

Eating Well With Diabetes

Nutrition & Dietetics

The prevention of infection is a major priority in all healthcare and everyone has a part to play.

- Please decontaminate your hands frequently for 20 seconds using soap and water or alcohol gel if available
- If you have symptoms of diarrhoea and/or vomiting, cough or other respiratory symptoms, a temperature or any loss of taste or smell please do not visit the hospital or any other care facility and seek advice from 111
- Keep the environment clean and tidy
- Let's work together to keep infections out of our hospitals and care homes.

Introduction

The information in this booklet will help you to manage your diabetes by giving you information on how to eat a healthy balanced diet. These changes can also help to manage your weight, which can support good diabetes control.

What is diabetes?

Diabetes is a condition in which the amount of glucose (sugar) in your blood is too high because your body is unable to use it properly.

It relates to the hormone insulin, which normally removes glucose from the blood to provide the body with energy.

These include:

- **Type 2 diabetes:** when your body does not make enough insulin or the insulin made is not working properly (insulin resistance)
- **Type 1 diabetes:** when your body has stopped making insulin. You will have to take insulin injections to manage your blood sugar levels

There are also other, less common forms of diabetes.

How is blood glucose (sugar) made?

Glucose is made when you eat foods and drinks containing carbohydrate.

What is carbohydrate?

Carbohydrate is found in:

- Starchy foods such as bread, potato, pasta, chapatti / roti, yam, rice, couscous, plantain, dumplings, breakfast cereal
- Milk and yoghurt
- Fruit and fruit juices
- Sugar and sugary foods

Different types of carbohydrate can cause blood glucose to rise at different rates. However, the amount (portion size) of carbohydrate we consume at one time is the biggest factor affecting blood glucose level, regardless of the type of carbohydrate eaten. So, managing your portion sizes is the key to good blood glucose control.

How do I change the way I eat?

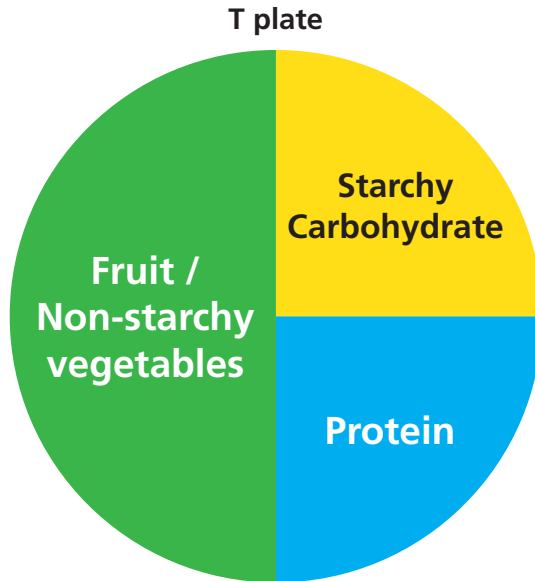
The most important changes to make first are:

- Eat regular meals – breakfast, lunch and main meal. If you feel hungry (or if you are at risk of a hypo) then snacks can be taken between meals, but they are not always necessary
- Some people mistake hunger for thirst. Drink a glass of water and wait for 20 minutes (avoid sugary drinks which do not help to quench thirst). If you still feel hungry then try one of the snack suggestions referred to on page 11
- Include a measured portion of healthy carbohydrate foods at each meal
- Eat salad and/or vegetables and fruit each day. Aim for a minimum of three different vegetables and two portions of fruit (the fruit to be eaten at separate times of the day)
- Cut down on sugar, sugary foods and drinks
- Eat less saturated fatty foods such as animal fats, butter, ghee and lard and choose unsaturated fats instead including olive oil, nuts, seeds and avocado take a look at the tips on page six.

Start making small changes you feel you can keep to and gradually make other changes when you are ready to. Setting yourself realistic and achievable targets can help with motivation and support you in maintaining positive changes.

Getting a healthy balance

Aim to make your plate of food look like this to help you eat a healthy balance of food:



Fruit and vegetables:

Aim for half of your meal to be non-starchy vegetables or salad.

Starchy carbohydrates:

Aim for one quarter of your meal to be a measured portion of healthy starchy carbohydrate.

Protein:

Aim for one quarter of your meal to be a protein source.

How to cut down on sugar and sugary foods

High sugar foods	Choose these low sugar foods
Sugar	Artificial sweeteners for example, Canderel, Sweetex, Stevia or Splenda
Fruit drinks and fizzy drinks	No added sugar, low calorie, Slimline, diet or sugar free varieties. Pure fruit juice drinks are high in natural sugars, so try to choose whole fruit instead, or limit to a small glass (150ml) only occasionally. Dilute fruit juices with still or sparkling water to make a longer more thirst quenching drink.
Jam, marmalade, syrup, treacle, honey, lemon curd	Reduced sugar jams, marmalade and pure fruit spreads or use small amounts of ordinary jams and marmalades
Sweet puddings	Sugar free jelly, low sugar yoghurts for example, Light and Free, Activia No Added Sugar, or fat-free natural yogurt with added berries (if weight loss is not a priority choose full fat natural / Greek yoghurt in smaller portions). If having tinned fruit, choose in natural juice, not syrup.
Cakes and sweet biscuits	Plain biscuits for example Rich Tea, arrowroot, ginger nuts, malt loaf, teacakes, homemade low-sugar cakes, scones (try to have these only occasionally), rice cakes, crispbreads and oatcakes.
Sugar, honey or chocolate coated cereals	Weetabix, Porridge, Shredded Wheat, Branflakes, Allbran, Fruit and Fibre, no added sugar muesli
Sweets and chocolate	Fresh fruit. A small amount (one to two squares) of chocolate can be taken at the end of a meal occasionally. Dark chocolate containing more than 70% cocoa contains less sugar and will not raise blood sugars as much as milk or white chocolate. Low calorie chocolate drinks (see below) often satisfy the need for a taste of chocolate

Drinking chocolate, Horlicks, Ovaltine and other sweetened bedtime drinks	Low calorie bedtime drinks for example Options, Highlights or Cocoa with a sweetener (if necessary)
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How will the sugar found in some processed foods affect diabetes control?

High sugar intake, especially added sugar found in processed foods, can lead to a sharp rise in your blood sugar levels, which is not good for your diabetes.

Current guidelines suggest limiting added sugar to less than 30g per day.

This includes the sugar found in biscuits, cakes, pre-packaged sauces and ready meals, as well as table sugar, syrups and honey.

You can check how much sugar is in a food by checking the food label.

What is a lot of sugar?

When looking at food labels, the ingredients are listed in order of weight, starting with the largest ingredient and ending with the smallest. If added sugar appears near the beginning of the list the amount will be a lot and if it appears at the end there will be a little.

There are several different names for added sugar. These include: sucrose, glucose, glucose syrup, invert syrup, maltose, honey and agave syrup.

When looking at food labels, the amount of sugar includes natural sugar from fruit and milk. The guidelines for sugar per 100g are:

A lot of sugar	A little sugar
22.5g or more	5g or less

Eat sweet foods only occasionally.

Are sweeteners safe?

Intense low-calorie sweeteners such as Splenda, Stevia, Sweetex and Canderel are safe to use and can be a useful alternative to sugar. They will not have an effect on your blood sugar levels and are useful if you are trying to lose weight. Many sweeteners now come in granulated forms so they can be used in cooking or baking as well.

What about diabetic cakes, biscuits and chocolates?

These are not recommended. They still contain carbohydrate and can be high in calories so will not help your diabetes. They also contain sweeteners which can have a laxative effect.

Having small amount of sweet food occasionally won't be harmful.

If choosing to have something sweet, try to have it after a more balanced meal to keep your blood sugar more stable and help manage your portion.

How to eat less fat in the diet

Saturated fats (butter, animal fats) are linked to heart disease, so it is a good idea to try to reduce these in your diet. Unsaturated fats and oils are better for your heart. These include olive oil and olive-based spreads, rapeseed oil, avocado, nuts, seeds, oily fish.

However, fats (whatever type) also contain more calories than sugar and protein per gram. It is therefore important to eat the correct portion size, especially if you are trying to lose weight.

Tips for cutting down are:

- Use all fats, oils and coconut milk sparingly. Measure quantities using teaspoons / dessertspoons to understand how much you are using
- Choose lean meats and trim off the excess fat. Remove the skin from chicken
- Choose natural dairy products such as skimmed or semi skimmed milk, low fat cheeses, low fat / fat free yoghurts
- Cut down on pastries, dumplings and fritters

- Eat fewer fatty snacks such as crisps, scratchings and cheese biscuits such as Ritz and Cheddars
- Avoid frying food. Grill, steam, boil or bake instead
- Foods labelled low fat often contain a lot of sugar. For example, low fat biscuits and cakes. You should still try not to eat more than a small portion.

What is a lot of fat?

When looking at food labels, you can compare the fat content of different varieties of the same product by looking at the amount of fat per 100g. This will help you to choose a variety with less fat.

When looking at food labels, the guidelines for fat are:

A lot of fat	A little fat
17.5g or more	3g or less

Aim to choose foods which contain more of the fat as unsaturates and less as saturates, with less than 10g of fat per serving most of the time.

What about fibre?

Fibre is beneficial to your health as it helps to fill you up, control appetite and promote healthy bowel function. It also helps to slow the absorption of carbohydrate from your food so can help with diabetes control.

The recommended amount of fibre is 30g per day.

It is found in wholegrains, beans, pulses, nuts, seeds, fruit and vegetables.

Most people in the UK do not eat enough fibre. Try to increase fibre-rich foods gradually, alongside plenty of fluids to allow your body to adapt. Too sudden an increase can cause some gastrointestinal symptoms, such as bloating and stomach cramps.

How can I include five portions of fruit and vegetables a day?

Fruit and vegetables provide you with vitamins, minerals and fibre which are important for health. They are low in calories and filling.

Aim to have two portions of fruit and three or more portions of vegetables each day. (See the portion guide on page 10).

Fruit is a convenient snack or pudding. A few berries or chopped apple can be added to a breakfast cereal or natural yoghurt for natural sweetness.

Fruit contains natural sugar and will affect your blood glucose if eaten in large amounts. Have one portion at a time and spread portions out over the day.

Aim to cover one half of your plate with vegetables. Add vegetables to stews and casseroles, pasta sauces, extra toppings on pizza. Include salad in your sandwich.

Add beans and lentils to stews, casseroles, soups or salads for extra fibre.

Are there any other foods I should eat for good health?

Eat a variety of foods containing protein, such as lean meat, poultry fish and meat alternatives to cover one quarter to one third of your plate.

Aim to include fish up to three times or more each week. Try to have oily fish such as pilchards, sardines, mackerel and salmon twice a week as these help to protect against heart disease.

If you are vegetarian, suitable protein options are beans, lentils, tofu, tempeh, soya, Quorn and other meat alternatives, a small portion of nuts, nut butters and seeds.

Choose wholemeal or whole grain varieties of bread, pasta and rice over white because they provide better blood glucose control and support better digestive health.

A word about salt

Too much salt in your diet can lead to high blood pressure. Most of the salt in your diet will come from tinned and packaged foods. Ways to cut down are:

- Use less in cooking
- Do not add salt at the table
- Use pepper, herbs, spices, lemon juice and vinegar to add or enhance the flavour of food
- Cut down on processed foods such as tinned and packaged foods, crisps, salted nuts, chevda, soups, stock cubes and sauces

When looking at food labels, the guidelines for salt per 100g are:

A lot of salt	A little salt
1.5g or more	0.3g or less
(0.6g as sodium)	(0.1g as sodium)

What can I drink?

Water is the best drink and satisfies thirst. You can also drink tea and coffee with no sugar, low calorie, no added sugar, diet squashes and fizzy drinks. Include a variety to make sure you have enough to drink throughout the day - about one and a half to two and a half litres.

Alcohol should be drunk in moderation. UK Government guidelines state that both men and women should aim to drink no more than 14 units per week over three or more days and have two alcohol free days per week. Regularly drinking more than 14 units per week and having one or two heavy drinking episodes per week significantly increases the risk of long-term illness and injury.

two units is equivalent to:

- 1 medium (175ml) glass of wine
- 1 pint of lower strength (3.5%) beer or lager
- 330ml of higher strength (5.5%) beer or lager
- Two 25ml shots of spirit

You can normally find the number of units on the packaging. Make sure you consider serving size.

Drinking alcohol on an empty stomach can cause people on certain medications to become hypoglycaemic (have low blood glucose levels), so it is important to drink with or soon after a meal. Alcohol is also high in calories so you should cut down if you need to lose weight.

How much can I eat?

Everyone's needs are different. A good way to help you get the right amount and variety of foods in your diet is to think about how many portions you normally eat. See how it compares with the guide below. If you need to lose weight, cutting down on fat and sugar and having measured portions of starchy carbohydrates is advised. If you would like more help or advice with this, please ask your doctor or nurse to refer you to a dietitian.

Food groups and what is in a portion

Starchy carbohydrates - five to seven portions per day. One Portion is

- Breakfast cereal – 30 – 45g, around ½ cup
- Half chapati to one small chapati
- Half cup cooked rice or pasta
- One medium sized jacket potato or four to five baby potatoes
- One nest of dried noodles

Choose wholegrain / seeded varieties of starchy foods

Fruit and vegetables – five or more portions / day (two fruit and three vegetables). One portion is:

- A medium sized apple, pear, orange, peach or small banana
- A slice of melon or mango / two pineapple rings / 10 grapes
- Two to three small fruits - plums, kiwi, satsumas, apricots, two tablespoons of blueberries or raspberries
- A small glass (150mls) of fruit juice or fruit smoothie
- One tbsp (10-15g) dried fruit for example sultanas, raisins.
- ½ plate of salad / three heaped tbsp cooked vegetables (80g)

Meat, fish & alternatives – two to three portions / day. One portion is:

- 60 - 90g (2 – 3oz) cooked meat, poultry or vegetarian alternative (hand palm size)
- 120 - 140g (4 – 5oz) cooked fish
- Two eggs
- One to two tbsp nuts (15 – 25g) / half cup cooked beans, lentils

Milk, dairy foods and alternatives – 2-3 portions / day. One portion is:

- 200mls (one third pint) milk / small pot of yoghurt
- 2tbsp cottage cheese / 30g cheese (match box size)
- 200ml low-sugar soya, oat or almond milk alternative
- 125ml unflavoured soya yogurt

Changing your diet is all about making small, healthy changes gradually over time. Use the following meal ideas to help plan your meals:

Breakfast:

- 45g or 1/3 – 1/2 cup of cereal for example porridge, no added sugar muesli, Branflakes, or two Weetabix or Shredded Wheat. Add a portion of fruit and some natural yoghurt. Use skimmed or semi-skimmed milk rather than full fat
- Unsweetened natural, Greek yoghurt with a portion of fruit, 25g nuts and a sprinkle of cinnamon
- One to two slices wholegrain or seeded bread with nut butter or a quarter of an avocado sliced
- One to two poached, boiled, scrambled egg or egg bhurji with grilled tomatoes or mushrooms on One to two slices of toast
- Baked beans 1/3 – 1/2 tin on one slice of toast
- Sardines or kippers on one to two slices of toast
- If buying take-away coffee be careful of portion size (especially if having a milky drink) and avoid added syrups that add lots of additional calories

Light meal / lunch

- Sandwich on one to two slices of bread or medium sized pitta bread or tortilla wrap with lean meat, fish, egg, chicken, turkey, low fat cheese, hummus. Add lettuce, tomato, cucumber
- Small jacket potato filled with baked beans (2 - 3tbsp), tuna, low fat cheese (30g)
- Chunky vegetable or lentil soup with or without a bread roll
- Mixed salad with chicken, fish, cheese, beans or chickpeas
- Small pasta salad
- Vegetable sticks with hummus and a boiled egg
- Roasted mudhi or chuda (puffed rice) with vegetables
- Dry roasted methi paratha (instead of aloo paratha)
- Finish with fruit and/or yoghurt

Main meal:

- Casserole or stew made with lean meat, chicken, fish, beans, or lentils with added vegetables
- Spaghetti Bolognese made with lean minced beef, Quorn, soya (add carrot, mushrooms, green, red pepper to the sauce). Serve with a side salad
- Tuna pasta bake served with a green vegetable such as broccoli or side salad
- Stir-fry vegetables with chicken, pork, fish or tofu. Flavour with a dash of Soy sauce, chilli sauce or own herbs and spices. Serve with noodles or rice
- Grilled or minced meat, one to two portions of vegetables and a small portion of rice, yam or dumpling.
- Dhal cooked in oil for example olive, rapeseed rather than ghee or butter
- Make khichdi with less rice and more mung adding as little oil as possible
- Meat based or vegetable based curry with less potato and serve with two to three tbsp basmati rice or chapatti

- Finish with fresh fruit or a low sugar pudding for example sugar free jelly or yoghurt

Snacks:

- One portion of fruit
- Two to three tbsp fat free yoghurt
- One to two plain biscuits, one to two savoury crackers with one tbsp cottage cheese or peanut butter
- One slice currant bread, malt loaf, small teacake or scone
- A boiled egg
- Two to three slices of cooked meat
- Five to eight olives
- Vegetable sticks (for example. carrot, cucumber, pepper) with Two tbsp hummus
- 25g (hand palm sized) unsalted un-roasted nuts
- One to two squares dark chocolate
- Sugar free jelly

Remember that snacks can lead to weight gain if had too often. We recommend you choose balanced snack options such as those described in this leaflet, and snack only when you are feeling hungry. If you are on certain medications, insulin injections, or have another health condition, snacks might be needed. Check with your healthcare professional or dietitian to see if this applies to you.

My action plan:

- 1.
- 2.
- 3.
- 4.
- 5.

Where can I get more information?

You can contact the Nutrition and Dietetic Service

New Cross Hospital:

Dietitian:

Telephone number: 01902 695335

You can also find further information on the following websites:

Diabetes UK offers information, help and support.

Website: www.diabetes.org.uk

Telephone Number (Helpline): 0345 123 2399

Email: helpline@diabetes.org.uk

The content of this leaflet was produced by:

Nutrition and Dietetic Service

New Cross Hospital

Wolverhampton

WV10 0QP

English

If you need information in another way like easy read or a different language please let us know.

If you need an interpreter or assistance please let us know.

Lithuanian

Jeigu norėtumėte, kad informacija jums būtų pateikta kitu būdu, pavyzdžiui, supaprastinta forma ar kita kalba, prašome mums apie tai pranešti.

Jeigu jums reikia vertėjo ar kitos pagalbos, prašome mums apie tai pranešti.

Polish

Jeżeli chcieliby Państwo otrzymać te informacje w innej postaci, na przykład w wersji łatwej do czytania lub w innym języku, prosimy powiedzieć nam o tym.

Prosimy poinformować nas również, jeżeli potrzebowałiby Państwo usługi tłumaczenia ustnego lub innej pomocy.

Punjabi

ਜੇ ਤੁਹਾਨੂੰ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਰੂਪ ਵਿਚ, ਜਿਵੇਂ ਪੜ੍ਹਨ ਵਿਚ ਆਸਾਨ ਰੂਪ ਜਾਂ ਕਿਸੇ ਦੂਜੀ ਭਾਸ਼ਾ ਵਿਚ, ਚਾਹੀਦੀ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

ਜੇ ਤੁਹਾਨੂੰ ਦੁਭਾਸ਼ੀਏ ਦੀ ਜਾਂ ਸਹਾਇਤਾ ਦੀ ਲੋੜ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

Romanian

Dacă aveți nevoie de informații în alt format, ca de exemplu caractere ușor de citit sau altă limbă, vă rugăm să ne informați.

Dacă aveți nevoie de un interpret sau de asistență, vă rugăm să ne informați.

Traditional Chinese

如果您需要以其他方式了解信息，如易读或其他语种，请告诉我们。

如果您需要口译人员或帮助，请告诉我们。