

Healthy eating after a kidney transplant

This infoKID topic is for parents and carers about children's kidney conditions. Visit www.infoKID.org.uk to find more topics about conditions, tests & diagnosis, treatments and supporting information.

Each topic starts with an overview followed by several sections with more information.

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This information is about healthy eating after a kidney transplant. It covers:

- eating a healthy, balanced diet, rich in fruit and vegetables
- eating less fat and choosing healthier types of fat
- limiting the amount of salt and sugar
- getting lots of exercise

This advice is very important to help your child have a healthy body weight. This will reduce the risk of heart disease and other health problems later in life.



Overview

Diet after a kidney transplant

Before a kidney transplant, many children have restrictions on what they can eat and drink – for example, much less of the minerals potassium and phosphate, which are found in many foods.

After a **kidney transplant**, most children can eat a diet that is much less restrictive and more varied. Your renal team will advise you on what your child can eat.

Appetite

Some children with kidney disease have a poor appetite, and do not want to eat. This usually improves after a kidney transplant.

However, if your child eats too much food or a lot of unhealthy food, he or she may have higher amounts of fat and sugar in the blood over the long term.

Medicines

Your child may also feel more hungry than usual if he or she is taking **steroid** medicines, especially for the first few months when the dose (amount of medicine) is high. When the dose is reduced, this effect on appetite is reduced.

Steroids can also lead to more of the mineral calcium being lost from your child's bones.

Tips

If your child is gaining too much weight, and you think that he or she may be eating too much food or unhealthy food, try the following.

- Make sure your child has regular meals – skipping meals may make them eat more later on.
- If your child wants a snack, try fruit, vegetable sticks or crispbreads, crackerbreads or rice cakes with a low-fat topping. He or she may also try sugar-free jellies, ice lollies or toast with low-fat toppings.
- Your child may have a glass of water or a low-calorie and low-sugar drink such as juice with their snack, to help him or her fill up.
- Your child can have larger portions of rice, vegetables, pasta or potatoes with his or her meals, but do not add extra sauces or butter.

A balanced diet

You can help prevent excessive weight gain after a transplant by making sure your child eats a healthy, balanced diet, which includes:

- fruit and vegetables – at least five servings a day
- starchy foods, such as bread, rice, potatoes and pasta – use wholegrain varieties where possible
- protein – including healthy types of meat, fish, eggs, beans and dairy produce, and other sources of protein such as soy products

» [More about a balanced diet](#)

Fat, sugar and salt

It is important that your child has only a small amount of foods are high in fat (especially saturated fat), sugar and/or salt.

» [More about fat, sugar and salt in the diet](#)

Exercise

Exercise is a very important part of staying healthy.

When your child first comes out of the hospital after a kidney transplant, he or she will only be able to gently exercise at first. After about three months, your child will be able to return to his or her normal activities. Your child's doctor and community nurse will speak with you about what is right for your child to do and when.

Your child can get regular exercise every day. Your doctor or nurse will let you know whether there are any activities your child should avoid. Some options are:

- walking to nursery, school or college
- playing a sport
- dancing
- swimming

Safer eating

Because of medicines taken after a kidney transplant, your child has a greater risk of getting ill from germs, such as bacteria. You will have been advised on this during your child's hospital stay for the transplantation.

Some bacterial infections can be picked up from food. You can help reduce your child's risk of infection from food by:

- handling food safely
- being careful when eating out or getting takeaway foods
- avoiding certain 'high-risk' foods because they are more likely to have bacteria that can cause an infection

» [More about safer eating after a kidney transplant on \[www.infoKID.org.uk\]\(http://www.infoKID.org.uk\)](#)

Your notes

Balanced diet

A healthy diet is one that contains a good balance of each of the food groups.

The Eatwell Plate

Use the Eatwell Plate to help get the balance right in your child's diet. It shows how much your child should eat from each food group.



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Fruit and vegetables

It is important that your child eats five servings of fruit and vegetables every day.

One serving size is about what can fit into the palm of your child's hand.

Fruit and vegetables have lots of vitamins and minerals. Eating plenty of them can help prevent serious health problems in adulthood, such as heart disease, stroke, type 2 diabetes and obesity.

Tips

- Include vegetables and fruit in your family meals.
- Add extra vegetables to casseroles, curries and pasta dishes. For example, grate carrots into minced beef when making cottage pie or Bolognese.
- Put salad in sandwiches and add vegetable sticks to your child's lunch box.
- Give your child fruit for snacks. Sprinkle dried fruit on cereal or spread banana on toast.
- Your child can have fruit juice, or you can puree fruit for smoothies.
- **Do not** give grapefruit or grapefruit juice if your child is taking the medicine tacrolimus.
- Add fruit to cake mixtures when baking – then reduce the amount of sugar you add.



Bread, rice, potatoes, pasta and other starchy foods

Your child should eat plenty of starchy foods, such as bread, rice, potatoes and pasta.

Choose wholegrain varieties – such as whole-wheat bread and brown rice – whenever you can.

Milk, dairy products and alternatives

Dairy products like milk and cheese or fortified soya milk and desserts, are great sources of protein, vitamins and minerals for your child.

These foods will help boost your child's calcium intake. This is especially important when he or she is taking steroid medicines, which can make the bones lose calcium and so reduce their strength.

If your child does not like or cannot drink milk, speak with your renal dietitian about other calcium-rich foods.

How much should my child have?

Try to give your child three portions a day. A portion is:

- 200ml (1/3 pint) milk or fortified soya milk
- 125 g pot yoghurt or fortified soya dessert
- 30 g of cheese.

Lower fat

For children aged 2 years or older, you can try lower-fat choices such as semi-skimmed milk. **Do not** give your child skimmed milk until they are 5 years old.

Some lower-fat choices are:

- semi-skimmed milk, skimmed milk or 'light' soya milk
- reduced fat hard cheeses and 'light' cream cheese
- cottage cheese
- 'diet' or low-fat yoghurts.

Meat, fish, eggs, beans and other protein sources

Your child should have one portion of meat, fish, eggs or beans at each of their main meals (in the middle of the day and in the evening). Choose options with less fat or healthier types of fat.

Below are some tips you can follow as a family, to help your child eat healthy sources of protein.

Meat and poultry

- Cut down on products with processed meat such as sausages, burgers, pies and pasties. If you do have sausages, choose lower-fat varieties and grill them to allow some of the fat to drain away.
- It is usually better to eat less red meat than white meat.
- Try to have leaner cuts of red meat. When cooking mince, drain away any excess fat.
- Do not give your child the skin on poultry such as chicken, because it has more fat.

Fish

- Fish is usually a good option, but try to avoid battered, fried fish.
- Oily fish is very good, as it naturally contains a healthy type of fat called omega-3, which has been shown to reduce the risk of heart disease. Oily fish can contain low levels of pollutants (chemicals that can be harmful if you have a lot of them) that can build up in the body over time. Because of this, it is recommended that girls only eat two portions a week (a portion is 140 g). Boys can eat up to four portions a week.
- Try salmon and mackerel. Tinned varieties are just as good and are useful for sandwich fillings.

Other

- Meat alternatives such as Quorn™, tofu and soya products are lower-fat options and suitable for vegetarians.
- Nuts and seeds also contain healthier fats but can be quite high in calories. Your child should try not to snack on them if he or she needs to limit weight gain.

Fat, sugar and salt

It is important that your child cuts down on fat, sugar and salt, especially if he or she is gaining too much weight.

Fat

There are two main types of fat:

- saturated fat
- unsaturated fat.

Fat is an important part of your child's diet – it provides energy as well as some important vitamins.

However, it is important that he or she does not eat too much fat, and that more of the fat he or she eats is unsaturated rather than saturated.

Eating less saturated fat and trans fat

Saturated fats can increase the cholesterol in the blood, which can increase the risk of many diseases, such as heart disease and stroke, later in life.

Limit the amount of these foods, which are high in saturated fat:

- meat products such as burgers, pies, sausages
- butter and lard
- pastry, cakes, biscuits, chocolate and toffees
- coconut or palm oil
- cream, including soured cream
- mayonnaise

Some foods, especially biscuits, cakes and fried snacks, contain a type of saturated fat called **trans fats**. These fats are made by hardening oil, and helps give foods a longer shelf life. They are often listed as hydrogenated fat on the food packaging.

Eating unsaturated fats

Unsaturated fats are much healthier for the heart and can actually reduce cholesterol. They are found in vegetables and oily fish, as well as some margarines – look for a label that says 'high in polyunsaturates'.

These fats contain **essential fatty acids**, which help keep us healthy, and may protect your child from heart disease later in life. We need to eat these because they cannot be made by the body. Some important ones are omega-3 and omega-6 essential fatty acids.

The following foods are high in unsaturated fat and should be encouraged, instead of the above foods with high saturated fats:

- oily fish such as mackerel, sardines, pilchards, salmon (see Balanced diet section about the number of servings per week)
- nuts (except coconut), seeds and avocados
- olive oil and spreads and rapeseed oil, omega-3 spreads, sunflower margarine and oil.

How to find out types of fat

You can read the labels on packaged foods to find out the amount of saturated fat and total fat.

- More than 5 g saturated fat per 100 g food is a lot of saturated fat.
- More than 20 g total fat per 100 g food is a high-fat food.

Sugar

Most children and adults in the UK eat too much sugar.

There are natural sugars in foods such as fruit and milk, but these are healthy.

Sugars are added to many foods, such as sweets, cakes, biscuits, chocolate and some fizzy drinks and juice drinks – your child should only have small amounts of these foods and drinks. These foods also have a lot of calories, and so may contribute to putting on too much weight.

Eating less sugar

Limit the amount of these foods, which have lots of sugar:

- sweets and chocolate
- cakes and puddings
- mousses, ice creams and other desserts
- jam, marmalade and chocolate spread
- fizzy drinks and juice drinks

Tips for cutting down on sugar

- Your child should eat more fruit instead of sugary foods – it is so good for you!
- Try plain or fruit buns, scones or teacakes instead of cake. Have plain, semi-sweet biscuits.
- Gradually cut down on sugar added to your child's cereal or in drinks.
- Try not to give your child sugar-coated breakfast cereal, and choose the wholegrain types with added fruit.
- Drink water and diluted fresh fruit juice or low sugar drinks.
- Try different toast toppings such as mashed banana, reduced-fat cream cheeses and reduced-sugar jams and marmalades.
- Try natural yoghurt or plain fromage frais with chopped or pureed fruit, instead of yoghurts that have added sugar.

Salt

Many children and adults in the UK eat too much salt. This can increase the risk of high blood pressure (**hypertension**) and heart disease.

Lots of salt is added to ready-made foods, so even if your child does not add salt to their meals, they may still be eating far too much. By cutting down salt over time, your child may find that he or she does not miss it as much.

Tips for cutting down on salt

- Try to avoid giving your child salty snacks such as crisps, corn snacks, salted nuts and savoury biscuits. Choose lower-salt types or, even better, unsalted.
- Try not to give your child too many ready-made or takeaway meals, such as pizza, nuggets and coated potato wedges.
- Smoked fish, cheese and bacon contain a lot of salt, so only have a small amount of these or have them occasionally.
- Have lower-salt varieties of baked beans and other tinned foods. Cut down on ketchup.
- Avoid dehydrated meals such as pot noodles or dried pasta/rice with sauce or flavourings.
- Do not add extra salt to meals that you cook, or at the dining table.
- Do not use salt substitutes such as 'Lo Salt' or low-sodium salt. These may contain potassium, which can be harmful in some children who have had a kidney transplant.

How to find out how much salt is in foods

You can read labels to help you understand if a food is high in salt.

Salt is often written as **sodium**. Labels will give the amount of salt or sodium in grams (g). 1 g sodium is the same as 2.5 g salt.

- Less than 0.1 g sodium or 0.3 g salt per 100 g food is a low-salt food.
- More than 0.6 g sodium or 1.5 g salt per 100 g food is a high-salt food.

Daily recommendations for salt intake

The daily recommendations for salt intake depend on your child's age. For children aged 1 year and over:

- 1–3 years – no more than 2 g salt or 0.8 g sodium
- 4–6 years – no more than 3 g salt or 1.2 g sodium
- 7–10 years – no more than 5 g salt or 2 g sodium
- 11 years and older – no more than 6 g salt or 2.5 g sodium

Special acknowledgement:

This information was co-written with Sarah Trace, Paediatric Dietitian Royal Hospital for Children, Bristol.

Your notes and contact information

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