#### **DIABETES UK** KNOW DIABETES. FIGHT DIABETES.

# Understanding your risk of TYPE 2 DIABETES

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# WHAT IS DIABETES?

#### Diabetes is a serious health condition.

When you have diabetes, your body either doesn't produce any insulin at all, doesn't produce enough insulin or the insulin produced doesn't work very well, which is called insulin resistance.

Insulin moves sugar, which is also called glucose, from our blood into our cells where it is used for energy.

We get glucose when our body breaks down foods that contain carbohydrates such as bread, cereals, fruit and veg and some dairy products. This glucose enters the bloodstream and insulin allows us to use it for energy. Without insulin doing its job, people with diabetes end up with high levels of glucose in their blood. If not treated properly, it can affect almost every part of their body and lead to serious health problems like sight loss, nerve damage, stroke and heart attacks.



#### There are two main types of diabetes



Type 1 diabetes is an autoimmune condition. The body attacks and destroys the cells in the pancreas, which is a small organ near your stomach, that make insulin. It is currently not possible to prevent type 1 diabetes.



With type 2 diabetes, the body doesn't make enough insulin, or the insulin it makes doesn't work properly. It is possible for some people to prevent or delay type 2 diabetes.

They are both serious and need to be treated and managed properly. Of the people in the UK who have diabetes:

- about 8% have type 1 diabetes
- about 90% have type 2 diabetes
- about 2% have other, rarer types of diabetes.



You can also develop diabetes during pregnancy, known as gestational diabetes, which can increase your risk of type 2 diabetes in the future.

For more info on diabetes and the different types, go to **diabetes.org.uk/guide-to-diabetes** 

### What are the signs of type 2 diabetes?

If you are at risk of type 2 diabetes, it's important to be aware of the signs.

These symptoms usually appear gradually over time, or you may not notice any symptoms at all. The things to look out for include:

- going to the toilet more often, especially at night
- feeling very thirsty
- being more tired than usual
- Iosing weight without trying to
- blurred vision
- genital itching or recurrent infections like thrush
- cuts and grazes taking longer to heal.

If you have any of these signs, don't ignore them.

See your doctor or nurse as soon as possible and ask to be tested for diabetes.

If you do have diabetes, you and your doctor or nurse can then work out a plan for how to treat and manage it properly.

The sooner you visit your doctor or nurse, the sooner you can get the right care and treatment to prevent you getting serious complications.

### The complications of diabetes

Diabetes can lead to serious complications that can affect many different parts of your body. Complications include:

- increased risk of dementia
- preventable sight loss
- kidney disease and kidney failure
- untreated, severely high or low glucose levels, which can cause coma or even death
- depression
- heart disease and stroke
- complications in pregnancy
- sexual dysfunction
- nerve pain and nerve damage.

The complications of diabetes can lead to premature death. They can also, when left untreated, lead to amputation. But by taking action now, you can lower your risk of getting type 2 diabetes and these devastating complications.

# WHAT DOES BEING AT RISK of type 2 diabetes mean?

#### If you or a family member have been told you're at risk of type 2 diabetes, it might have come as a shock.

The reasons people are at risk can be different and some people are more at risk than others. But research has shown that, for some people, making changes to your lifestyle, including healthy eating, moving more and losing weight, can help reduce your risk by about 50%.

The next few pages will explain why you might be at risk and what this means for you.

#### What a blood test can tell you about your risk

If you've seen your GP or nurse recently and they were worried about your risk of type 2 diabetes, you may have had a blood test.

There are several different types of blood tests. These all check the level of glucose in your blood and are sometimes known as a blood sugar or blood glucose test. The results can tell you if you have type 2 diabetes or not, but also if you have higher-than-normal blood glucose that is not yet high enough to diagnose type 2 diabetes.

### Higher-than-normal blood sugar levels

In some people, blood sugar levels may be higher than normal, but not high enough to be diagnosed as type 2 diabetes. Your doctor or nurse will tell you if this is the case.

Having high blood sugar levels means you are more at risk of getting type 2 diabetes. Knowing this is important. It means you can now take action and get support and tips to keep your risk as low possible. There are lots of ways to describe higher-than-normal blood sugar levels.

Your doctor or nurse might talk about impaired glucose regulation or non-diabetic hyperglycaemia. You may also hear the words prediabetes or borderline diabetes.

These all mean the same thing. You do not have type 2 diabetes but are more at risk of getting it in the future.



### What increases my risk?

There are several reasons why some people are at more risk of type 2 diabetes than others.

There are some things you might be able to change and others you can't.

#### What you can't change

Age

If you are over the age of 40 and from a white background, your risk is increased. But if you are from an African-Caribbean, Black African or South Asian background, your risk increases from the age of 25.

Gender

Men are slightly more likely to get type 2 diabetes than women.

#### Ethnicity

If you're of African-Caribbean, Black African or South Asian origin, you're more at risk than people from a white background.

- Close relatives with diabetes
  The chances of you getting type 2 diabetes are increased if a parent, brother or sister, or child has diabetes.
- Medical history

If you've ever had high blood pressure, this increases your risk for type 2 diabetes. Your risk is also increased by some other health conditions, including polycystic ovary syndrome, and some mental health conditions, like schizophrenia, biploar disorder and depression.

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### What you might be able to change

Weight

Living with obesity or overweight also makes it harder for your body to manage the levels of sugar in your blood.

Waist size

Having a high waist measurement means you are more at risk of insulin resistance. This can make it harder for your body to manage the levels of sugar in the blood.

All of these increase your risk of getting type 2 diabetes.

### What to ask your doctor or nurse

Once you know you're at risk of type 2 diabetes, you may have a lot of questions.

Your healthcare team can help you make the changes you need to reduce your risk of type 2 diabetes.

It's important to make an appointment with them – here are some questions you might want to ask.

#### More help

- Is there a diabetes prevention programme or weight management group I can go to in my local area?
- Are there any local services to help me move more?
- Are there any local services to help me eat better?

#### **Blood tests**

- Do I need a blood test to check my risk?
- When will I get my results?
- What do my results mean?

#### What next?

- What do I need to do now?
- When do I need to come back and see you?
- Do I need more blood tests in the future?

Use our online Know Your Risk tool at **diabetes.org. uk/my-risk** to find out your risk level for type 2 diabetes and get information about your next steps.



# **REDUCE YOUR RISK OF TYPE 2 DIABETES**

#### If you've found out you're at risk – and knowing is a big first step – the important thing to do now is take action to lower your risk.

Here are some questions to ask yourself.

- What healthy changes can I make to eat better?
- How can I move more every day?
- What is my body mass index (BMI)?
- What support is available to me if I'd like to try and lose weight?

Over the next few pages, we've put together our top tips for:

- managing your weight
- eating well
- moving more.

Even making a small change today can make a big difference to your future health.

### For more top tips: diabetes.org.uk/lower-my-risk

#### Managing your weight

Getting support to help you with weight management could lower your risk of type 2 diabetes.

We know that not everyone who is at risk of type 2 diabetes needs to lose weight. But making healthier choices and moving more is good for everyone who's at risk of type 2.

If you are living with obesity or overweight and are at high risk of type 2 diabetes, losing just 5% of your body weight can significantly reduce your risk. There are lots of ways you can lose weight and it's about finding what works best for you.

Making healthier food choices and being more active are both positive ways to start making these changes. If you need help with managing your weight, a dietitian can help you. Your GP surgery may also be able to help you find weight management services in your local area.

### How do I know if I need to lose weight?

Finding out your waist measurement and BMI is the first step.

#### Waist size

Healthy weight measurements are less than:

- 80cm/31.5 inches if you're a woman
- 94cm/37 inches if you're a man
- 90cm/35 inches if you're a South Asian man.

Your waist size isn't your trouser size. Find out how to get the right measurement for your waist at: **diabetes.org.uk/** waist-measurement

#### BMI

BMI is a measure that uses your height and weight to work out if your weight is in the healthy category.

If your BMI is over 25, you're more at risk of type 2 diabetes.

To work out your BMI visit: nhs.uk/live-well/healthy-weight/ bmi-calculator





#### **Eating well**

Here are our top tips for healthier food choices you can make, to reduce your risk of type 2 diabetes.

### 1. Choose drinks without added sugar

We know there is a link between having full-sugar soft drinks and type 2 diabetes. Cutting down on these can help to reduce your risk and manage your weight too. Try switching to low calorie versions of soft drinks, plain water, plain milk or tea or coffee without added sugar instead. Try not to replace sugary drinks with juices or smoothies.

### 2. Choose higher fibre carbs

Eating refined carbs, which include white bread, white rice and sugary breakfast cereals, is linked with an increased risk of type 2 diabetes. But wholegrains such as brown rice, wholewheat pasta, wholemeal flour, wholegrain bread and oats are linked to a reduced risk, so try to choose these instead. They're also associated with lower risk of other serious conditions such as obesity, heart diseases and certain types of cancers.

### 3. Cut down on red and processed meat

Having more red and processed meats like bacon, ham, sausages, pork, beef and lamb are all associated with an increased risk of type 2 diabetes. They also have links to heart problems and certain types of cancer. Try to get your protein from healthier foods like beans, lentils, eggs, fish, chicken or turkey instead. You should try and have at least one portion of oily fish per week.

#### 4. Eat plenty of fruit and veg

Including more fruit and vegetables in your diet is linked with a reduced risk of type 2 diabetes. Some foods are especially associated with a reduced risk of type 2, including:

- apples
- grapes
- berries
- green leafy veg such as spinach, kale, watercress, rocket.

Don't worry about eating fruit. The good news is the natural sugar in whole fruit is not the type of added (or free) sugar we need to cut down on. But drinks like fruit juices and smoothies do contain free sugar, so eat the whole fruit and veg instead.

### 5. Choose unsweetened yogurt and cheese

Yogurt and cheese are fermented dairy products and they have been linked with a reduced risk of type 2 diabetes. The amount of fat from these dairy foods is not as important as the amount of sugar. Choose unsweetened options like plain natural or Greek yoghurt and plain milk.

#### 6. Be sensible with alcohol

Drinking too much alcohol is linked with an increased risk of type 2 diabetes. It's high in calories too so drinking lots can make it hard if you're trying to lose weight. You shouldn't drink more than 14 units of alcohol per week, spread evenly over 3 or 4 days. Try to have a few days per week without any alcohol at all.

#### 7. Choose healthier snacks

If you want a snack, go for things like unsweetened yoghurt, unsalted nuts or fruits and vegetables instead of crisps, biscuits, sweets and chocolates. But watch your portions as it'll help you keep an eye on your weight.



### 8. Include healthier fats in your diet

Some healthy fats in our diet are important as they give us energy. But some saturated fats can increase your blood cholesterol, increasing your risk of heart problems. These are mainly found in meat, animal products like butter and lard, and processed foods like biscuits, cakes, sweets and pastries.

Healthier fats are found in foods like:

- unsalted nuts
- seeds
- avocados
- olive oil, rapeseed oil, sunflower oil.

We also know that the type of fat found in oily fish like salmon and mackerel is linked with a reduced risk, especially if you are from a South Asian background.

#### 9. Cut down on salt

Eating lots of salt can increase your risk of high blood pressure, which has been linked to an increased risk of type 2 diabetes. Try to limit yourself to a maximum of one teaspoonful (6g) of salt a day and check the labels on pre-packaged foods, as they can contain a lot of salt.

## 10. Getting vitamins and minerals from food instead of tablets

We don't have evidence to say that certain vitamins and minerals reduce your risk of type 2 diabetes. So, unless you've been told to take something by your healthcare team, like folic acid for pregnancy, you don't need to take supplements. It's better to get all your vitamins and minerals by eating a mixture of different foods.



#### So what next?

#### Set clear goals

Use the action plan (page 20) and keep a food and activity diary to keep you on track.

#### Plan ahead

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It's helpful to plan meals for the week ahead especially when we all lead busy lives. This can help you eat better and stick to a budget.

#### Start to make healthy changes

Use the tips in this guide to make small and lasting changes.

#### Be creative

Try simple, healthy new recipes and new food. You can find lots of ideas at **diabetes.org.uk/recipes** 



#### Move more

We should all be aiming to sit less and move more.

Moving more every day will help you maintain a healthy weight and reduce your blood sugars levels.

It can also:

- help you sleep
- manage your stress levels
- improve your mood.

And remember, doing just a little bit more than you did before is a great start. Then keep increasing the intensity or the amount you're doing.

### How much activity should you do?

You should aim to do 150 minutes of moderate intensity exercise or 75 minutes of vigorous intensity exercise per week. Moderate intensity means you're breathing faster but still able to talk, and vigorous intensity means you're breathing fast and would have difficulty talking.

You could break this down into 30 minutes of moderate intensity exercise per day or 15 minutes of vigorous intensity exercise per day on at least five days a week.

You should also do activities that improve your muscle strength on two or more days a week.



#### Ways to move more

Moderate intensity activites:

- Brisk walking.
- Cycling.
- Swimming.
- Chair-based exercises.

#### Vigorous intensity activities:

- Running.
- Playing sports like football, hockey or rugby.
- Fitness classes, like circuit training.
- Cycling uphill.

Activity to improve muscle strength:

- Carrying heavy shopping bags.
- Yoga.
- Lifting weights.
- Wheeling a wheelchair.



For a simple way to move more, start walking more than normal:

- get off the bus a stop earlier
- take the stairs instead of the escalator or lift
- have a walking meeting or catch up with friends
- do an extra five minutes when walking the dog
- walk to the shops to pick up a few items
- use a pedometer to keep track of your steps – aim for 10,000 a day.

#### **Get support**

We all need a helping hand and the good news is, there is support out there.

Ask your healthcare team about the support and services available in your area.

These can include:

- a weight management programme or group
- a registered dietitian
- an exercise specialist or group
- a type 2 diabetes prevention programme.

# **MY WEIGHT LOSS PLANNER**

### Use this planner to set weight loss goals and track your progress.

By putting a plan in place and noting down your progress, you'll be able to see the positive changes you're making. This can help you to stay motivated, lose weight and achieve your goals.

#### How could I benefit from losing weight?

Write down three personal reasons for losing weight. Try to think of both short-term benefits like 'I want to reduce my blood sugar levels' as well as longer-term benefits like 'I want to set an example for my family so they can live more healthily too'.

1			
2			
3			

#### Your future goal

The future can seem a long way off. But thinking about a long-term goal can help you plan how to reach it. Think about what you'd like to achieve and how you'd like to feel in a few months' time. Use your three reasons to write your future goal. Make your goal specific, measurable, achievable, realistic and timely (SMART for short).

Here's an example:

 I want to lose 5kg over the next three months to help me reduce my risk of type 2 diabetes.

My goal:	

### How to reach your future goal

Now you've thought about your long-term goal, it helps to break this down into more manageable chunks and include the steps you need to take. Try to make these activities as achievable and specific as possible.

Here are some examples:

- On Mondays, I will write down a plan for healthy evening meals for the rest of the week.
- I will reduce my takeaways from weekly to once a month.
- I will use a pedometer to track my steps and walk 10,000 steps a day. I'll increase my steps by taking a 30-minute walk every lunchtime.

It can also be helpful to already know what you'll do if things don't go according to plan. You can try using 'if... then...' statements to help you think ahead.

#### For example:

- If I haven't had my five portions of fruit and veg, then I will add a portion of veg to my dinner.
- If I'm late home from work and don't have time to cook dinner, then I will pick up a bag of salad and plain piece of cooked meat or some tofu from the supermarket for an easy healthy dinner.
- If I eat an unhealthy snack that I didn't plan to eat, then I will not beat myself up about it and choose healthier snacks for tomorrow instead.



# My action plan 1 2 3 4 5

#### My tracker

This is where you can make a note of what you're eating each day and how you've moved more. Thinking about how you might feel if you achieve your goals for the week will help you stay motivated. And it's okay to feel upset or frustrated as you move through the week – trying to lose weight isn't easy. Try using this diary for about 12 weeks because it can take some time to change habits.

Week number	Date	/	/
My goals this week are:			
1			
2			
If I reach my goals, I will re	eward myself with	a non-	food reward:
If I reach my goals, I will re	eward myself with	a non-	food reward:

What went well this week?

What was challenging and what can I do differently next week?

My weight

Waist measurement

	Breakfast	Lunch	Dinner	Snacks	Activity
Mon					
Tues					
Wed					
Thurs					
Fri					
Sat					
Sun					



We are Diabetes UK and it's our mission to tackle diabetes, day in and day out, until it can do no harm.

It's why we campaign for better care, give support in times of need and fund ground-breaking research into new treatments and a cure.

Diabetes doesn't stop, so neither do we.

#### This guide is FREE

As a charity, we rely on the generous donations of people like you to help us produce this vital information on reducing your risk of type 2 diabetes.

To find out more about how you can help us, go to diabetes.org.uk/get-involved

Or, to make a donation to support our work, go to **diabetes.org.uk/donate** or send a donation via text.

Please text DUK to 70123 to donate £5 to Diabetes UK and help us do even more for people with diabetes.

You will be charged £5, plus one message at your standard network rate. Diabetes UK will receive 100%. Registered charity number England & Wales 215199 and Scotland SCO39136. If you wish to discuss this mobile payment, call 0203 282 7863.

By texting DUK to 70123, you are agreeing to us contacting you by phone and SMS to tell you more about our work and how you can support it (including financial support). To give  $\pounds 5$  without receiving further contact by phone and SMS, text DUK NO to 70123.

You must obtain permission from the bill payer before sending a text message.

# **GET IN TOUCH**

Call **0345 123 2399** Email **helpline@diabetes.org.uk** Visit **diabetes.org.uk** 

Search **Diabetes UK** on Facebook, Twitter, YouTube, Instagram and TikTok



If you would like to get in touch about the information in this leaflet or suggest any improvements, please send your comments to: **helpline@diabetes.org.uk** or write to us at: Diabetes UK Helpline, Wells Lawrence House, 126 Back Church Lane, London E1 1FH



Scan the QR code to fill in a quick survey about what you thought of this booklet and how it's helped you.

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