, cocoa, malt drinks ♥ ∅
- cola drinks
- beer \(\)

^{*} homemade soups are often high in potassium if they are made using a packaged soup base.

Additional information about sodium

Improving the taste of food without salt:

There are a variety of ways you can improve the taste of your favourite foods without adding salt.

- try adding different herbs and spices such as: basil, chives, cumin, chillies, curry, coriander, dill, fennel, ginger, garlic, horseradish, mustard, mint, oregano, parsley, pepper, paprika, sage, tarragon, and unsalted seasoning powders such as garlic powder and onion powder
- when adding fresh herbs and spices, use 3 times as much dried herbs to get the same flavour
- add whole spices when you start cooking to help the full flavour come out; add ground spices at the end
- add lemon juice and vinegar after cooking vegetables to add flavour and keep the colour

Helpful tips to avoid sodium:

- do not use the salt shaker at the table
- do not add salt when cooking
- choose fresh or frozen vegetables; if choosing canned vegetables, look for the label with 'No-Added Salt'
- use fresh roast beef, turkey or chicken instead of prepackaged luncheon meats
- prepare your own foods to give you better control of what is in it
- eat popcorn without salt instead of potato chips, pretzels and nuts
- use unsalted butter or margarine

Here is a chart to help you with serving sizes:

Metric and Imperial Sizes

250 ml = 1 cup $175 \text{ ml} = \frac{3}{4} \text{ cup}$ $125 \, \text{ml} = \frac{1}{2} \, \text{cup}$ $60 \text{ ml} = \frac{1}{4} \text{ cup}$

15 ml = 1 tablespoon5 ml = 1 teaspoon25 g = 1 ounce

Dietitian's suggestions

Meal plan summary

Amount of protein each day _____ grams.

Food Group	Number of servings a day
Meats and Alternatives	
Milk and Milk Products	
Breads, Grains and Other Starches	
Vegetables	
Fruits and Juices	
Fats, Oils and Sugar	
Other Foods	