

Information for people with kidney disease

Eating enough phosphate

This leaflet is a guide for people with kidney disease on how to get more phosphate from food. If you have any questions or concerns, please speak to your dietitian.

What is phosphate and why do I need it?

Our bodies need phosphate to make, maintain and repair our bones. In the first few weeks after your transplant, the level of phosphate in your blood can be too low. This may be a side effect of your medicines or as a result of your kidney taking a little while to find the right balance of phosphate.

Low levels of phosphate can cause muscle weakness, bone pain, tremors and confusion. However, often you will not experience any symptoms. The normal level for phosphate in your blood is 0.9 -1.4 mmol/l (millimoles per litre). Your doctor will regularly check your phosphate level when you come to clinic.

If your phosphate levels are low, increasing your intake of phosphate rich foods as part of a healthy diet can help to increase the level of phosphate in your blood.

Phosphate rich foods

Dairy products

Dairy foods are high in calcium, which helps to keep your bones strong. They are also rich in phosphate. Choose low fat varieties to prevent putting on too much weight and to keep your heart healthy. Aim to include 2-3 servings each day. 1 serving is:

- ½ pint of milk, or
- 1 small carton of yoghurt, or
- small bowl of custard, or
- 1oz or 25g (1 small matchbox-sized piece) of hard cheese, such as cheddar or edam

Fish

Fish is a good source of protein. Some types of fish such as salmon, sardines, mackerel, trout, seabass, monkfish, fresh tuna, pollock and herring are also rich in phosphate. Try to eat high phosphate fish at least twice a week.

1 serving of fish = 115g

Offal

Offal is very high in phosphate e.g. liver, and kidney. Eating these foods regularly will help to increase phosphate in your blood.

Wholemeal breads and cereals

Choose wholemeal breads, pasta, rice and breakfast cereals as these are higher in phosphate than the lower fibre options. All bran and muesli are particularly good sources of phosphate.

Meat and eggs

Meat and eggs are high in protein as well as being rich sources of phosphate and other vitamins and minerals. Include at least 2 servings of lean meat or chicken or eggs each day. 1 serving is:

- 100g of meat or chicken
- 2 eggs

Beans and pulses

Beans and lentils are low in fat and are a good source of phosphate, protein and fibre. Lentils, chickpeas, baked beans, black-eyed beans and cannellini beans are all examples of beans or pulses that you can include regularly in your diet. Choose tinned products in water rather than brine. If you are vegetarian or vegan you need to have at least 150g of beans or pulses daily.

Nuts and seeds

Nuts and seeds, for example peanuts, walnuts, Brazil nuts, sesame seeds and sunflower seeds are high in phosphate and contain good fats. You can regularly include unsalted nuts and seeds in your diet. However it is important to limit a serving to a small handful (30g) per day as they are also high in calories.

Meal and snack ideas

Here are some meal and snack ideas to help increase the phosphate in your blood:

Breakfast:

- Reduced fat cheddar cheese on a wholemeal roll
- Scrambled eggs on wholemeal bread
- Muesli with yogurt or skimmed or semi-skimmed milk

Lunch:

- An egg sandwich with reduced fat mayonnaise on wholemeal bread
- A wholemeal roll with salad and cold meat
- Baked beans on wholemeal toast
- Lentil soup and wholemeal roll

Evening meal:

- Grilled fish, meat or chicken with vegetables or salad
- Add lentils or baked beans to bolognaise sauce and serve with wholemeal pasta
- Chicken curry with wholemeal rice

Snacks:

- A small handful of unsalted nuts
- Reduced fat yoghurt or custard
- Wholemeal crackers with reduced fat cheddar cheese or hummus
- Oatcakes with low fat cheese

- Scone and a glass of skimmed or semi-skimmed milk

Remember:

- Drinking skimmed or semi-skimmed milk will increase phosphate and count towards your daily fluid intake
- Nuts, yoghurt and crackers are easy snacks to take to hospital appointments
- Tinned lentils and beans are a healthy, easy, cheap way to increase your phosphate

Medication

Despite eating a diet adequate in phosphate, some people need phosphate supplements for the first few weeks or months after their kidney transplant to help keep the level of phosphate in their blood within the normal range. Your doctor will prescribe phosphate supplements if you need them.

Contact us

If you have any questions or concerns regarding this information, please contact the Renal Dietitians on 0141 451 6243 (Monday to Friday, 9am – 5pm). If we are unable to take your call, please leave a message and we will call you back.

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