



Oxford University Hospitals
NHS Foundation Trust

HEALTHY EATING AFTER YOUR TRANSPLANT

Information for patients



Transplant Unit

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

EATING HEALTHY FOR YOUR TRANSPLANT

After your transplant it is important to maintain a healthy diet and lifestyle, to keep your transplant working well.

Weight gain can happen for many reasons after a transplant. A healthy diet can help stop you gaining weight and reduce your risk of developing heart disease, diabetes and poor bone health.

Top tips for healthy eating

- Eat a variety of different foods.
- Eat at least 5 portions of fruit and vegetables a day.
- Choose a rainbow of different coloured fruit and vegetables.
- Choose low fat and low sugar products.
- Eat plenty of wholegrain starchy foods, which are high in fibre.
- Choose lean, skinless cuts of meat, fish and poultry.
- Use healthy cooking methods (grilling, dry roasting or steaming).
- Follow current alcohol recommendations.
- Don't add salt in cooking or at the table.
- Try to cook from fresh, rather than relying on processed or convenience foods.
- Eat the right amount to be a healthy weight.

THE EATWELL GUIDE

No one food contains all the nutrients we need to stay healthy, so it is important to eat a varied and balanced diet.

The Eatwell Guide shows how we can do this and in what proportions. You don't need to always get the balance right at each meal, but try to get it right over a day or week.



FRUIT AND VEGETABLES

- Aim for more than 5 portions a day. Tinned, fresh, frozen and dried all count.
- 1 portion is:
 - 1 medium fruit (e.g. apple, banana)
 - 2 small fruits (e.g. plums, satsumas)
 - a small bowl of salad
 - 3 heaped tablespoons of vegetables



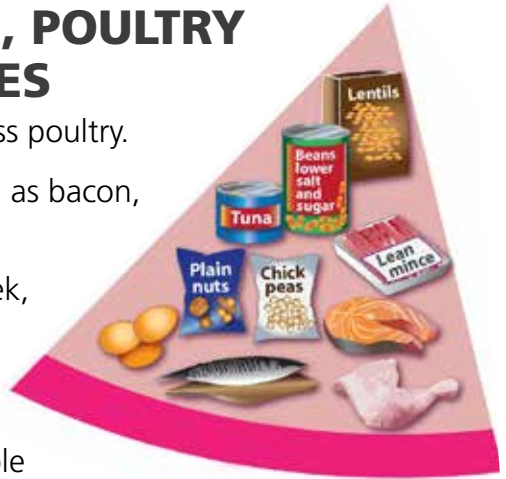
STARCHY FOODS

- Eat a portion at each meal, e.g. bread, potato, sweet potato, yam, plantain, rice, pasta, noodles, couscous or breakfast cereal.
- Choose high fibre varieties, such as wholegrain pasta, wholemeal bread and brown rice.



MEAT, FISH, EGGS, POULTRY AND ALTERNATIVES

- Choose lean meat and skinless poultry.
- Eat less processed meat, such as bacon, ham and sausages.
- Eat 2 portions of fish per week, one of which is oily, such as sardines and mackerel.
- Pulses, peas, soya beans, tofu, lentils, textured vegetable protein and Quorn are good alternatives to meat.



MILK AND DAIRY PRODUCTS

- Aim for 3-4 portions a day to meet calcium requirements, e.g. 200mls of milk, 30g of cheese (size of a small matchbox) or 1 pot of yoghurt.
- Choose lower fat varieties.



FOODS CONTAINING FAT AND SUGAR

- Eat less often and in small amounts.
- Choose lower sugar, lower fat varieties.
- Choose unsaturated oils, such as olive and rapeseed oils.



BEING A HEALTHY WEIGHT

Being a healthy weight helps your transplant to keep working well.

After your transplant, a combination of increased appetite, previous dietary restrictions being lifted and new medications can lead to weight gain, high cholesterol and/or raised blood sugar levels. It is important to maintain a healthy balanced diet and be as active as you can.

The body mass index (BMI) chart (shown on the next page) gives a rough idea of whether you are carrying excess weight for your height. An ideal BMI falls between **18.5-25kg/m²**, but even a small amount (e.g. 5-10%) of weight loss if you are overweight will produce significant health benefits.

PREVENT UNWANTED WEIGHT GAIN

Some of the anti-rejection medications may make you feel hungry.

- Don't mistake thirst for hunger – have a glass of water and wait 30 minutes before reassessing your hunger.
- Try chewing sugar-free gum or sweets in between meals.
- You may find brushing your teeth after eating helps put you off eating more.
- Make sure meals are of a sensible size – you could try using a smaller plate.
- Try to limit snacks in between meals. If you need to snack, choose low calorie options like vegetable sticks, a piece of fruit or a handful of plain popcorn.
- Keep yourself occupied – boredom can lead you into the kitchen.
- Be as active as you can, to burn excess calories and stay a healthy weight.
- For a 12 week diet and exercise plan, see the NHS website: www.nhs.uk/Livewell/weight-loss-guide/Pages/losing-weight-getting-started.aspx

BMI CHART

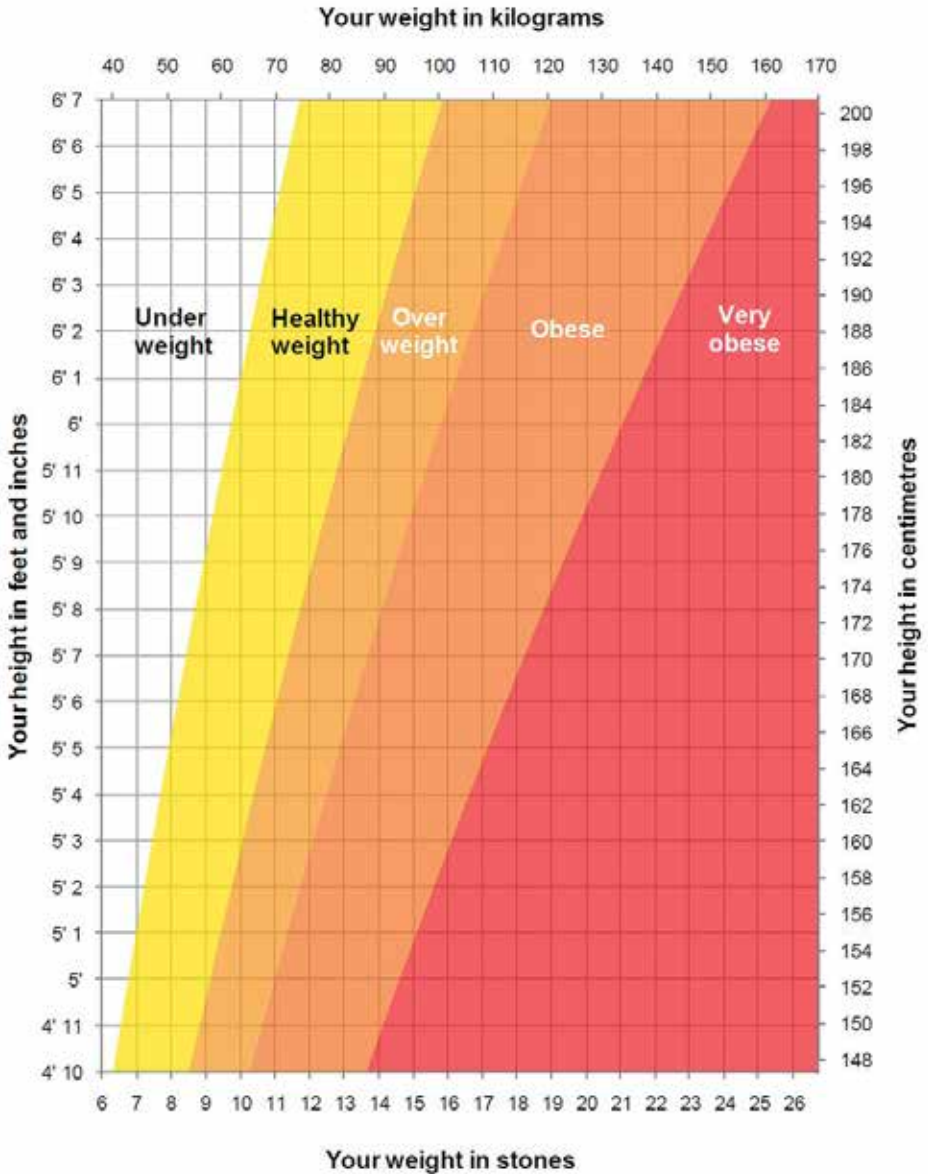


Chart taken from www.nhs.uk/live-well/healthy-weight/height-weight-chart/

If you think you may be overweight and would like further support with losing weight, please speak with your GP, hospital doctor, specialist nurse or dietitian.

HEART HEALTH

Following a healthy diet and lifestyle and being a healthy weight can reduce your risk of developing heart disease. It can also help protect your heart if you already have problems.

Top tips for a heart-healthy diet:

- Reduce your intake of total fat: choose low fat products, trim visible fat off meat, try to grill or bake rather than fry.
- Reduce your intake of saturated fat and replace with monounsaturated or polyunsaturated fats (see the following table for suitable swaps).
- Choose wholegrain varieties of starchy foods, such as wholegrain bread, high fibre breakfast cereals and brown pasta and rice.
- Reduce your intake of sugar and refined sugars: see top tips on page 10 for reducing sugary drinks and snacks.
- Aim for 5 portions of fruit and vegetables a day.
- Eat at least 2 portions of fish a week, including a portion of oily fish, such as sardines, mackerel, salmon, trout and pilchards.
- Include 4-5 portions a week of unsalted nuts, seeds, beans and pulses.

Fats and oils are all high in calories, so try to only use them in small amounts. There are several different types of fats which can change cholesterol levels and can affect the heart.

Cholesterol is a fatty substance in blood, which is produced naturally in the liver. Some cholesterol also comes from the food we eat, but this doesn't affect our blood cholesterol. There are two main types of cholesterol; one is good and one is bad for heart health.

- **LDL (bad) cholesterol** – This can form plaques on the walls of arteries, making them narrow and stiff. This can reduce blood flow to the heart and lead to a heart attack or stroke.
- **HDL (good) cholesterol** – This takes bad cholesterol away from arteries, which can protect the heart and improve circulation.

The following table shows the different fats and their effect on cholesterol. It also shows common foods where they might be found.

	Type of fat:	Effect on cholesterol:	Sources:
Fats to limit	Trans fats	Can increase LDL (bad) cholesterol	Processed foods, e.g. sausages, burgers, pastry, pies, cakes, biscuits and rich puddings Fast food and take away foods
	Saturated fats	Can increase LDL (bad) cholesterol	Lard, butter, ghee, palm oil, coconut oil Full fat dairy products, e.g. milk, cheese, yoghurt, cream Fat on meat and poultry Processed foods, e.g. sausages, burgers, pastry, pies, cakes, biscuits and rich puddings
Fats to have in moderation	Polyunsaturated fats	Maintains a healthy cholesterol balance	Sunflower, corn, soya and rapeseed oils, and spreads made from these oils Nuts and seeds
	Monounsaturated fats	Maintains a healthy cholesterol balance	Olive and rapeseed oils, and spreads made from these oils Avocados Some nuts, e.g. walnuts, almonds, pecans

CHOLESTEROL-LOWERING FOODS

Soluble fibre soaks up cholesterol like a sponge and carries it out of the body, so it cannot do any damage. The following foods are a good source of soluble fibre:

- oats and oat bran
- linseed (flaxseed)
- barley
- fruit and vegetables
- vegetable protein, such as nuts, beans and pulses (including peas, soya, lentils and chickpeas).

Plant stanols and **sterols** are plant extracts that occur naturally in foods such as wholegrains, fruits, vegetables and nuts. They are added to certain foods, such as fat spreads, milks, mini-drinks and yoghurts.

Consuming just 2g a day of stanols and sterols as part of a healthy balanced diet can help to reduce LDL cholesterol by up to 10-15%. This can vary from person to person.

Sugary food and drinks in large amounts are harmful to heart health. Below are some **top tips** for reducing sugar in your diet:

- **Avoid sugary drinks** such as sugary fizzy drinks, flavoured waters or squash containing sugar, and high juice. Opt for plain water, herbal or fruit teas, or sugar-free, reduced calorie or diet options instead.
- **Limit fruit juice and smoothies** to one 150ml glass a day. This counts as 1 of your 5 a day, but the remaining 4 portions should be from whole fruit and vegetables. These contain fibre, which helps fill you up and promotes good digestive health.
- **Limit cakes, sweets and biscuits** – Some cereal bars contain a lot of sugar. Why not try baking your own cakes or biscuits, substituting some or all of the sugar with artificial sweetener or fruit.
- **Desserts** – try better choices, including plain low fat yoghurts, fresh, frozen or canned fruit (in juice rather than syrup) and lower calorie/sugar rice pudding or jelly.

- **Breakfast cereals** can be high in sugar. Opt for plain cereals, such as shredded wheat, Weetabix or porridge oats.
- **Read the nutrition labels of packaged foods** like soups, ready meals, and packets or jars of stir in sauces. They often have sugar added to them.
- **Condiments.** Try not to use these every day, as the sugar content will soon add up. Aim to buy reduced sugar versions of condiments, such as ketchup.

SALT

It is important to follow a diet which is low in salt. This helps to reduce blood pressure, which can prevent damage to your transplanted organ, as well as your heart.

Rock salt, sea salt, Himalayan salt and garlic salt all have the same amount of salt content as table salt, so they should also be avoided.

It is recommended to have no more than 5-6g of salt a day. The majority of salt comes from convenience foods and this can easily add up to 9g a day.

Top tips for eating less salt

- Avoid adding salt when cooking or at the table. Instead, flavour food with lemon juice, pepper, garlic, chilli, vinegar, herbs and spices.
- Limit processed meats, such as, bacon, ham, gammon, sausages, pork pies, burgers, salami and corned beef. Choose fresh meats as an alternative, such as chicken, turkey, pork, beef and lamb.
- Choose fresh or unsalted frozen fish, instead of smoked fish, shellfish or processed fish (such as scampi or seafood sticks).
- Check the food labels on canned foods, such as tinned fish, baked beans and soups and choose those with less salt.
- Limit salty snacks like crisps, salted nuts or Bombay mix. Choose unsalted popcorn or nuts, plain breadsticks, rice cakes or crackers instead.
- Choose reduced salt versions of stock cubes and condiments. Try adding more herbs/flavourings and cooking juices instead.
- Limit ready meals and convenience foods. Try to cook from fresh as often as you can. If this is difficult, then compare food labels and choose the option with the least salt content.
- When eating out, ask the chef or person taking your order for no salt to be added to your meal.

ALCOHOL

Drinking a lot of alcohol can lead to unwanted weight gain and other undesirable health issues. The current recommendation for both men and women is:

- Drink less than 14 units a week.
- If you drink up to 14 units a week spread this out over 3 or more days.
- Try to have a few alcohol-free days in a week.

Although the units of alcohol will depend upon the strength of the drink, the guide below will help you see how many units there are in typical drinks:

Drink	Units
25ml shot of spirit	1
Small (125ml) glass of wine	1.5
Large (250ml) glass of wine	3
1 bottle (330ml) of beer/lager	1.7
1 pint of beer/lager/cider	2
1 pint of strong beer/lager/cider	3

Always check with your pharmacist or doctor whether it is safe to drink alcohol with your current medications.

READING FOOD LABELS

Most packaged foods display a nutritional grid on the back of the packaging detailing the calorie, protein, carbohydrate and fat content per 100g of the food. Some products include further information on types of fat, sugar, salt, vitamins, minerals and fibre.

Traffic light labels are often displayed on the front of packaging. These labels use red, amber and green colour coding, to help us make healthier choices when shopping.

Try and choose lots of foods with mainly green coding and fewer with amber coding. Try to avoid foods with mainly red coding.

	This is high	This is moderate	This is low
Fat	Over 17.5g per 100g or over 21g per portion	3 to 17.5g per 100g	Under 3g per 100g
Saturated fat	Over 5g per 100g or over 6g per portion	1.5 to 5g per 100g	Under 1.5g per 100g
Total sugars	Over 22.5g per 100g or over 27g per portion	5 to 22.5g per 100g	Under 5g per 100g
Salt	Over 1.5g per 100g or over 1.8g per portion	0.3 to 1.5g per 100g	Under 0.3g per 100g

Nutrition labels can also provide information on 'reference intakes' (recommended daily allowance, or RDA). These are shown as a percentage and are guidelines for an average person. This can be more complex to follow compared to the colour coded labels. Speak to your dietitian if you would like more information.

USEFUL WEBSITES

British Heart Foundation

This website has lots of information about heart health and keeping well.

Website: www.bhf.org.uk

Consensus Action on Salt and Health

This website provides useful advice for managing your salt intake.

Website: www.actiononsalt.org.uk

Diabetes UK

This website has lots of useful information on diabetes and keeping well.

Website: www.diabetes.org.uk

Drinkaware

Website: www.drinkaware.co.uk

NHS – diet and exercise plans

Website: www.nhs.uk/Livewell/weight-loss-guide/Pages/losing-weight-getting-started.aspx

NHS – eating well

Website: www.nhs.uk/Livewell/healthy-eating

Oxford Kidney Unit

This website has lots of information about the Oxford Kidney Unit for patients and carers.

Website: www.ouh.nhs.uk/oku

PatientView

This shows your latest blood results.

Website: www.patientview.org

HOW TO CONTACT US

If you would like further information about anything in this leaflet, please ask to speak with one of the dietitians.

Renal Dietitians

Tel: **01865 225 061**

(8.00am to 4.30pm, Monday to Friday)

(Please leave a message on the answerphone)

Renal Network Clinics

Some of these clinics are covered by a dietitian. Please ask the receptionist if you would like to be seen.

If you need an interpreter or would like this information leaflet in another format, such as Easy Read, large print, Braille, audio, electronically or another language, please speak to the department where you are being seen. You will find their contact details on your appointment letter.



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