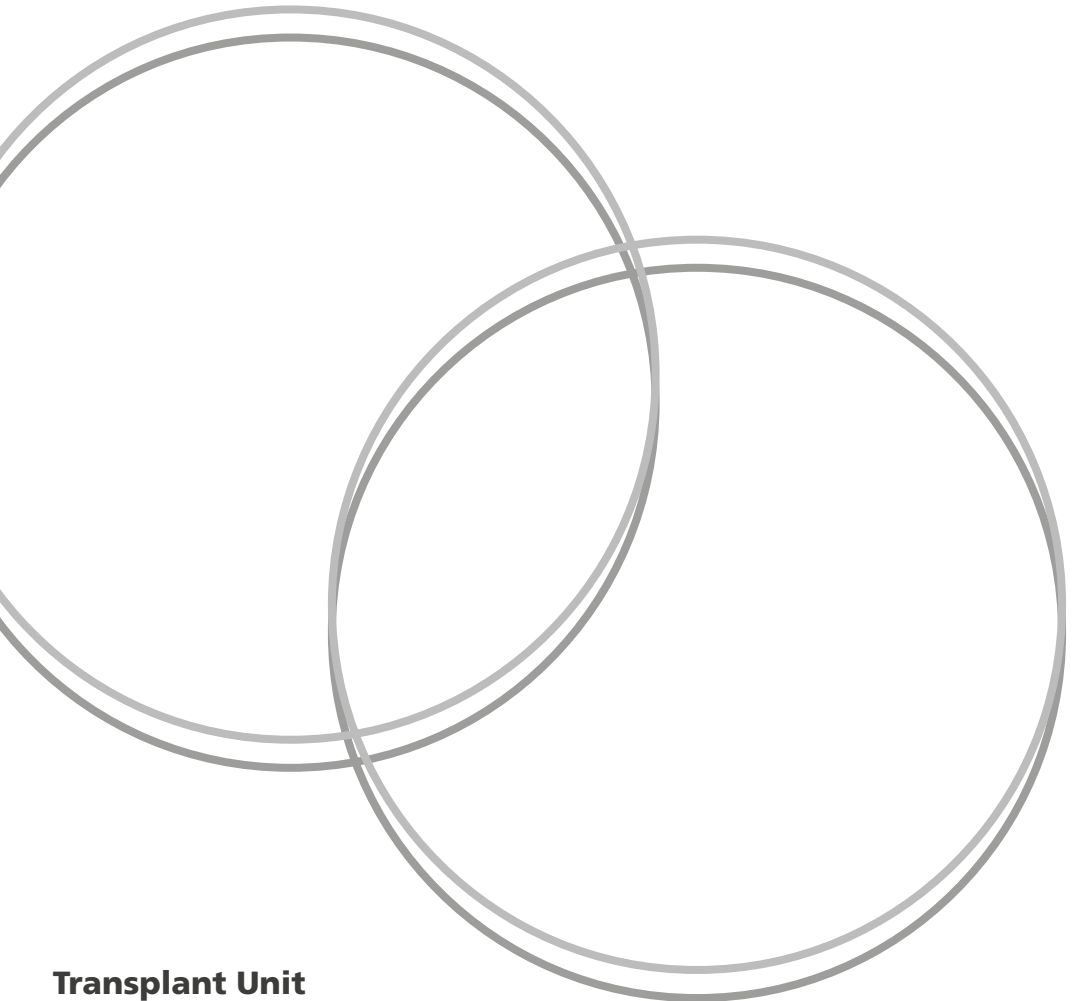


# Eating Safely After Your Kidney or Pancreas Transplant

Information for patients



## **Introduction**

If you have had a transplant and would like advice about eating safely, then this is the leaflet for you.

## **Why do I need to worry about eating safely after my transplant?**

After a transplant you are at greater risk of getting food poisoning. Food poisoning usually causes vomiting and/or diarrhoea. You are more at risk because your immune system is weakened by the immunosuppression medication you are taking, so is less able to fight infection. It is important to avoid high risk foods that may carry harmful bacteria.

## **How long do I need to avoid high risk foods?**

The food safety guidance in this leaflet should be followed for the first six months after your transplant. This is because you are on a higher dosage of your immunosuppressive medication during this time.

After six months, you should continue to follow basic food safety, as you will still need to take a maintenance dose of immunosuppressive medication.

## **How can I reduce my risk of getting food poisoning?**

Following the 4 C's can help reduce your risk:

1. Wash your hands properly and keep them clean.
2. Cook food properly.
3. Chill food properly.
4. Avoid cross-contamination.

### **Cleaning**

- Wash your hands with soap and hot water and dry thoroughly with a clean towel. This should be done after going to the toilet, handling pets, before preparing or handling food and before eating.
- Keep worktops, chopping boards and utensils clean at all times.
- Use clean dish cloths and tea towels. Use a separate towel or kitchen paper to dry your hands.
- Avoid eating food that has been prepared by someone who has diarrhoea or vomiting.
- Make sure that open cuts or sores are covered before preparing and handling food.

## **Cooking**

- Cooking food thoroughly kills harmful bacteria.
- Always cook meat and fish well. Juices from meat should run clear and have no visible pink flesh. Seafood should be cooked until the flesh is firm.
- Eat cooked foods within an hour of making. If there are leftovers, cool them within 1 to 2 hours and store in the fridge or freezer. Eat any left overs within 24 to 48 hours.

### **Reheating foods**

- If reheating foods, make sure they are served piping hot.
- Always follow the cooking or reheating instructions on the label.
- Do not reheat food more than once.
- Rice should only be eaten when it has been freshly cooked and should not be reheated.

### **Understanding 'use-by' dates**

Do not eat food that is past its 'use by' date.

### **Understanding 'best before' dates**

'Best before' dates show how long food will remain at its best. It is advisable to use the product within a few days of this date, to reduce risk of foodborne illness.

## Chilling

Chilling your food properly helps to stop harmful bacteria from growing.

- Keep refrigerators at the correct temperature (between 0-5°C).
- After shopping, put food that needs to be kept chilled in the fridge straight away. Cool bags are useful to keep foods cool during transportation.
- Avoid overloading home refrigerators as the air needs to circulate to keep it cold.
- Do not re-freeze foods once thawed.

## Avoiding cross-contamination

Cross-contamination is when bacteria spread between food, surfaces or equipment. It is most likely to happen when raw food touches (or drips onto) ready-to-eat food, equipment or surfaces. Cross-contamination is one of the most common causes of food poisoning.

### **To reduce the risk:**

- Keep raw and ready-to-eat food separate during storage and preparation.
- Do not wash raw meat or poultry before cooking. Washing could splash potentially harmful germs onto work surfaces.
- Use different chopping boards and utensils when preparing raw meat, poultry and fish.

# Food that is more harmful

## **Meat, poultry, fish and shellfish**

Meat, poultry and fish are generally safe to eat, if cooked thoroughly. However, the following foods are considered more high risk (harmful):

- Rotisserie chickens.
- Deli-counter meat, fish and poultry.
- Raw meat, fish and poultry, such as steak tartare, sashimi, sushi, oysters and caviar.
- All meat and vegetable pâté.
- Sausages and chicken at barbecues. Make sure they are cooked throughout.
- Cold meats such as salami, Parma ham, chorizo and pepperoni. These are cured and fermented, rather than cooked. Only eat these foods if they are cooked until piping hot, such as on a pizza.
- Cold smoked or cured fish. Only eat these foods if they are cooked until piping hot such as in a pasta meal.

## **Safer meat options:**

- Pre-packed meat, such as cooked ham or beef.
- Shelf stable tinned and jarred pate, but be aware as these will have a high salt content.

## **Safer fish and shellfish options:**

- Pre-packaged fish and shellfish.
- Tinned fish such as tuna, salmon.

## **Eggs**

These are safe to eat, providing they are thoroughly cooked with no runny yolks.

- Eggs (including duck and quail eggs) should be 'British Lion-stamped' which certifies that the hens have been vaccinated against salmonella. They should be stored in the fridge.
- Avoid eggs from outside the UK, or any eggs without the British Lion-stamp.
- Avoid using raw egg in any homemade sauces or desserts, such as home-made or deli mayonnaise, hollandaise sauce, mousses and ice-cream. Use pasteurised liquid egg instead.
- Avoid eating raw cookie dough or cake batter.

## **Fruit, vegetables and salad**

If you are going to eat fruit and vegetables raw (such as in a salad or a smoothie/juice) wash thoroughly and peel if necessary.

## Milk and dairy products

Milk and milk alternatives should be pasteurised or ultra-heat treated (UHT).

### Cheese

All cheese is safe to eat if cooked until piping hot or pasteurised. Hard cheeses are generally a safer option as they have a lower moisture content (pasteurised or unpasteurised), such as cheddar, red Leicester, edam, gouda, pecorino and parmesan.

All cheeses are safe to eat if they are cooked to piping hot, even if they are unpasteurised.

The table below summarises the current recommendations.

<b>Higher risk cheeses</b>	<b>Safer alternative</b>
Cheeses on the deli counter.	Vacuum packed cheese.
All unpasteurised mould-ripened soft cheese (white rind) e.g. brie, camembert, soft goats cheese.	Pasteurised soft cheese e.g. cottage cheese, cream cheese, mozzarella, ricotta feta, paneer, labneh, halloumi, hard goats' cheese, processed cheeses such as cheese spreads (e.g. Dairylea).
Blue-veined cheese e.g. Danish blue, gorgonzola, Roquefort.	Cooked and uncooked Stilton. Cooked blue-veined cheese.
Dolcelatte.	Pasteurised version.
Homemade cheese e.g. labneh/paneer (unless pasteurised).	Shop-bought pasteurised version.



### **Ice-cream**

- All shop-bought ice-cream is safe to eat.
- Do not re-freeze ice-cream that has melted.
- Avoid soft serve ice-cream from machines, such as Mr Whippy.

### **Yoghurt and starter cultures**

- All yoghurt should be pasteurised and stored in the refrigerator.
- Avoid large 'sharing' pots and buy smaller pots and consume within the use by dates.
- Avoid homemade yogurts, such as kefir and home starter kits.

Yoghurts containing prebiotics (substances encouraging the growth of healthy bacteria within the gut) are safe to eat. These should not be confused with probiotic yogurts which should be avoided (see below).

<b>Higher risk</b>	<b>Safer alternative</b>
'Bio' or 'probiotic' yogurt. Kefir or other homemade yogurts.	Live, plain/natural yogurt, lassi. sour cream, Greek and fruit yogurts.

## **Eating out and takeaways**

It is best to avoid eating out or having takeaways for the first 6 to 8 weeks after your transplant.

### **Tips to enjoy eating out safely**

- Make sure the restaurant/café/takeaway has a good food hygiene rating. The Food Standards Agency website: <https://ratings.food.gov.uk>
- Check the eating area is clean and tidy.
- Avoid all high-risk foods on the menu or ask if you are unsure.
- Try to order a plated meal that is cooked to order and make sure your meal is piping hot and thoroughly cooked when it arrives.
- Be wary of raw or undercooked egg in sauces, desserts and dressings, such as homemade mayonnaise, homemade ice-cream, chocolate mousse, meringue, hollandaise and béarnaise sauces.
- Avoid rice that has already been cooked and kept warm (often done by Chinese and Indian restaurants). Ask for it to be cooked fresh or choose potato, pasta, chips, chapatti or noodles.
- Buffets: try to be at the front of the queue and do not go back for more, as there is a risk the food may have been contaminated by other diners and temperatures may fluctuate on the hot plates.

## **Foods that may interact with your medication**

The following foods and herbal remedies may interact with your immunosuppressive medications, by reducing their ability to work properly.

- Grapefruit and grapefruit juice.
- Pomelo and pomelo juice (a citrus fruit closely related to grapefruit).
- Star fruit.

Avoid taking any 'alternative' medicines, such as herbal or homeopathic remedies, or high dose vitamins such as vitamin C.

If you have any concerns or queries, please discuss this further with your transplant doctor, nurse or pharmacist before taking any non-prescription medicines.

## **Do my previous dietary restrictions need to continue after I have had a kidney transplant?**

Sometimes after your kidney transplant the new kidney is slow to wake up (known as delayed graft function). During this time it is sensible to continue the previous dietary restrictions you followed before you had your transplant.

Once your transplanted kidney function improves you can start to lift your potassium and phosphate dietary restrictions. Your dietitian will be able to provide more advice on this if needed.

You should continue to limit your salt intake to help maintain a healthy blood pressure.

### **How much fluid am I allowed to drink?**

Once you are passing normal volumes of urine it is important to drink plenty, to keep your kidney functioning. Aim to drink at least 2 litres (3 and a half pints) per day, or as advised by your kidney or transplant team.

# Looking after your bones after your transplant

Following a transplant it is really important to include calcium, vitamin D and phosphate-rich foods in your diet, to keep your bones strong.

## Phosphate

It is common for phosphate levels to decrease immediately after your kidney transplant starts working. You should now eat food high in phosphate to help replace this. Your transplant team will check your phosphate levels when you come to clinic.

Foods high in phosphate:

- Lean meat and offal.
- Fish, especially those where soft, edible bones are eaten.
- Eggs.
- Nuts and seeds.
- Milk, cheese, yoghurt.
- Malted milk drinks and drinking chocolate.
- Milk puddings, such as rice pudding.
- Fortified plant drinks (milk substitutes) and yogurts.

## **Calcium and vitamin D**

To meet your recommended calcium intake, aim to eat or drink 3 to 4 portions of calcium-rich foods per day. Eating foods rich in vitamin D helps your body to absorb calcium from food.

Foods high in calcium (per portion):

- 200mls milk – if choosing milk alternatives, such as soya, oat or nut milks, choose those fortified with calcium.
- 25g light malted milk powder in 200mls milk (this is 2 portions of calcium).
- 30g cheese.
- 120g yoghurt including soya yogurts.
- 80g tofu.
- 60 to 100g tinned fish with bones, e.g. sardines and pilchards.
- 80 g watercress, boiled kale or pak choi.

Foods high in vitamin D:

- Fortified margarine and low fat spread.
- Oily fish, such as mackerel.
- Fortified breakfast cereals.
- Eggs.
- Fortified milk alternatives such as soya, oat or rice milk.
- Mushrooms that have been enriched with vitamin D.

## **How to contact us**

If you would like further information about anything in this leaflet, the renal dietitians will be available in the morning during your clinic appointment. Please ask the receptionist to let the dietitian know you would like to talk with them.

### **Renal Dietitians**

Telephone: 01865 225 061  
(8.00am to 4.30pm, Monday to Friday)

(Please leave a message on the answerphone)

We can only provide advice or information if we care for you under the Oxford Kidney or Transplant Unit (Churchill Hospital).

This includes the network units at Banbury, High Wycombe, Milton Keynes, Stoke Mandeville, Swindon (Great Western Hospital) and Whitehouse Dialysis Unit.

If you do not attend these sites, please contact your local care team for support.

## Useful websites

You may find the following websites helpful:

### **General food safety**

Food Standards Agency

Website: [www.food.gov.uk](http://www.food.gov.uk)

### **Eating out**

Food Standards Agency hygiene rating

Website: <https://ratings.food.gov.uk>

### **Food Hygiene Ratings**

Website: [www.scoresonthedoors.org.uk](http://www.scoresonthedoors.org.uk)

### **Oxford Kidney Unit**

Useful information for patients and relatives.

Website: [www.ouh.nhs.uk/oku](http://www.ouh.nhs.uk/oku)

### **Oxford Transplant Centre**

Useful information for patients and relatives.

Website: [www.ouh.nhs.uk/services/departments/renal/transplant](http://www.ouh.nhs.uk/services/departments/renal/transplant)

## Further information

If you would like an interpreter, please speak to the department where you are being seen.

Please also tell them if you would like this information in another format, such as:

- Easy Read
- large print
- braille
- audio
- electronic
- another language.

We have tried to make the information in this leaflet meet your needs. If it does not meet your individual needs or situation, please speak to your healthcare team. They are happy to help.

Author: Oxford Kidney Unit Renal Dietitian Team  
May 2024  
Review: May 2027  
Oxford University Hospitals NHS Foundation Trust  
[www.ouh.nhs.uk/information](http://www.ouh.nhs.uk/information)



*Making a difference across our hospitals*

[charity@ouh.nhs.uk](mailto:charity@ouh.nhs.uk) | 01865 743 444 | [hospitalcharity.co.uk](http://hospitalcharity.co.uk)

OXFORD HOSPITALS CHARITY (REGISTERED CHARITY NUMBER 1175809)

