

Eating Well With Diabetes

Nutrition & Dietetics

How will this booklet help me?

The information in this booklet will help you to control your diabetes by giving you information on how to eat a healthy balanced diet. These changes will help to control your weight which is important for 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 cannot use it properly. If you have Type 2 diabetes your body is either not producing enough insulin or the insulin that is being produced is not working properly (insulin resistance). If you have Type 1 diabetes your body has stopped making insulin and you will need to have insulin injections. Insulin is a hormone which helps remove glucose from the blood to be used by other cells for energy.

How is blood glucose (sugar) made?

Glucose is made when you eat foods and drinks containing carbohydrate. The body uses it for energy.

What is carbohydrate?

Carbohydrate is found in:

- Starchy foods such as bread, potatoes, pasta, chapattis / roti's, yam, rice, couscous, breakfast cereals
- 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 sticking to sensible portion sizes is the key to good blood glucose control.

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.

How do I change the way I eat?

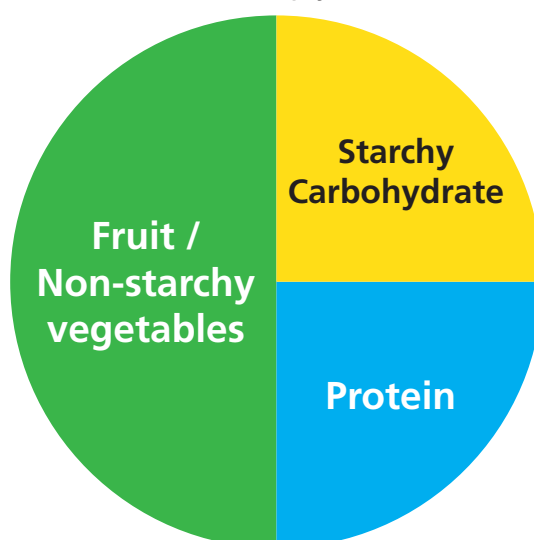
The most important changes to make first are:

- 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. Sometimes hunger is mistaken 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 3 different vegetables and 2 portions of fruit (the fruit to be eaten at separate times of the day)
- Cut down on sugar, sugary foods and drinks
- If aiming to lose weight 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.

Start making small changes you feel you can keep to and gradually make other changes when you are ready to.

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 fruit and non-starchy vegetables.

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, Hermesetas or Splenda
Ordinary fruit squash, 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 limit to one small glass (150ml) per day. 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, diet or fat free yoghurts for example, Shape, Diet Ski, Muller Light (if weight loss is not a priority choose full fat natural / Greek yoghurt in smaller portions), diet fromage frais reduced fat and sugar, milk puddings, fruit in natural juice, not syrup
Cakes and sweet biscuits	Plain biscuits for example Rich Tea, arrowroot, ginger nuts, garibaldi, currant loaf, malt loaf, teacakes, scones, crumpets, low-sugar home-made cakes, 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 (1-2 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)

How will the sugar found in some processed foods affect diabetes control?

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.

Are sweeteners safe?

Intense low-calorie sweeteners such as Hermetas, 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. Some people find that sweeteners can increase appetite, therefore use in much smaller amounts than sugar because they are significantly sweeter.

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.

What about diabetic cakes, biscuits and chocolates?

These are not recommended. They are expensive, high in calories and will not help your diabetes. A small amount of sweet food very occasionally will not be harmful.

Be careful with sugar free sweets and chewing gum as the sweetener used in these products for example sorbitol, isomalt can have a laxative effect. Have these only in small quantities.

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, especially mono-unsaturated fats (olive oil and olive-based spreads, rapeseed oil, avocado, nuts, seeds, oily fish). Healthy fats are an important nutrient in our diet. They help to form cells in our bodies, help us to absorb fat soluble vitamins and can prevent heart disease and lower cholesterol. However, fats (whatever type) also contain more calories than carbohydrates 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 low fat 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 also known as roughage. There are two types of fibre, soluble fibre and insoluble fibre. Both types of fibre are beneficial to your health as they help to fill you up, control your appetite and promote healthy bowel function.

Soluble fibre is found in beans, pulses, oats, fruit and vegetables. This type of fibre helps to control your blood glucose levels because the carbohydrate is more slowly absorbed.

Insoluble fibre is found in wholegrain cereals and bread, beans, skins of fruit and vegetables. This type of fibre helps keep your digestive system healthy and prevents constipation.

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, filling and the fibre helps to control your diabetes.

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 chopped banana or dried fruit 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 meat alternatives are beans, lentils, Quorn, tofu, soya and nuts.

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 litres or three pints.

You can still drink alcohol but in moderation only. No more than two units a day for women and three units a day for men. Do not save up your units and have them all at once, as this is not good for your health.

1 unit is:

- 1 glass (125ml) of wine (based on 10% alcohol by volume)
- Half a pint beer (based on 4% alcohol by volume)
- One pub measure (25ml) of spirits.

To work out the number of units in a drink, multiply the total volume by its alcohol by volume (ABV) divided by 1000

For example 236mls (half a pint) x 4 (%ABV) / 1000 = 1 unit

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 - 5 to 7 portions per day. One Portion is

- 2 - 4 tbsp breakfast cereal (40 - 45g)
- One slice medium bread / half a small chapatti / roti
- 2 - 3 crispbreads or crackers
- 2 - 3 tbsp cooked rice, pasta, couscous
- One medium potato / half a large jacket potato
- Half a layer of dry noodles

Choose wholegrain / seeded varieties of starchy foods

Fruit and vegetables - 5 or more portions / day (2 fruit and 3 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
- 2 - 3 small fruits - plums, kiwi, satsumas, apricots, two tablespoons of blueberries or raspberries
- A small glass (150mls) of fruit juice or fruit smoothie (once a day)
- One tbsp (10-15g) dried fruit for example sultanas, raisins.
- A cereal bowl of salad / 3 heaped tbsp cooked vegetables (80g)

Meat, fish & alternatives - 2 to 3 portions / day. One portion is:

- 60 - 90g (2 - 3oz) cooked meat, poultry or vegetarian alternative (hand palm size)
- 120 - 140g (4 - 5oz) cooked fish
- 2 eggs
- 1 - 2 tbsp nuts (15 - 25g) / 3 tbsp cooked beans, lentils

Milk and dairy foods - 2 to 3 portions / day. One portion is:

- 200mls (one third pint) milk / small pot of yoghurt
- 2 tbsp cottage cheese / 30g cheese (match box size)

So what can I put on my plate?

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 2 - 3 tbsp of cereal for example porridge, no added sugar muesli, Branflakes, or 2 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
- Small glass (up to 150mls) of fruit juice and 1 - 2 slices wholegrain or seeded bread with nut butter or a quarter of an avocado sliced
- 1 - 2 poached, boiled, scrambled egg or egg bhurji with grilled tomatoes or mushrooms on 1 - 2 slices of toast
- Baked beans (a small tin which is 200g or half a large tin) on one slice of toast
- Sardines or kippers on 1 - 2 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 of 1 - 2 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
- 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 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 or fish. Flavour with a dash of Soy sauce, chilli sauce or own herbs and spices. Serve with noodles or rice

- Finish with fresh fruit or a low sugar pudding for example milk pudding or diet yoghurt
- Dhal cooked in unsaturated 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 2 - 3 tbsp basmati rice OR chapatti.

Snacks:

- One portion of fruit
- 2 - 3 tbsp fat free, diet yoghurt
- 1 - 2 plain biscuits, 1 - 2 savoury crackers with 1 tbsp cottage cheese or peanut butter
- One slice currant bread, malt loaf, small teacake or scone
- A boiled egg
- 2 - 3 slices of cooked meat
- 5 - 8 olives
- Vegetable sticks (for example. carrot, cucumber, pepper) with 2 tbsp hummus
- 25g (hand palm sized) unsalted un-roasted nuts
- 1 - 2 squares dark chocolate
- Sugar free jelly.

Remember snacks can cause people to gain weight. If you are on certain tablets or insulin injections snacks will be needed. You do not require snacks if you are taking Metformin only. Check with your dietitian or diabetes nurse 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:

Wolverhampton Diabetes Service:

www.wdconline.org

Diabetes UK Careline offers help and support:

www.diabetes.org.uk

Telephone number: 0845 120 2960

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 potrzebowaliby 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。