

## **Eating well with diabetes**

### **What is diabetes?**

**Diabetes mellitus is a condition in which the amount of glucose (sugar) in the blood is too high because the body cannot use it properly. Glucose comes from the digestion of starchy foods such as bread, rice, potatoes, chapatis, yams and plantain, from sugar and other sweet foods, and from the liver which makes glucose.**

Insulin is vital for life. It is a hormone produced by the pancreas, which helps the glucose to enter the cells where it is used as fuel by the body. The main symptoms of untreated diabetes are increased thirst, going to the loo all the time - especially at night, extreme tiredness, weight loss, genital itching or regular episodes of thrush, and blurred vision.

Type 1 (insulin dependent) diabetes develops if the body is unable to produce any insulin. This type of diabetes usually appears before the age of 40. It is treated by insulin injections and diet, and regular exercise is recommended.

Type 2 (non insulin dependent) diabetes develops when the body can still make some insulin, but not enough, or when the insulin that is produced does not work properly (known as insulin resistance). This type of diabetes usually appears in people over the age of 40, though often appears before the age of 40 in South Asian and African-Caribbean people. It is treated by diet and exercise alone or by diet, exercise and tablets or by diet, exercise and insulin injections.

The main aim of treatment of both types of diabetes is to achieve near normal blood glucose and blood pressure levels. This, together with a healthy lifestyle, will help to improve well-being and protect against long-term damage to the eyes, kidneys, nerves, heart and major arteries.

## Introduction

**Balancing your diet when you are diagnosed with diabetes can be challenging. Although the food choices you make and your eating habits are important in helping you manage your diabetes, you should be able to continue enjoying a wide variety of foods as part of healthy eating.**

Eating a balanced diet, managing your weight, and following a healthy lifestyle, together with taking any prescribed medication and monitoring where appropriate will benefit your health enormously.

Remember, in the long run it is better to make small changes that you feel you can stick to rather than completely altering your diet and not sticking to it.

Taking steps to balance your diet, as outlined in this leaflet, will help you control your:

- blood glucose levels
- blood fats – cholesterol and triglycerides
- blood pressure

It will also help regulate your weight. If you are overweight losing weight will help you control your diabetes and will also reduce your risk of heart disease, high blood pressure and stroke.

You are sure to have lots of questions about your diet. We've tried to answer the most commonly asked questions in this leaflet.

A registered dietitian will be able to answer any additional questions. Diabetes UK recommends that everyone with diabetes should see a registered dietitian at diagnosis, and then have regular reviews for specific advice on their eating habits.

## Ten steps to eating well

- 1) **Eat three regular meals a day.** Avoid skipping meals and spread your breakfast, lunch and evening meal over the day. This will not only help control your appetite but also help in controlling your blood glucose levels.
- 2) **At each meal include starchy carbohydrate foods** such as bread, pasta, chapattis, potatoes, yam, noodles, rice, cassava and cereals. The amount of carbohydrate you eat is important to control your blood glucose levels. All varieties are fine but try to include those that are more slowly absorbed (have a lower glycaemic index) as these won't affect your blood glucose levels as much.

Better choices include:

- pasta
- basmati or easy cook rice
- grainy breads such as granary, pumpernickel and rye
- porridge oats, all bran and branflakes.
- sweet potatoes, yam and new potatoes

The high fibre varieties of starchy foods will also help to maintain the health of your digestive system and prevent problems such as constipation.

- 3) **Cut down on the fat you eat** particularly saturated fats, as this type of fat is linked to heart disease. Choose unsaturated fats or oils, especially monounsaturated fat (eg olive oil and rapeseed oil) as these types of fats are better for your heart.

All fats contain calories. Fat is the greatest source of calories so eating less fat and fatty foods will help you to lose weight.

Here are some tips to cutting the fat:

- Use less saturated fat by having less butter, margarine, cheese and fatty meats.
- Choose lower fat dairy foods such as skimmed or semi-skimmed milk, low fat or diet yogurts, reduced fat cheese and lower fat spreads.
- Grill, steam or oven bake instead of frying or cooking with oil or other fats.
- Watch out for creamy sauces and dressings and swap for tomato-based sauces.
- Skim the fat from soups, stews and one-pot meals.

- 4) **Eat more fruit and vegetables.** Aim for at least five servings in total a day to provide you with vitamins and fibre as well as to help you balance your overall diet. A portion is, for example:
  - a whole banana or apple
  - a slice of melon
  - two plums
  - a handful of grapes
  - a cereal bowl of salad
  - three heaped tablespoons of vegetables.
  
- 5) **Include more beans and lentils** such as kidney beans, butter beans, chickpeas, red and green lentils, as these can help to control your blood glucose levels and blood fats. Try adding them to stews, casseroles and soups, or to a salad.
  
- 6) **Aim for at least two portions of oily fish a week.** Oily fish contains a type of polyunsaturated fat called omega 3 which helps protect against heart disease. Eat oily fish such as mackerel, sardines, salmon and pilchards.
  
- 7) **Limit sugar and sugary foods.** This does not mean you need to eat a sugar-free diet. Sugar can be used in foods and in baking as part of a healthy diet. However use sugar-free, no added sugar or diet squashes and fizzy drinks, as sugary drinks can cause blood glucose levels to rise quickly.
  
- 8) **Reduce salt in your diet to 6g or less a day.** More than this can raise your blood pressure, which can lead to stroke and heart disease. Limit the amount of processed foods, saltfish, corned beef, pickled meats and salt pork you eat. Try flavouring foods with herbs and spices instead of salt and soak your saltfish for as long as possible before cooking.
  
- 9) **Drink alcohol in moderation only** that's a maximum of two units of alcohol per day for a woman and three units per day for a man. For example, a pub measure (25ml) of spirit or half a pint of normal strength beer is about one unit. Over the years the alcohol content of most drinks has gone up. A drink can now contain more units than you think – a pint of premium lager can contain as much as three units, and a small glass of wine (175ml) around two units. Remember alcohol contains empty calories so think about cutting back further if you are trying to lose weight. Never drink on an empty stomach, as alcohol can make hypoglycaemia (low blood glucose levels) more likely to occur when taking certain diabetes medication. Never drink and drive.
  
- 10) **Don't be tempted by diabetic foods or drinks** they offer no benefit to people with diabetes. They:
  - are expensive
  - contain just as much fat and calories as the ordinary versions
  - can have a laxative effect
  - will still affect your blood glucose levels.

## **Your questions answered**

### **Q. Can I still have some sugar in my diet?**

A. "Yes – Eating sugar doesn't cause diabetes and people with diabetes do not need to have a sugar-free diet. A limited amount of sugar can be eaten as part of a balanced, healthy diet without having a harmful effect on overall blood glucose control (see page 10 and 11 for guidance on portion sizes).

Sugary drinks and sweets will affect blood glucose levels quickly so use low calorie fizzy drinks, sugar-free or no added sugar squashes. Sugar in foods may not affect your blood glucose levels as much as sugar in drinks.

But remember, foods high in sugar, like cakes and desserts, tend to be higher in fat and calories too. For this reason they should be limited especially if you're trying to lose weight.

Foods that contain a small amount of sugar or sugary foods, which you eat in small amounts eg sauces, jams, ready meals and yogurts, will not affect your overall diabetes control significantly."

### **Q. My doctor told me I need to lose weight. Is a low carbohydrate diet safe for me to follow?**

A. "Losing some weight and keeping it off will help control your diabetes and reduce your risk of heart disease. Low carbohydrate diets are very restrictive so you miss out on fruit and veg and starchy foods like bread and pasta, while filling up on fat and protein. Eating a high fat and high protein is not good for long term health. Although many people lose weight quickly at first they often find the diet hard to stick to in the long run. The diet appears to work by simply cutting down on the amount of calories (energy) you eat. Until studies prove the long-term safety and effectiveness of these diets, Diabetes UK does not recommend them. Your dietitian can guide you on the best way to lose weight and keep it off."

### **Q. Is it true that I shouldn't eat bananas or grapes?**

A. "No. All fruit and vegetables are extremely good for you. Eating more can reduce the risk of coronary heart disease, some cancers and some gut problems. You should aim to eat at least five portions of fruit and vegetables per day. This also helps to improve the overall balance of the diet. Eat a variety of different fruit and vegetables to ensure maximum benefit."

**Q. Does having diabetes mean I have to eat wholemeal bread?**

A. “High fibre varieties of starchy foods can help to maintain the health of your digestive system and prevent problems such as constipation. However, high fibre does not necessarily mean it is better for your diabetes control. Foods that tend to be more slowly absorbed and so help to control your blood glucose levels are:

- Pasta
- Basmati or easy cook rice
- Grainy breads such as granary, pumpernickel and rye
- New potatoes, sweet potato and yam
- Porridge oats, all bran and branflakes
- Fruit and vegetables
- Beans and lentils“

**Top tip...**

Top tip: Ask your doctor to refer you to a registered dietitian who can answer your other questions too.

## Your daily balance

Following a healthy eating pattern means eating foods from the five food groups in the right proportions. To get an idea whether you are hitting the mark think about how many portions of each of these foods you normally eat and see how it compares. Remember everyone's nutritional needs are different and you may need more or less portions than those suggested

Remember: if you are trying to lose weight the sizes of your portions may need to change...check for more specific advice with your dietitian

<b>Food groups and what's in a portion</b>	<b>How many portions should you eat in a day?</b>	<b>How many portions do you eat in a day?</b>
<b>Bread, cereals, rice, pasta and potatoes</b> <ul style="list-style-type: none"> <li>• 2 – 4 tbsp cereal</li> <li>• 1 slice of bread</li> <li>• ½ small chapatti</li> <li>• 2tbsp rice, pasta, noodles, mash potato</li> <li>• 2 -3 crackers</li> <li>• 2 new or ½ baked potato</li> </ul>	<b>5 – 14</b> Include starchy foods at all meals. Choose more slowly absorbed varieties whenever possible (see page 4)	
<b>Fruit and vegetables</b> <ul style="list-style-type: none"> <li>• a whole banana or apple</li> <li>• a slice of melon</li> <li>• 2 plums</li> <li>• a handful of grapes</li> <li>• a cereal bowl of salad</li> <li>• 3 heaped tablespoons of vegetables</li> </ul>	<b>5 – 9 or more</b> Choose a wide variety of foods from this group, including fresh, frozen, dried and tinned.	
<b>Meat, fish and alternatives</b> <ul style="list-style-type: none"> <li>• 2–3oz meat, poultry or oily fish</li> <li>• 4–5oz white fish</li> <li>• 2 eggs</li> <li>• 3tbsp beans, lentils or dahl</li> <li>• 2tbsp nuts</li> </ul>	<b>2 – 3</b> Choose the lower fat alternatives whenever possible and eat more beans and pulses.	
<b>Milk and dairy foods</b> <ul style="list-style-type: none"> <li>• 1/3 pint milk</li> <li>• small pot yogurt</li> <li>• 2tbsp cottage cheese</li> <li>• 1 ½ oz cheese (matchbox size)</li> </ul>	<b>2 – 3</b> Choose lower fat versions of milk and dairy foods.	
<b>Fatty and sugary foods</b> <ul style="list-style-type: none"> <li>• 2tsp spread, butter, oil, salad dressing</li> <li>• ½ sausage or rasher bacon</li> <li>• 1 scoop ice cream or 1 tbsp cream</li> <li>• 1 mini chocolate bar or pack of crisps</li> <li>• 2tsp sugar, jam or honey</li> </ul>	<b>0 – 4</b> Cut down on sugary and fatty foods.	

## What's on your plate?

**Eating for diabetes isn't about going on a diet. It's about making small, healthy changes to make your eating habits more balanced. One or two high fat, sugar or salty foods won't undo all your good work. Use these ideas to plan your meals over the day.**

### **Breakfast**

All breakfast cereals are fine. The best choices for your diabetes control and for satisfying your appetite include varieties like porridge, branflakes, all bran and fruit 'n' fibre. Add semi skimmed or skimmed milk, and try adding fruit to notch up a portion towards your five early in the day. You can use any fruit and it can be fresh, frozen, stewed, canned or dried.

A small glass of unsweetened fruit juice can count towards one of your five a day, but no matter how much you drink fruit juice can only count as one portion in any one day. Some people find it affects blood glucose levels quickly so it's not the best choice for quenching your thirst.

Bread, toast, bread muffins and crumpets are a good alternative to cereal. All are fine but wholegrain and granary versions are better for your diabetes control and may make you feel fuller for longer. Choose a low fat spread or one based on monounsaturated fat such as Bertolli or Mono or supermarkets own brands. Ordinary jams and marmalades or reduced sugar versions are okay too.

### **Lunches**

Making time for lunch helps you to ensure that you spread your food out over the day. This is good for controlling your appetite as well as your diabetes. Lean meat, fish, eggs, beans, pulses, soups and salads are all good choices. Try these with granary bread, toast, pitta bread, jacket potatoes, pasta or rice.

For a better balance try adding some extra salad and follow lunch with a piece of fruit or a low fat or diet yogurt.

### **Snacks**

Remember that extra snacks can pile on the pounds so make fruit or a diet/low fat yogurt your choice of snack wherever possible. For some people with diabetes on certain medication snacks are essential – check with your healthcare team about whether this applies to you.

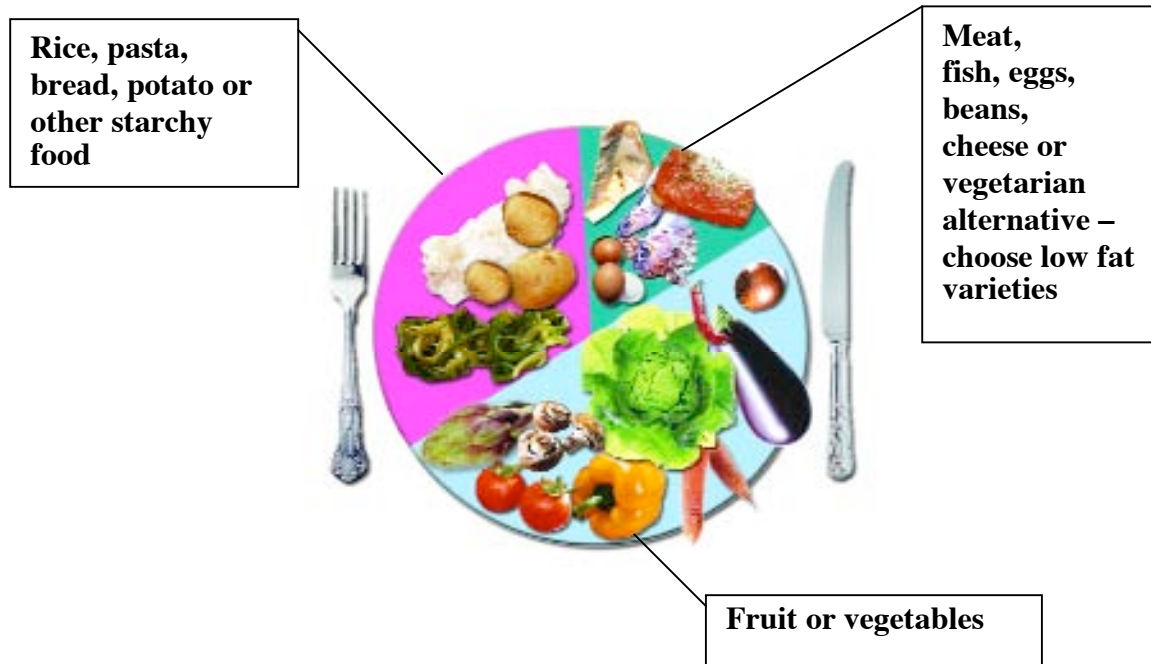
### **Think...**

Being diagnosed with diabetes can be a great time to review your diet ... why not take a chance and try new foods and recipes?

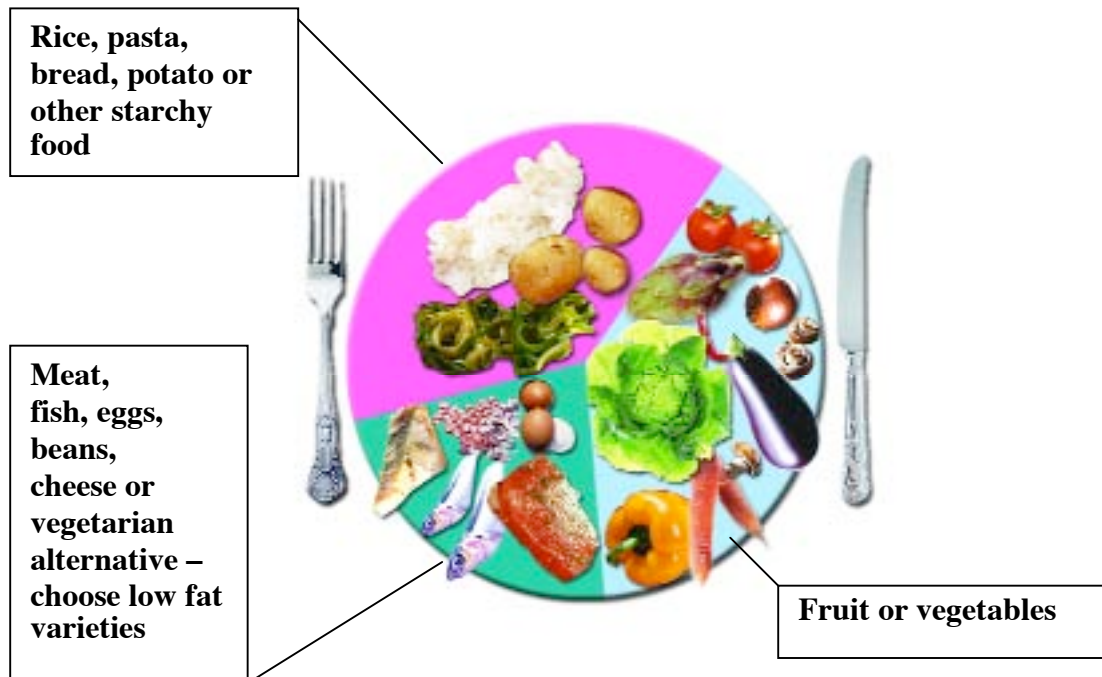
## Main meals

Try to have a balanced main meal every day. Using your plate as a rough guide will help you to eat foods in the recommended proportions.

### Trying to lose weight:



### Weight Management:



## About Diabetes UK

Diabetes UK is the charity for people with diabetes, their family, friends and carers. Our mission is to improve the lives of people with the condition and work towards a future without diabetes. Diabetes UK is one of the largest patient organisation in Europe. We stand up for the interests of people with diabetes by campaigning for better standards of care. We are the largest funder in the UK of research into better treatments for diabetes and the search for a cure. We provide practical support and information and safety-net services to help people manage their diabetes.

### Did you know?

There are over two million people in the UK diagnosed with diabetes and an estimated million have the condition but don't know it.

- Our website [www.diabetes.org.uk](http://www.diabetes.org.uk) has over 4,000 visitors a day.
- We have a network of offices throughout the UK – see page 21.
- We have over 170,000 members.
- Diabetes UK Careline staff answer over 200 enquiries a day.
- We spend £5 million a year on diabetes research.
- We produce a wide range of magazines, books and leaflets covering all aspect of diabetes.

### How can you help?

You can be actively involved in the work Diabetes UK does.

- Become a member – call free on 0800 138 5605
- Diabetes Campaigners Network – for details call 020 7424 1000
- Email [dcn@diabetes.org.uk](mailto:dcn@diabetes.org.uk) [www.diabetes.org.uk/campaigns/](http://www.diabetes.org.uk/campaigns/)
- Fundraising ideas and events – call 020 7424 1000
- Email [community@diabetes.org.uk](mailto:community@diabetes.org.uk) [www.diabetes.org.uk/fundraise/](http://www.diabetes.org.uk/fundraise/)
- Make a donation – call 020 7424 1010 [www.diabetes.org.uk/donate/](http://www.diabetes.org.uk/donate/)

## **Become a member of Diabetes UK**

Diabetes UK offers a membership scheme to help people attain good management of their diabetes.

Membership of Diabetes UK keeps you up to date with diabetes developments and connects you with a network of people who understand the condition.

### **As a member of Diabetes UK you can benefit from:**

- Our bi-monthly members' magazine, Balance.
- Confidential support and information from trained counsellors on Diabetes UK Careline, open during office hours.
- A wide range of publications.
- Diabetes UK's website [www.diabetes.org.uk](http://www.diabetes.org.uk).
- Details of voluntary groups.
- Educational and support events.
- The opportunity to add your voice to that of Diabetes UK to campaign for better diabetes care across the UK.

**To become a member of Diabetes UK, call free on 0800 138 5605 or visit [www.diabetes.org.uk/jointoday](http://www.diabetes.org.uk/jointoday)**

**For further information please call our Supporter Services team on 0845 123 2399.**

## Diabetes UK

### National and regional offices:

<b>Central Office</b>	Telephone <b>020 7424 1000</b>
<b>Diabetes UK Cymru</b>	Telephone <b>029 2066 8276</b>
<b>Diabetes UK Northern Ireland</b>	Telephone <b>028 9066 6646</b>
<b>Diabetes UK Scotland</b>	Telephone <b>0141 332 2700</b>
<b>Diabetes UK Eastern</b>	Telephone <b>020 7424 1000</b>
<b>Diabetes UK East Midlands</b>	Telephone <b>0115 950 7147</b>
<b>Diabetes UK London</b>	Telephone <b>020 7424 1116</b>
<b>Diabetes UK Northern &amp; Yorkshire</b>	Telephone <b>01325 488606</b>
<b>Diabetes UK North West</b>	Telephone <b>01925 653281</b>
<b>Diabetes UK South East</b>	Telephone <b>020 7424 1000</b>
<b>Diabetes UK South West</b>	Telephone <b>01823 324007</b>
<b>Diabetes UK West Midlands</b>	Telephone <b>01922 614500</b>

Visit [www.diabetes.org.uk/in\\_your\\_area/](http://www.diabetes.org.uk/in_your_area/) for email addresses

### Useful contacts:

<b>Become a member</b>	Telephone <b>0800 138 5605</b>
<b>Supporter Services</b>	Telephone <b>0845 123 2399</b>
<b>Diabetes UK Careline</b>	Telephone <b>0845 120 2960*</b>
(or if hearing impaired)	Textphone <b>020 7424 1031</b>
<b>Publications orderline</b>	Telephone <b>0800 585 088</b>

Visit [www.diabetes.org.uk](http://www.diabetes.org.uk) for further information

**\*Diabetes UK Careline** is here to help. Call 0845 120 2960 for support and information (although unable to provide individual medical advice). Calls cost no more than 4p per minute. Calls from mobiles usually cost more.

**Diabetes UK**  
**The charity for people with diabetes**  
Macleod House, 10 Parkway, London NW1 7AA  
**Telephone** 020 7424 1000 **Fax** 020 7424 1001  
**Email** [info@diabetes.org.uk](mailto:info@diabetes.org.uk)  
**Website** [www.diabetes.org.uk](http://www.diabetes.org.uk)  
Registered charity no. 215199 © Diabetes UK 2005