

Nutrition and Dietetics

Protein portions with chronic kidney disease

This information should only be used by patients with kidney disease and should only be followed with supervision from a dietitian.

Healthy kidneys usually get rid of a waste product called urea from your blood. When your kidneys are not working properly, the urea level in your blood can rise and make you feel unwell.

Urea is created when your body breaks down protein from your diet. Protein is important for repairing body tissues, building muscles, and fighting infections. Managing the amount of protein, you eat can make sure your body has what it needs and help manage your urea levels to keep you feeling well.

It's recommended you have a moderate amount of protein in your diet if you are stage 3- 5 chronic kidney disease and not on dialysis.

If you are on dialysis, you will need a higher amount of protein, as some protein is lost through the dialysis process.

Your dietitian will help you to work out the correct amount of protein for you.



Protein portions

The following foods contains **around 6-7 grams of protein**. This is **equivalent to 1 protein portion** and can be swapped for one another:

- 30g (1oz) meat or chicken (cooked weight)
- Small chicken breast (4-5 protein portions), 2 slices roast meat (3 protein portions)
- 30g (1oz) fish (cooked weight)
- 1 fishcake or 2 fish fingers
- 30g (1oz) cheese - a matchbox size piece
- 60g (2oz) cottage cheese – 2 tablespoons
- 1 egg
- 200ml (1 /3 pint) milk (dairy or soya)
- 1 tub yoghurt or soya yogurt
- 90g (3oz) peas, beans or lentils (cooked weight)
- 30g (1oz) dried or raw beans or lentils - 1 heaped tablespoon
- 60g (2oz) Quorn (equivalent to 1 Quorn steak)
- 60g (2oz) soya beans cooked (2 tablespoons)
- 90g (3oz) tofu (cooked weight) - about 1/3 of a standard pack of firm tofu
- 30g (1oz) fried tofu
- 30g (1oz) unsalted nuts/seeds
- 30g (1oz) peanut butter

**To meet your protein requirements, you need to eat
protein portions per day.**

Patient Information

If you need to moderate your protein intake:

- Only have protein foods at your main meals.
- Cut down on cooked breakfasts. If having, try one protein item only.
- Try to have low protein snacks in between meals to maintain your weight, such as:
 - biscuits: plain / ginger /custard creams / jam cream / iced
 - bread, toast, bagels, muffins, crumpets* or teacakes with butter and jam /marmalade / caramelised biscuits spread
 - a plain scone with jam and cream
 - a piece of fruit
 - a slice of cake for example Victoria sponge/ lemon drizzle /plain or iced doughnut /cream horn
 - cereal with oat milk

***Avoid crumpets if you are on phosphate restriction**

Plant-based proteins such as beans, lentils, pulses, soya, tofu and plant-based milks can be good alternative to animal protein sources if you are trying to moderate your protein intake. They are low in saturated fat, high in fibre, can help manage high blood pressure, diabetes and reduce the risk of developing type 2 diabetes, cardiovascular disease as well as help with weight loss.

Work towards eating at least one plant-based meal a day or try:

- Swapping 50% of your mince in chilli/bolognaise/shepherd's pie for lentils or soya mince.
- Swapping chicken or other meat in stews or stir fries for TVP (textured vegetable protein) pieces, pieces of firm tofu, chickpeas, lentils, or cashew nuts.
- Swapping dairy milk or yogurts for soya-based alternatives.
- Experimenting with new fully plant-based recipes – Kidney Kitchen has some ideas to get you started.

Patient Information

If you need to increase your protein intake:

- Include protein with each meal.
- Add a protein snack between meals.
- Spread protein portions out throughout the day.

Consider using high protein products that you can find in your supermarket:

- 200g (7oz) high protein yogurt 20-25g protein/ yogurt (3-4 portions)
- 200g (7oz) high protein mousse or pudding 20g protein/pot (3 portions)
- 200g (7oz) high protein rice pudding 13g protein/pot (2 portions)
- 250ml (8.8oz) high protein plant-based milk (1Litre =50g Protein) 250ml = ~2 portions
- 20g (1oz) high protein mature cheese slices (one slice = 1 portion)

Make sure you read the ingredient list to identify if any products contain potassium or phosphate additives if you are on low potassium and low phosphate diet.

Warning - Star fruit contains a chemical which can be extremely dangerous to people with kidney problems. These should be avoided.

Avoid ready-to-eat smoked or cured fish products such as smoked salmon or gravlax due to an increased risk of listeriosis.

Listeriosis is an infection caused by bacteria called listeria. People with kidney disease and people taking medicines or having treatments that weaken their immune system are amongst a group of people at higher risk of serious illness from listeriosis.

More information on how to reduce the risk of listeriosis can be found at: [Listeriosis - NHS \(www.nhs.uk\)](http://www.nhs.uk) and [Listeria | Food Standards Agency](http://www.foodstandards.gov.uk).

Patient Information

More information

If you'd like more information or have any questions, contact us on 024 7696 6151. You can also follow the Renal Dietitians on X (formerly known as Twitter) @UHCW_RenalDiet.

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