You’re bound to have a lot of questions about living with Type 2 diabetes. There’s a lot of information out there, and it can be confusing to understand what it all means. We’ll help you get to grips with it.

In this guide, we set the record straight, giving you the facts about diabetes and how you can treat it. We tell you what you need to do to look after yourself to stay healthy, and list the care you should get from your diabetes healthcare team.

We also hear from people like you on how they manage their lives with Type 2 diabetes. We give you lots of tips to make your life easier – and there’s a handy glossary and index at the back to help you get the most out of this guide.

If you sometimes find it all a bit overwhelming, there’s a lot of support available to you, so don’t be afraid to ask for help from your healthcare team. And, you can always send us an email or pick up the phone if you want to talk (see the back cover for ways to get in touch).

Armed with all the facts, and understanding what you and your healthcare team need to do, means you can look forward to living a full, long and healthy life with Type 2 diabetes.
What is Type 2 diabetes?

Type 2 diabetes is a serious lifelong condition. It develops when your insulin-producing cells can’t produce enough insulin. Or when the insulin you do produce doesn’t work properly (called insulin resistance). This leads to high blood sugar levels.

If left untreated, high blood sugar levels can cause serious health complications.

Symptoms
You may not have had obvious signs. That’s particularly true in the early stages. But you may have noticed:
• going to the toilet more often, especially at night
• feeling more tired
• losing weight without trying
• genital itching or thrush
• cuts and wounds taking longer to heal
• blurred vision.

Causes
It’s a combination of lifestyle and genes that puts you at risk of getting Type 2 diabetes. Things that increase your risk include:
• Age. If you’re over 40 (or over 25 if you’re South Asian).
• Weight. If you’re overweight (particularly around your belly).
• Ethnicity. If you’re Black African, African Caribbean, South Asian or Chinese.
• Family link. If you have a parent, brother or sister with diabetes.
• Previous medical history. If you have a history of high blood pressure, heart attack or strokes, gestational diabetes or severe mental illness.

Treatment
There are three main treatments:
• healthy eating, being physically active and keeping to a healthy weight
• medication – tablets and injections which may include insulin
• weight loss surgery (bariatric surgery).

People with Type 2 diabetes are likely to be on a combination of these treatments. Everyone is different and it takes a while to find out what works best for you. But most people will need to make lifestyle changes – things like eating more healthily and being more active, and losing weight if you’re overweight.

Your treatment may well change over time – either the type of medication or the dose. Your diabetes healthcare team will talk to you about how you manage your diabetes.

Family and friends
It’s worth encouraging your friends and family to see if they’re at risk. In the UK, 11.9 million people are at high risk of developing Type 2 diabetes, but three out of five of them could avoid or delay it by taking action in time. You can get your friends or family to check their risk at www.diabetes.org.uk/t2-risk

The good news is that you can make a difference to how you’re affected by Type 2 diabetes. The main ways you can do this are by:
• eating a healthy, balanced diet
• being as active as you can
• avoiding putting on extra weight and trying to lose excess weight
• setting yourself goals to improve your health
• taking your medication as prescribed
• getting support, eg going on an education course, to look after yourself (see page 28)
• going to your healthcare appointments.

If Type 2 diabetes isn’t managed well it can lead to devastating complications like heart attacks, stroke, kidney failure, blindness, amputation and death. But these aren’t inevitable. This guide is here to help you manage your diabetes and reduce your risk of these complications.

You can also go to our website at www.diabetes.org.uk or call our Helpline on 0345 123 2399* or 0141 212 8710, if you’re in Scotland, for information and support.
What’s the difference between Type 1 and Type 2?

Type 1 diabetes and Type 2 diabetes are caused by different things and managed differently.

Type 1 develops when insulin-producing cells in the pancreas are destroyed. It’s more common in younger people, particularly children. It’s treated with insulin (either via injections or a pump), a healthy diet and keeping active.

You’ll have developed Type 2 because, even though you can make insulin, you don’t make enough. Or, the insulin you do make doesn’t work properly. It tends to develop in older people (over 40, or over 25 if you’re South Asian). It’s treated with a healthy diet, keeping active, and quite often medication is needed.

Can children get Type 2 diabetes?

It’s true that more children are developing Type 2 diabetes. The most recent UK figures show 600 children or young people are getting diagnosed with Type 2 every year. It’s still very rare and the majority of children with diabetes have Type 1 – which can’t be prevented and isn’t linked to lifestyle. This guide is only for adults living with Type 2 diabetes.

Is Type 2 diabetes serious?

The truth is, yes, it can be. The complications can be serious. But this guide is here to help you manage the condition, make sure you’re getting the right care and reduce your risk of complications.

Is there a cure?

At the moment, there isn’t a permanent cure for Type 2 diabetes. But there’s some evidence that shows some people can put their Type 2 diabetes into remission through weight loss (either by following a very low calorie diet under medical supervision, or through surgery). You can find out about all of our research at www.diabetes.org.uk/t2-research

Meet Rohit

Rohit, from North London, has had Type 2 diabetes for 14 years

“I was diagnosed in 2003. I didn’t have any symptoms, but I’d asked to get tested roughly every two years once I’d turned 40, as there’s a very strong diabetes history on my father’s side of the family.

It’s very important to educate yourself about Type 2 diabetes and how to deal with it. Knowing that diabetes is a condition that can be controlled is so vital.

Take care of your lifestyle from the start and work at it until it becomes a good habit. That will eventually help you to be in control.”
Putting the record straight

People say lots of different things about diabetes – but not all of it’s true. And knowing the facts about diabetes is important when it comes to managing it. There’s so much information out there, and it’s often difficult to know what’s right and what’s not.

Here are some of the most common myths about diabetes...

Myth: “Type 2 is a mild form of diabetes”
This isn’t true. Type 2 diabetes is a serious medical condition. But the good news is that lifestyle changes and the right treatment can really make a difference. It doesn’t have to stop you living a full life.

Myth: “People with diabetes can’t have sugar”
That’s not true, either. But, as a nation, we eat too much sugar and could all do with reducing how much we eat. We don’t need sugar in our diets – that’s why sugary drinks and foods should only be eaten in small amounts and not very often. See page 31 for more on healthy eating.

Myth: “People with diabetes can’t play sport”
That’s rubbish. It’s good for you to be active – physical activity and exercise have lots of health benefits and reduce your risk of complications, including heart disease. See page 49 for more on exercise.

Myth: “People with diabetes should eat ‘diabetic’ foods”
There’s no need to eat special ‘diabetic’ foods. They don’t have any health benefits, are often high in fat and calories, and can cause an upset stomach. In fact, companies aren’t allowed to label their food and drinks ‘diabetic’ anymore under EU regulations.

Myth: “It’s not safe to drive if you have diabetes”
Yes, you can drive. So long as you have control of your blood sugar levels, it’s as safe for you as it is for anyone else out there. See page 60 for more on driving.

Myth: “People with diabetes can’t have sugar”
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Testing

So that you can keep track of your diabetes, you may be asked to test your blood sugar levels.

Not everyone with Type 2 diabetes will be advised to do their own testing. Your diabetes healthcare team will discuss with you whether it’s right for you to test, when and how often.

The test measures the amount of sugar (glucose) in your blood and tells you if you have high or low sugar levels. You’ll use a blood glucose meter to do this.

If you choose to buy your own meter, you might not get a prescription for the test strips it uses. Check with your healthcare team.

What should I be aiming for?

You’ll agree a target figure with your healthcare team. It’s normally between 4–7mmol/l before meals, and less than 8.5mmol/l two hours after meals.

Tips for testing blood sugar

1 Wash your hands with soap and water – don’t use wet wipes as they can affect the test result.
2 Make sure your hands are warm – it’s easier to get blood and it doesn’t hurt as much.
3 Prick the side of your finger – not the index finger or thumb. Don’t prick the middle, or too close to a nail.
4 Use a different finger and a different part each time.
5 Keep a diary of your results – you’ll be able to spot trends and help your healthcare team decide whether your treatment needs to change.

My agreed targets

<table>
<thead>
<tr>
<th>Before meals:</th>
<th>After meals:</th>
</tr>
</thead>
</table>

Need to know

• Ask what your target is. It’s important to know your target blood sugar level. This lets you and your healthcare team know how you’re doing and if things can be improved.
• Medication, food and activity levels affect your blood sugar levels every day. If you understand how they affect your own levels, you can change what you eat, what you’re doing and get advice on your medication.
• It’s all about knowing your own diabetes so that you can plan it around your life (and not the other way around).

Some questions

My doctor won’t prescribe any more test strips for me. What can I do?

This is happening to about one in four people. We’re furious and are campaigning against it. Challenge it with your GP practice. If that doesn’t work, then with your local health decision makers. Most people will get the decision reversed. Find out about our campaign, and how we can help you raise your issues, at www.diabetes.org.uk/12-test-strips

PEDI-SALVE™ TOTAL FOOTCARE CREAM

“PediSalve™ is ideal for all patients who suffer from foot and ankle disorders and can be used by all groups including people living with diabetes. When used as massage cream it may help relieve the pain of arthritis and encourage mobility.”

Mr. John Wong
Senior Foot and Ankle Surgeon.

“There is nothing like it, I recommend it to all my patients”

Elaine McLaughlin, Senior Podiatrist

Developed by Dr Maria McGee PediSalve™ Total Footcare Cream is suitable for everybody who wants to keep their feet supple, conditioned and moisturised. PediSalve™ is recommended by Podiatrists for care of the Diabetic Foot.

Ideal for dry, rough skin, hard skin, brittle nails, cracked heels, corns, calluses and joint massage.

Please check with your Podiatrist.

Also available on Amazon.co.uk

Web: www.marblehillonline.co.uk | Email: Info@marblehillonline.co.uk | Tel: 02871357128

www.diabetes.org.uk
Medication

You may not need medication when you’re first diagnosed. Lifestyle changes – like being active, losing excess weight and eating well – may be all that’s needed. It could be that you manage your diabetes without medication for a long time.

But Type 2 diabetes changes over time. This means you may also need to start taking medication. This doesn’t mean that you’ve done anything wrong. It’s just that your body needs more help to keep blood sugar levels within a healthy range. All medications work in different ways, so your healthcare team will speak to you about what’s best for you.

It’s important to think ahead about what you want to do before you start taking medication. They may have side effects or interact with other medicines you take. If you need more information, speak to your healthcare team or pharmacist. The patient information leaflet (PIL) given with each medicine you take. If you need more information, they may have side effects or interact with other medicines you take. If you need more information, speak to your healthcare team or pharmacist. The patient information leaflet (PIL) given with each medicine also has more details.

### Tips for remembering your meds

1. Make a schedule. If you take more than one medicine, make a schedule showing when to take them each day and in the best order. Ask your pharmacist to help.
2. Use a pill box. Get one that has separate days of the week – you can get organised a week at a time.
3. Keep your meds handy. Keep them somewhere you will see them (but away from children’s reach) – near your TV, computer or with your toothbrush.
4. Use an alarm. Set reminders on your phone or computer.

### Side effects

Diabetes medicines are safe but, like all drugs, they may have side effects or interact with other medicine you take. If you need more information, speak to your healthcare team or pharmacist. The patient information leaflet (PIL) given with your medicines also has more details.

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<table>
<thead>
<tr>
<th>Medicine Type</th>
<th>How they work</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biguanides</td>
<td>They lower blood sugar levels by making your body use more insulin. They also help you lose weight.</td>
<td>Metformin, glibenclamide, glipizide</td>
</tr>
<tr>
<td>Sulphonylureas</td>
<td>They stimulate the cells in the pancreas to make more insulin. They also help insulin work better.</td>
<td>Glimepiride, glipizide, glibenclamide</td>
</tr>
<tr>
<td>Alpha-glucosidase inhibitors</td>
<td>They slow down the digestion of carbohydrates.</td>
<td>Acarbose</td>
</tr>
<tr>
<td>Prandial glucose regulators</td>
<td>They work in the stomach to slow the absorption of carbohydrates.</td>
<td>Amaryllis, Osenil, Viacar</td>
</tr>
<tr>
<td>SGLT2 inhibitors</td>
<td>They reduce the amount of sugar absorbed in your kidneys.</td>
<td>Canagliflozin, Empagliflozin</td>
</tr>
</tbody>
</table>

### Thiazolidinediones (glitazones)

- **Pioglitazone** is the only one in this group.
- **How it works**: It helps overcome insulin resistance so that you use your natural insulin better. It also helps to protect the cells in the pancreas, so that you’re able to produce insulin for a longer period.
- **When to take it**: Tablets taken once or twice a day, with or without food.

### Incretin mimetics (GLP-1 analogues)

- **This isn’t insulin but is given by injection**.
  - **Examples include exenatide, liraglutide, dulaglutide, albiglutide and lixisenatide**.
- **How they work**: They increase levels of hormones called ‘incretins’, which help your body make more insulin as it’s needed, reduce the amount of sugar (glucose) made by the liver when it isn’t needed, and reduce the speed at which you digest food. They also reduce appetite.
- **When to take them**: Injection taken once daily, twice daily or once weekly – it depends on the type.

### DPP-4 inhibitors (gliptins)

- **Examples include sitagliptin, vildagliptin, saxagliptin, alogliptin and linagliptin**.
- **How they work**: They stop the enzyme DPP-4 from destroying incretins. Incretins help the body make more insulin when it’s needed and bring down the levels of sugar (glucose) made by the liver when it’s not needed.
- **When to take them**: Tablets taken once daily, twice daily or once weekly – it depends on the type.

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- **When to take it**: Tablets taken once or twice a day, with or without food.
Some questions

Do I have to pay for my medication?
Not if you treat your diabetes with tablets, injectable therapies or insulin. But, if you’re in England, you’ll need to have a medical exemption certificate to claim your free prescription unless you’re 60 or over.
You can get an application form (called FP92A) from your doctor’s surgery. Fill it in, then your doctor will sign it and send it off. Go to www.diabetes.org.uk/12-prescriptions for more details.

Need to know

It's important to understand your medication and take as prescribed. Understanding these things will help you:

- The name. Most medicines have two names. One is the generic name and is the actual name of the medication. The other name is the brand (trade) name that it’s sold under. Write down and remember the generic name.
- The dose. How much you take.
- Time and frequency. When and how often you take it. Is it with or without food, before or after food?
- How is it taken? Is it a tablet, liquid or injection?

Rohit’s story

“When I was first diagnosed I was asked to change my diet and activities. We cut down on sugar and all sugary foods. But after about three years, I was put on metformin and drugs to control my cholesterol and blood pressure. Over the years, my metformin dose has increased.

I’d enjoyed talking to people at a diabetic awareness stall, and it dawned on me that I had to practise what I preached. So, I changed my eating lifestyle and significantly increased my activities. At the same time, my HbA1c (which gives average blood sugar levels over three months) readings were over 63mmol/mol. Doctors warned me that if I wasn’t able to bring them down then my medication would have to change.

Now, I rely on exercise at home in the morning, which involves 45 minutes on a cross trainer. I built up slowly. I distract myself by watching a box set series on my tablet. I now also walk everywhere possible, walk up the escalators, and avoid lifts. I’ve got my HbA1c down to 47.5mmol/mol and I’m working to get it down to 42mmol/mol.”

Level 4
High Risk
The feet in Levels 3 and 4 above are 11 times more at risk of ulceration than those in Level 1 and 2.

1 in 15 people at High Risk ulcerate annually
Within 1 week 95% of patients using Dermatonics Heel Balm will have feet looking like those at Level 1 or 2.

Apply Just Once A Day Dermatonics Once can reduce your risk of ulceration and is Best Emollient Practice for High Risk Neuropathic Feet†

Don’t settle for anything less to keep your feet callus free
Check your feet daily using the chart below. If they are level 3 or 4 and you have neuropathy then NICE Guidelines (which GPs Have to follow) say that you are entitled to a prescription of cream to treat dry skin on the feet. Most creams are not designed for removing callus but Dermatonics, which is Best emollient practice for treating Diabetic Feet, is designed to do so and with just one single daily application.

95% of Dermatonics users will have Level 1 or 2 feet within just one week**

Dermatonics Once Heel Balm is listed on the UK drug tariff and is prescribed in 6500 GP surgeries. Unlike most creams available on the Drug Tariff it is designed to treat callus and prevent its recurrence.

Check your feet daily

Callus greatly increases your risk of ulceration†

If you have neuropathy and your feet are in Level 3 or 4 you need to see your GP, Pharmacist or Podiatrist immediately.

95% of Dermatonics Heel Balm users will have Level 1 or 2 feet within just one week**

Dermatonics.co.uk shop or on prescription
Some questions

Does this mean I’m now Type 1?
No, it doesn’t. You still have Type 2 diabetes but you’ve changed treatment.

Is it my fault I now need insulin?
No, it’s not your fault. It can be hard to control your diabetes and insulin is just another way to help do this. Everyone’s different and you shouldn’t feel bad about having to take insulin.

If you’re feeling worried about having to take insulin (or anything to do with your treatment), then you need to talk about it. Talk to your nurse (or healthcare team), or contact our Helpline: call 0345 123 2399* or email helpline@diabetes.org.uk. If you’re in Scotland, call 0141 212 8710 or email helpline.scotland@diabetes.org.uk.

Tips for injecting

1 Change the place you inject. Don't go to the same place – rotate where you inject. This stops the build-up of small lumps under the skin. These lumps don't look or feel very nice and they make it difficult for your body to absorb the insulin properly.

2 If you're finding it difficult or painful to inject, speak to your nurse who'll be able to help.

Insulin is a hormone made in the pancreas. It helps us move sugar (glucose) from our blood into our cells where it’s used for energy.

Insulin injections are available as a treatment for Type 2 diabetes. Because your diabetes changes over time, you might need to move on to insulin. If you do need to take it, it'll be because the medicines you're taking aren't working as well as they were to manage your diabetes. Or, you may only need it for a short time for a particular reason (like during pregnancy, a severe illness, or if you've had surgery) and it could be stopped afterwards.

How it's taken

You'll need to inject insulin with a syringe or a special pen. Your healthcare team will show you how. The places to inject are usually the thigh, bottom, stomach and upper arm. Basically, where there's plenty of fatty tissue.

These are the steps you'll be shown:

- Decide where you’re going to inject.
- Make sure your hands and the place that you’re injecting are clean.
- If you’re using a pen, squirt out two units of insulin into the air. This makes sure the top of the needle is filled with insulin.
- If the nurse has told you to do this, lift a fold of skin (but not so tightly that it causes your skin to whitens or go pale, or is painful), then insert the needle at a 90 degree angle. You shouldn’t need to pinch up, unless you’re very thin – check this with the nurse beforehand.
- Put the needle in quickly.
- Inject the insulin. Make sure the plunger (syringe) or thumb button (if using a pen) is fully pressed down and count to 10 before removing it.
- Let go of the skin fold if you’re doing this method and dispose of the needle safely.
- Always use a new needle. Reusing a needle makes it blunt and painful to inject with.

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Medication

Insulin

www.diabetes.org.uk
Hypos and hypers

Hypos

A hypo or hypoglycaemia is when your blood sugar level is too low – that's below 4mmol/l. Not all people with Type 2 diabetes will have hypos, but you’re more likely to have a hypo if you take insulin, sulphonylureas or prandial glucose regulators (see page 13). If you take any of these, it’s especially important to know the symptoms of a hypo.

Hypo signs

They can come on quickly. Everyone has different symptoms but the most common ones are:

- trembling and shakiness
- sweating
- becoming anxious or irritable
- becoming pale
- palpitations and a fast pulse
- lips feeling tingly
- blurred sight
- feeling hungry
- tearfulness
- tiredness
- headache
- confusion.

Why they happen

You can’t always know why you’ve had a hypo, but these things make them more likely:

- too much diabetes medicine for the amount of carbohydrate eaten (see page 38)
- missing a meal
- exercising more than normal (or if you didn’t plan to exercise)
- drinking alcohol on an empty stomach.

Treating a hypo

You need to act quickly as soon as you notice symptoms, or if a blood sugar test has shown your levels are too low. If you don’t, it could become worse.

If you can, treat the hypo immediately by eating or drinking 15–20g of fast-acting carbohydrate. This could be:

- a sugary (non-diет) drink
- glucose tablets
- sweets, like jelly babies
- pure fruit juice
- glucose gel.

To find out how much you need to take, check the food label to see how much carbohydrate it contains. If you’re not sure how much to take, speak to your healthcare team.

After a hypo, you may need to then eat or drink a bit more: 15–20g of a slower-acting carbohydrate to stop your sugar levels going down again. It could be a sandwich, a piece of fruit, cereal or milk. Or, it could be your next meal if that’s due.

Tips for preventing a hypo

1. Don’t miss a meal.
2. Eat enough carbohydrate.
3. Eat more carbohydrate if you’re more active than normal.
4. Take your medicine correctly.
5. Don’t drink alcohol on an empty stomach or drink too much alcohol.
Hypers
A hyper or hyperglycaemia is when your blood sugar is too high. That’s usually above 7mmol/l before a meal or above 8.5mmol/l two hours after a meal.

Hyper signs
• weeing more than usual, especially at night
• being very thirsty
• headache
• tiredness.

Treating a hyper
It depends on the cause. If you have them often, speak to your healthcare team about your medications and/or lifestyle. If your blood sugar level is high for a short time, you don’t need emergency treatment. But if it stays high, you need to:
• drink lots of sugar-free fluid
• if you take insulin, you may need to have extra
• if you feel ill – particularly if you’re being sick – you must contact your healthcare team.

Tips for preventing a hyper
1 Know your carbohydrate portions and how they’re affecting your blood sugar levels.
2 If you’re ill, keep taking your diabetes medication even if you’re not eating. Contact your healthcare team if you need more information.
3 Be as active as possible.
4 Remember your medication and always take it correctly.
5 You may need more medication, so talk to your healthcare team.

Some questions
Why do I get hypers?
There are lots of reasons. It may be that you:
• have missed a dose of your medication
• have eaten more carbohydrate than your body and/or medication can cope with
• are stressed
• are unwell from an infection
• overtreated a hypo.

Need to know
• The symptoms you experience when you have a hyper may be similar to when you were first diagnosed with Type 2 diabetes (see page 5). It’s important to be aware of these symptoms and know when you’re hyper.
• If you have hypers regularly, speak to your diabetes healthcare team as you may need to make changes to your medication or your lifestyle.
• The odd high blood sugar level every now and again isn’t anything to worry about, especially if it comes back down again. But, if your blood sugar levels are high for a while, this can be serious, so seek medical help.
• If your blood sugar levels are very high it can be very dangerous and can lead to something called hyperosmolar hyperglycaemic state (HHS). This can happen when you’re ill. You can become severely dehydrated and will need hospital treatment. See page 62 for more on illness.
Meet Manjula

Manjula, 50, was diagnosed with Type 2 diabetes five years ago

“For the first month or so after my diagnosis I was in denial as I didn’t know anything about diabetes. My GP practice didn’t offer me any advice or guidance (apart from an A4 piece of paper with a list of foods to avoid) on how I can best manage my condition, which left me apprehensive and confused about my health and future. I was advised to lose weight, but it looked like I had to cut down on so many different foods, I didn’t know how to go about it. So, I decided to research on the internet. I acquired a lot of useful information, which made me so much more aware of my condition and how I could still live a full life.

For me, that meant cutting down on sugary things that have no nutritional value, like cakes and sweets, biscuits, etc. It doesn’t mean I can’t ever eat these things, but I just have to be mindful. Gradually, I changed the eating habits of the whole family. We all now eat more vegetables and salads. I love cooking and like to make things interesting, so that really helped.

I really feel that by eating healthily and keeping active, I’ve managed to control my diabetes better. My advice to someone else who has just been diagnosed with diabetes is that it’s not the end of the world. Once you’ve managed and maintained your blood sugar levels, it’s about living a healthy life, which everyone should do anyway, whether you have diabetes or not.”

At least once a year, you should have a full review of your diabetes with your healthcare team. It’s called the annual diabetes review. It’s a bit like an MOT of your diabetes, so it’s important you attend.

Even though you’ll be looking after your Type 2 diabetes every day, there are certain things your healthcare team will need to check. This is to make sure you’re in good health. Checks include your blood sugar levels, cholesterol levels, blood pressure, your weight, your feet, your eyes and how well your kidneys are working.

Some of these checks will have targets to aim for. These are:

- **Blood sugar levels.** HbA1c is what we call the long-term measure of blood sugar. It should usually be below 48mmol/mol. Some people may be asked to aim for below 53mmol/mol. The target you’re given depends on how your diabetes is treated.

- **Body Mass Index (BMI).** If your BMI figure is 25kg/m² (or 23kg/m² if you’re from a South Asian background) or higher, you may be told that losing weight would help control your diabetes. Your healthcare team will work out your BMI and set a target for you. See page 45 for more on weight and BMI.

- **Waist measurement.** It should be less than:
  - 80cm (31.5in) for women
  - 90cm (35in) for South Asian men
  - 94cm (37in) for other men.

- **Blood pressure.** It should be under 140/80mmHg. If you have problems with your eyes, kidneys or have had a stroke, it should be below 130/80mmHg.

- **Cholesterol.** Cholesterol is a type of fat in our blood. HDL (high density lipoprotein) is a good type of cholesterol and can protect against heart disease. Triglycerides are another type of fat in the blood. If you have raised total cholesterol and raised triglycerides, you have an increased risk of cardiovascular disease.

  - Your total cholesterol level should be below 4mmol/l.
  - HDL levels should be 1mmol/l or above in men and 1.2mmol/l or above in women.
  - Triglyceride levels should be 1.7mmol/l or less.

Keep a copy of your own targets and results. You can then track how you’re doing and know where you may need help.

Need to know

- The general targets are a helpful guide, but the most important ones are your own personal targets that you agree on with your diabetes healthcare team.

Some questions

What if I don’t meet my targets?

Don’t worry if you don’t reach your targets straight away – it can take time. Even if your results have improved from last time, then that’s great. The good news is, once you know what your results are, you and your healthcare team can do something about it. They can help you make changes to your lifestyle and/or adjust your medication to come closer to meeting your targets.

Tips for your test

Keep a copy of your own targets and results. You can then track how you’re doing and know where you may need help.
Your 15 Healthcare Essentials

We’ve created the 15 Healthcare Essentials checklist so you can make sure you’re getting the best care. Use this list to check you have all the help you need to manage your diabetes successfully.

1. Get your blood sugar levels measured. These must be measured at least once a year by your healthcare team. It’s an HbA1c blood test (the long-term test for blood sugar levels).

2. Have your blood pressure measured. It must be taken at least once a year and you need your own target set.

3. Have your blood fats measured. You need to have your blood fats tested each year and you need your own target set.

4. Have your eyes screened for signs of retinopathy. This checks for signs of retinopathy (damage to the eye). A special digital camera takes a photograph of your retina (at the back of your eye) and a specialist looks for any changes. It’s a free test and part of the regular diabetic eye screening service which you’ll be invited to. It’s not the same as a regular eye test.

5. Have your feet and legs checked. The skin, circulation and nerve supply of your legs and feet need to be examined at least once a year by your healthcare team. That’s because people with diabetes are at higher risk of developing problems that can lead to toe, feet or leg amputations. The good news is these can be avoided by getting your check and following some simple tips for healthy feet on page 76. You should be told if you have any risk of foot problems and if you need to see a podiatrist or go to a specialist foot clinic. You should also check your feet every day. Keep your heels well moisturised and check your toenails. If you see anything unusual, go straight to your doctor.

6. Have your kidney function monitored. There are two tests for kidney function you need each year. One tests your urine for protein (a sign of possible kidney problem). The second is a blood test to measure how well your kidneys are working. Kidney disease is more common in people with diabetes and high blood pressure.

7. Get ongoing, individual dietary advice. You can be referred to a dietitian for dietary advice, and help to manage your weight.

8. Get emotional and psychological support. It can be hard living with a long-term condition and you’re bound to worry about it sometimes. Talk to your healthcare team about any worries and, if needed, ask for specialist support.

9. Be offered a local education course. Your healthcare team should tell you about courses you need to go on to help you understand and manage your diabetes. It’s a small investment of your time, which will definitely pay off.

10. See specialist healthcare professionals. Diabetes affects different parts of the body and you should be referred to specialist professionals when needed, like a diabetes specialist nurse, dietitian, pharmacist or podiatrist.

11. Get a free flu vaccination every year from your GP. People with diabetes are at greater risk of severe illness, like pneumonia, if they get flu. You should also be given a personal care plan telling you what steps to take if you are ill.

12. Receive high-quality care if admitted to hospital. If you have to stay in hospital, you should still receive high-quality diabetes care from specialist healthcare professionals, whether you’ve been admitted due to your diabetes or not.

13. Have the chance to talk about any sexual problems. Diabetes increases the risk of sexual dysfunction in both men and women. It can be caused by physical, emotional and lifestyle factors, or medication you might be taking. You should be assessed and given support and education, and referred to an appropriate service if necessary.

14. If you smoke, get support and advice to quit. Diabetes increases your risk of heart disease and stroke, and smoking increases this risk even more.

15. Get information and specialist care if you’re planning to have a baby. Your diabetes control has to be a lot tighter and monitored very closely before and during pregnancy. You should expect support from specialist healthcare professionals at every stage from preconception to postnatal care.

Need to know

- Use this list of 15 Healthcare Essentials to check that you’re getting the right care during the year, every year.

Some questions

I’m not getting all the right checks. What can I do?

Speak to your doctor or someone in your healthcare team. Take along this guide and the 15 Healthcare Essentials checklist. If you need to make a complaint, go to www.diabetes.org.uk/t2-15-essentials

Tips for getting the most out of your appointments

Before an appointment:

1. Decide what you need to know. Write down some points and two or three questions.

2. Take things you think will be useful, like your blood sugar results or a list of your medications.

3. Ask if you’ll need any tests before going to the appointment.

4. Ask if you need to bring anything with you, like a urine sample.

During an appointment:

1. Listen and ask questions. Don’t be shy to ask questions about anything you don’t understand, or if you need more clarification.

2. Take notes to help you remember what’s been said.

3. Ask for your test results and what they mean.

4. You can take someone with you to help with questions and remembering what’s said.

5. Check that everything you wanted to talk about has been covered.

6. Make a plan with your healthcare professional about what should happen next.

7. Ask who you should contact if you have more questions.

8. Ask if there’s any support available in your local area.

After the appointment:

1. Go over what was said. Make a note of anything you need to do before your next appointment.

2. Put your next appointment in your diary.
Your healthcare team

<table>
<thead>
<tr>
<th>Team member:</th>
<th>What do they do?</th>
<th>Name and contact details:</th>
<th>When do I see them?</th>
</tr>
</thead>
<tbody>
<tr>
<td>GP</td>
<td>This is the doctor in charge of your care and treatment. If they have a special interest in diabetes or are an expert, they may play a bigger role in your care. Otherwise, they’ll refer you to a diabetes clinic.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Practice Nurse</td>
<td>A nurse from your GP surgery who may support your diabetes care. This depends on their specialist knowledge.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diabetes Specialist Nurse (DSN)</td>
<td>A nurse with specialist knowledge of diabetes who only works with people with diabetes. They usually give support and advice between appointments with things like blood sugar testing and adjusting your medication.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registered Dietitian</td>
<td>An expert in food and nutrition. They give you information and support to help you make changes to your eating habits. You should always see a registered dietitian when you’re first diagnosed. You should then have regular reviews with them.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Registered podiatrist</td>
<td>An expert in feet and legs. You may need to see them to check and manage any problems with legs and feet related to diabetes.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ophthalmologist</td>
<td>A doctor specialising in eyes. They can do your retinal screening review and give treatments, if you need them.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pharmacist</td>
<td>A qualified pharmacist at your pharmacy or chemist. As well as giving you medicines and supplies on prescription, they can review your medication.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychologist</td>
<td>An expert who can help you if you’re worried about your diabetes. If these worries are affecting your life, they provide emotional support.</td>
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</tr>
</tbody>
</table>

Tips for contacts

Agree with your GP who’ll be your main contact. This is usually the person you see most often and may be the GP or practice nurse.

Some questions

How will I find out who are the members of my team?

First off, it’s best to ask at your GP surgery. Don’t be shy of asking them to wait while you take a note of names and details. They’re likely to be different healthcare professionals – you may not see them all at the same time and place.

Hello, we’re neuropad®

Our aim is to help your feet stay healthy through early at-home screening and clinically-proven treatment

neuropad® is non-invasive, completely painless and can be done at home in just 10 minutes

Why may people with diabetes experience problems with their feet?

In a person with diabetes, sustained high blood glucose levels over a long period of time can cause damage to the nerve systems in the body, including those in your feet. 1

How can I start looking after my feet?

First, it’s important to know your risk. neuropad® 10–Minute Screening Test® is a simple way of helping to check for early signs of diabetic foot disease. 2,3

The test is non-invasive and painless and has been designed to be done at home in just 10 minutes. 3 neuropad® may pick up diabetes-related foot problems early so that more serious complications may be avoided through initiation of timely treatment and improved blood glucose control.

neuropad® tests for insufficient sweating which for many is an early sign of nerve damage, putting feet at risk of ulceration. The pad starts off blue and should turn completely pink after 10 minutes’ application. If any blue remains, this indicates that your feet are not producing enough sweat (anhydrosis) – medically, this is known as sudomotoric dysfunction.

References


Neuropad UK is a trading name of Skyrocket Phytopharma (UK) Ltd, Kao Hockham Building, Edinburgh Way, Harlow, Essex CM20 2NQ. 2017. medinfo@neuropad.co.uk

Advertisement code SKYR_NPT_FPA_0002a Date of preparation August 2017
Learning more

Knowing about diabetes is crucial to managing your diabetes.

Yes, Type 2 diabetes is now part of your life, but it doesn’t have to rule your life. Whether you’ve just been diagnosed, or have had it for a while, it’s never too late to make yourself an expert in your own care and condition. If you do, it’s much easier to live with, and you can reduce your risk of developing complications further down the line.

First off, make sure you’re getting the right care by checking it against our 15 Healthcare Essentials checklist on page 24.

Next, take a free diabetes education course.

It can feel that there’s a lot to learn about Type 2 diabetes. People who go on these courses feel more confident about their understanding of diabetes and how to look after themselves.

Everyone in the UK with diabetes should be offered a free course by their doctor, nurse or consultant. If you haven’t been offered one, make sure you ask for a referral.

The main courses for Type 2 diabetes are DESMOND and X-PERT. They help you understand your diabetes, make food choices and take control.

If you prefer to learn on your own and in your own time, Diabetes UK’s free e-learning course ‘Type 2 diabetes and me’ may suit you better. Sign up at www.diabetes.org.uk/t2-type-2-and-me

Tips for making the most out of a course

1. You’ll probably need to take time off work to attend a course – but it’s worth it, especially if it helps you to look after your diabetes and health better. If you’re struggling to get time off, explain the benefits to your employer. The course provider or your healthcare team may be able to send materials or a letter to give to your employer. For more advice, go to www.diabetes.org.uk/t2-employment

2. Courses are informal and friendly – so don’t be afraid to ask questions.

3. Take the opportunity to mingle and share experiences with others on the course.

Need to know

There are also some good locally based courses that you can find out about from your own healthcare team.

Some questions

Can’t I just go online for info?

There’s lots of useful information online, but you need to be careful. Some websites aren’t always accurate. So that you avoid any out-of-date or wrong information, you should follow this advice:

• Speak to your healthcare team about anything you see, hear or read that interests you or you’re not sure about. If you can, take a copy of it with you.

• Ask your healthcare team to recommend online sites or information.

• Don’t trust sites that say there’s a cure for diabetes. There is currently no cure.

• Don’t try medical products or specialist foods you find online without checking with your healthcare team first.

• Check links on the site are working.

• Find out about the author or where the information has come from. If something sounds unbelievable, it probably is.

• Online forums are a useful way to share knowledge, but check with your healthcare team before you change your treatment.

These sites have reliable information:

• www.diabetes.org.uk
• www.diabetes.org.uk/t2-forum
• www.nhs.uk
• www.nice.org.uk

HELP US TO FIND NEW WAYS TO TREAT TYPE 2 DIABETES

Covance are looking for people with Type 2 diabetes over the age of 18 to take part in our clinical trials. You will receive from £100 per day for your time and help us to treat diabetes in the future.

To find out if you qualify, please call us on 0113 394 5200 or visit www.covanceclinicaltrials.com
Meet Joni

Joni encourages everyone to go on a diabetes education course

“When I was diagnosed 20 years ago, diabetes courses weren’t available. Now they are, and I thought to go along and be with others who lived with the same condition was going to be very useful. I was excited.

There were about 14 people in our group. There was a chance to talk among ourselves, to be able to share our stories from when we first became diabetic, what we wanted out of the course, and how we hoped it would be helpful. But it was very informal and that made it very relaxing.

It was interactive and drew people in. But if you didn’t feel like talking you didn’t have to.

We learned how Type 2 diabetes happens, about the medicines, how they work and when best to take them. The course taught you helpful things like managing and monitoring your diabetes, and the best time to test your bloods.

Making a difference

It put aside some misconceptions; for example, it’s not just about eating sweets, because I wasn’t really a sweetie eater. It was more about looking at my diet and recognising there were things like potatoes and rice that would increase your blood sugar because of the way your body broke it down. The other thing that it helped me to do was to realise that I’m the main instrument here and what I do makes the difference between living well and not.

But you also learn that doing one small thing, no matter how small you might think it is, is big because you’re doing it. That was huge for me.

It’s helped my overall wellbeing. Before, there were times when I felt I wasn’t up to doing something as I was extra tired and I’d feel a bit low. I came to understand that it doesn’t just affect you physically – it can affect you emotionally.

It has given me more confidence; it has helped me lose quite a bit of weight, so my diabetes is very well under control and my drugs were reduced slightly. It’s been a godsend.”
Getting a healthy, balanced diet

As well as helping to manage diabetes, the foods you eat can make a real difference to how well you feel and how much energy you have. And a healthy, balanced diet is important whether or not you have diabetes – there’s no special diet for people with diabetes. But, if you think that healthy eating must be complicated and boring, think again.

Starchy carbohydrates

Your body breaks these foods down into blood sugar that’s used as fuel. The healthiest are the ones with more fibre. These include wholegrain bread, wholewheat pasta and basmati, brown or wild rice. And chapatti made with wholemeal flour, cassava and noodles.

Fibre is good for your digestion and is more slowly absorbed (it has a low glycaemic index – see page 39). You’ll feel fuller for longer too.

A serving includes:
- 25g porridge oats
- 1 bowl (34g) muesli
- 1 bowl (30g) toasted wholegrain oat cereal
- 23g (uncooked weight) brown rice or wholemeal pasta
- 1 slice (40g) multigrain bread.

How often?

You should include some starchy food every day. Since the amount of carbohydrate foods affect blood sugar levels, be careful of your portion sizes. For more on portion sizes, go to www.diabetes.org.uk/t2-portion-sizes

The Eatwell Guide explained

The Eatwell Guide shows the proportions of different types of food needed for a healthy, balanced diet over a day or a week. Some foods you’ll need to eat more of and some you’ll need to eat less of. Find out more at nhs.uk/Livewell/Goodfood/Pages/the-eatwell-guide.aspx

Speak to a dietitian about how you can use these recommendations to meet your own needs.

Fruit and vegetables

Full of vitamins, minerals and fibre, fruit and vegetables are low in calories and fat. They may also protect against stroke, heart disease, high blood pressure and some cancers.

How often?

Every day and at least five portions. A portion is roughly what fits in your hand.

Fresh, frozen, dried, canned (in juice or water). They all count towards your five a day. Try:
- sliced melon or grapefruit topped with low-fat yogurt for breakfast
- carrots, peas and green beans mixed up in a pasta bake
- adding an extra handful of vegetables to your dishes when cooking – add peas to rice, spinach to lamb or onions to chicken.

The Eatwell Guide

6–8 glasses/cups of drinks like water, lower-fat milk or sugar-free drinks. Limit fruit juice/smoothies to a total of 150ml per day.

Unsaturated oils and spreads

Starchy carbohydrates

Beans, pulses, fish, eggs, meat

Foods high in fat, salt and sugar

Milk, dairy foods and alternatives

Starchy carbohydrates

Your body breaks these foods down into blood sugar that’s used as fuel.

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How often?

You should include some starchy food every day. Since the amount of carbohydrate foods affect blood sugar levels, be careful of your portion sizes. For more on portion sizes, go to www.diabetes.org.uk/t2-portion-sizes
You have the right to see a dietitian when you have Type 2 diabetes. Ask your GP to refer you.

How much you should eat from each food group depends on your age, sex, how active you are and what your goals are – eg this could be better management of blood sugar levels or losing weight.

As plates and bowls have got bigger over the years, so have portion sizes. Use smaller crockery to make it look like there’s more food on your plate.

No single food has all the nutrients you need. That’s why you should have foods from each of the main food groups.

### Some questions

I’m worried about my family’s eating habits. I want us all to eat healthier now I have Type 2. How can I do this?

It may be hard to change people’s views, but there are lots of ideas for healthy eating for the whole family on our Enjoy Food website www.diabetes.org.uk/t2-enjoy-food. Also, see our Eating well information on page 36 for some quick tips.

### Healthy swaps

#### Sweet

- **Instead of** milk chocolate
  - try dark chocolate rice cakes

- **Instead of** ice cream
  - try frozen banana or frozen low-fat yogurt

#### Savoury

- **Instead of** crisps
  - try plain popcorn with added spices or cinnamon

- **Instead of** bread and dips
  - try carrots and celery with salsa or low-fat hummus

#### Drinks

- **Instead of** fizzy sugary drinks
  - try water flavoured with mint or fresh fruit

For more healthy swaps, tasty recipes and loads of food tips, go to www.diabetes.org.uk/t2-enjoy-food

### Need to know

- You have the right to see a dietitian when you have Type 2 diabetes. Ask your GP to refer you.
- How much you should eat from each food group depends on your age, sex, how active you are and what your goals are – eg this could be better management of blood sugar levels or losing weight.
- As plates and bowls have got bigger over the years, so have portion sizes. Use smaller crockery to make it look like there’s more food on your plate.
- No single food has all the nutrients you need. That’s why you should have foods from each of the main food groups.

### Need to know

#### Instead of

- milk chocolate
  - try dark chocolate rice cakes

- ice cream
  - try frozen banana or frozen low-fat yogurt

#### For more healthy swaps, tasty recipes and loads of food tips, go to www.diabetes.org.uk/t2-enjoy-food

### Food

#### Beans, pulses, fish, eggs, meat

High in protein, these foods help build and replace muscles. They also contain vitamin and minerals.

Pulses like lentils and beans are a good alternative to meat as they tend to be lower in fat and higher in fibre.

Oily fish (eg mackerel, fresh tuna, salmon and sardines) also contain omega-3 fatty acids, which helps protect the heart. Choose leaner meats and eat less red and processed meat, like sausages.

#### How often?

Every day (and at least two portions of oily fish every week when you have diabetes). Here are some things you can try:

- serving lean meat, poultry or a veggie alternative grilled, roasted or stir-fried
- a small handful of unsalted nuts and seeds as a snack, or chopped with a green salad
- using beans and pulses in a casserole, stew or soup to replace some – or all – of the meat
- fish pie, or making your own fish cakes
- eggs scrambled, poached, dry fried or boiled
- tinned fish, like mackerel or sardines (tinned in water or tomato sauce rather than brine, as it’s high in salt)
- adding a tuna steak to salads.

#### Milk, dairy foods and alternatives

It’s the calcium in dairy food that’s important for bones and teeth. Milk, cheese and yogurts contain calcium – and they’re also good sources of protein.

Some dairy food is high in fat, especially saturated fat, so go for lower-fat types like semi-skimmed milk and reduced-fat cheeses. Check that any low-fat foods, like yogurt, don’t have added sugar.

#### How often?

You should eat food from this group every day. Try:

- 200ml (½ pint) semi-skimmed, skimmed milk or unsweetened fortified soya milk on cereal
- a small pot (150g) low-fat yogurt as a mid-afternoon snack, but check the labels as some are high in sugar
- 2 tbsp cottage cheese scooped on carrot sticks.

#### Foods high in fat, salt and sugar

Sugary drinks and food, like cakes, chocolate and biscuits, are high in calories and raise blood sugar levels. Go for diet or low-calorie drinks if possible, or water.

Check food labels to compare foods, and go for ones lower in sugar, salt and fat. See page 40 for more on food labels.

#### How often?

These sorts of food aren’t needed in the diet, so should be eaten less often and in smaller amounts.

For some great tips, see our healthy swaps on page 35.

#### Unsaturated oils and spreads

It’s better to have unsaturated fats like rapeseed, olive and vegetable oils. They’re better for your heart than saturated fats (found in butter, ghee and coconut oil).

#### How often?

All fats are high in calories – only have small amounts.

### For more healthy swaps, tasty recipes and loads of food tips, go to www.diabetes.org.uk/t2-enjoy-food
Tips for eating well

1. If you make gradual changes to your diet that suit your lifestyle, you’re more likely to stick to them.

2. Remember to ask your GP for an appointment with a dietitian.

Need to know

Watching your portion sizes and choosing healthier foods that are lower in saturated fat, sugar and salt will help you to control:
- blood sugar levels
- blood cholesterol levels
- blood pressure
- weight.

Some questions

What about the ‘diabetic foods’ you see in the shops?

The need for special ‘diabetic’ foods has been obsolete for over 30 years. We’ve been calling for an end to the use of claims like ‘diabetic’ or ‘suitable for diabetics’ on food labels. Labelling a food as ‘diabetic’ is misleading, as it implies it has a health benefit. They’re not a good idea and, under EU regulations, are not to be sold. ‘Diabetic’ foods still affect blood sugar levels, they’re expensive, and have just as much fat and calories. They could also have a laxative effect.

Rohit’s story

“1 don’t deny myself any foods but I always watch what – and how much – I eat. I don’t eat desserts and I’ve cut down on portion sizes.”
Carbohydrates are your main source of energy and have important nutrients. They’re part of a healthy, balanced diet.

All carbohydrates are broken down into sugar. So, the amount and type of carbohydrate you eat or drink makes a difference to your blood sugar levels and to managing your diabetes.

There are two main types:

- **Starchy food.** Includes foods like bread, pasta, potatoes, yams, breakfast cereals and couscous.
- **Sugars.** These are either natural or free sugars. Naturally occurring sugars are found in fruits (fructose) and some dairy (lactose). Free sugars are added to foods like sweets, chocolate, sugary drinks and desserts. It also includes sugars found in honey, syrups and fruit juice.

Fibre

This is another type of carbohydrate.

- **Insoluble fibre.** Found in wholemeal bread, brown rice and wholegrain cereals. It helps keep the digestive system healthy.
- **Soluble fibre.** Includes bananas, apples, carrots, potatoes, oats and barley. It helps keep your blood sugar levels and cholesterol under control.

You need to eat both types of fibre. Good sources include fruit and vegetables, nuts, seeds, oats, wholegrain bread and pulses.

How much?

You need some carbohydrate every day. How much depends on how old you are, how active you are and what your targets are.

The amount of carbohydrate you eat has the biggest effect of all on your blood sugar levels, so it’s good to be aware what foods contain carbohydrates and to know what a healthy portion size is.

Tips to get healthier carbohydrate in your diet

1. Choose wholegrain bread and cereals.
2. Eat the whole fruit. There’s more fibre in apples with their skin on than a glass of apple juice.
3. Change things up. Try quinoa or couscous to make a change from pasta.
4. Have brown or wild rice instead of white.

Glycaemic index

- **GI stands for glycaemic index.** It’s a measure of how quickly foods containing carbohydrate affect your blood sugar levels after you eat them. Some foods affect sugar levels quickly and so have a high GI. Others take longer to affect blood sugar levels and so have a low GI.
- **Eating low GI foods can make small improvements to blood sugar levels in people with Type 2 diabetes.** But focusing too much on GI without looking at other parts of your diet could lead to an unbalanced way of eating. Also, not all low-GI foods are healthy choices as some are high in fat.
- It’s good to think of the bigger picture and choose foods low in saturated fat, salt and sugar as part of a healthy, balanced diet.

Need to know

Carbohydrates

- They’re your main source of energy.
- They have important nutrients.
- The amount and type you eat or drink makes a difference to your blood sugar levels.

Fibre

- It’s another type of carbohydrate.
- Good sources include fruit and vegetables, nuts, seeds, oats, wholegrain bread and pulses.

Tips to get healthier carbohydrate in your diet

- Choose wholegrain bread and cereals.
- Eat the whole fruit. There’s more fibre in apples with their skin on than a glass of apple juice.
- Change things up. Try quinoa or couscous to make a change from pasta.
- Have brown or wild rice instead of white.

Ready, steady, shop

By purchasing from our shop you’re supporting our fight for a world where diabetes can do no harm. All profits raised will help fund our research which is developing better treatments and taking us a step closer to a cure.

With 4.5 million people in the UK living with diabetes your support has never been more important and means we’re able to help more and more people.

Thank you.
Understanding food labels

Being able to figure out food labels will make it easier for you to eat the right things and the right amounts. But they can be confusing, so this will help you understand what to look out for. That means next time you’re at the shops, you’ll know exactly what you’re putting in your basket.

Traffic light labels

Food companies don’t have to put labels on the front of their packaging. If they do, they use what are called traffic light labels.

These tell you whether the product has low, medium or high amounts of fat, saturated fat, sugars and salt. They’re designed to let you know at a glance how healthy or unhealthy something is and make it easy to compare similar products.

Example of a front of pack label

Most foods will have a mix of traffic light colours. Pick items with more greens and ambers, and fewer reds.

Tips for going green

2. Pick low-salt options if they’re available.
3. Be aware that low-fat products, like yogurts, are sometimes high in sugar to make up for the lack of fat.

The numbers for sugars don’t tell you whether the sugars are natural, like in fruit, or added by the food company, like sucrose.

Carbohydrates

The number for carbohydrates you find on a label includes the carbohydrate from starchy foods like bread, potatoes, rice, pasta, chapattis, fruit, some dairy products, sugar, and other sweet foods and drink. The ‘of which sugars’ amount tells you how much sugar the food or drink contains. It includes sugar that’s naturally present like fructose (found in fruit) and lactose (found in dairy products), and sugar added by the food company, like sucrose.

Sugars added to food can appear in the ingredients list as sucrose, fructose, glucose, syrup or honey.

All carbohydrates increase your blood sugar levels. If you’re carb counting, count the ‘total carbohydrate’ amount, rather than ‘of which sugars’.

You’ll find the total carbohydrate information on labels at the back of the pack.

To see if something is high in free sugar, also called added sugar, check out the ingredients list as this always starts with the largest ingredient first.

Artificial or low-calorie sweeteners can be a useful alternative to sugar.

Reference Intakes

Reference Intakes, sometimes shortened to RI, can also be found on the front or the back of the packaging.

There are recommended amounts for how much sugar, salt, fat and saturated fat everyone should eat and drink each day. A Reference Intake label tells you the percentage that item of food will contribute to these daily targets.

In our example of a front of pack label (see page 40), the salt content of that product is 42 per cent of your Reference Intake, of how much salt you should be having a day. That’s very high.

Of course, everyone is different but you should aim not to eat or drink more than the Reference Intake for fat, saturates, sugar and salt each day.

Energy

This is the amount of calories that a food or drink provides. To gain weight, you’ll need to eat and drink more calories than you use.

If you want to stay the same weight, you’ll need to balance the calories you use with the calories you get from your food and drink.

If you want to lose weight, you need to eat and drink fewer calories than you use. So it might be helpful to choose lower calorie versions of foods. It’s also helpful to move more so you’re increasing the amount of calories you are burning.

Fat

Cut down on fats, especially saturated fats, as they’re linked to high cholesterol, which can lead to heart disease and stroke.

Use unsaturated fats and oils, like olive oil, as they’re better for your heart.

Low fat means a food product has 3g of fat or less in every 100g. Reduced fat means the product is at least 30 per cent lower in fat compared to a standard product. But watch out as it still might be high in fat.

The number for carbohydrates you find on a label includes the carbohydrate from starchy foods like bread, potatoes, rice, pasta, chapattis, fruit, some dairy products, sugar, and other sweet foods and drink.

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Salt
Salt is sometimes listed as sodium or sodium chloride. It’s the sodium in salt that’s bad for your health. Too much salt can cause high blood pressure, which increases your risk of heart disease and stroke.

About 75 per cent of the salt we consume is from pre-prepared foods, like ready meals.

Using the traffic light labels to pick green or amber products will help you avoid too much salt.

You can reduce the amount you use in your cooking by using spices and herbs to season your food instead of salt.

Fibre
Fibre is the part of plant food that our body can’t completely break down.

Soluble fibre can help control your blood sugar and cholesterol levels. It’s found in wholegrain foods, pulses, oats, fruit and vegetables.

Insoluble fibre keeps your digestive system healthy. It’s found in high-fibre cereals and breads, fruit and vegetables.

Wholegrains, beans, peas, lentils, dhal, fruits and vegetables have a good mixture of soluble and insoluble fibre.

Need to know
- Labels on the front of the packaging can help you spot whether a product contains lots of fats, sugars and salt, or just a little.
- Use the ‘per 100g’ column on the back label to compare what’s in similar food. You can also use this to check against your actual serving size.
- The ‘per serving’ column might also be on the back. Use this if you want to know the amount of fats, sugar and salt in the suggested portion.
- Always check what the food company suggests is a portion size, as it might be different from what you think or normally eat.
- Remember you don’t need to avoid all food and drink which contains a lot of fats, sugars or salt. If an item has lots of reds on the front of the packaging, only eat them occasionally and in small amounts. Try to pick items with lots of greens and sometimes ambers. It’s the overall balance of your diet that counts.
- One label to always avoid is any food products marked ‘diabetic’. Despite their name, these products don’t offer any special benefit for people with diabetes.

Some questions
What if there isn’t any nutritional information on the pack?
Not everything you buy will have nutritional information. But there’ll still be clues. Remember that the ingredients are listed from high to low, so if a fat or sugar is at the top, it may be worth looking for an alternative. Ingredients are listed in order of weight, so the main ingredients are always listed first.

Help us to change diabetes. Take part in our research.

Novo Nordisk, a world leader in diabetes care, is passionate about bringing innovative treatment to people with diabetes.

If you have diabetes and volunteer for our research into new medicines, treatments and devices, you may:
- learn more about your condition
- help us develop medicines that could benefit you and others
- get access to future treatments.

Please get in touch today for more information:
Freephone 0808 169 6666.
Text INFO to 62277* and we’ll call you back. Or visit changingdiabetesresearch.co.uk

*Texts charged at your service provider’s standard rate.

TOGETHER WE CAN CHANGE DIABETES

www.diabetes.org.uk
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www.diabetes.org.uk
Eating out

You don’t need to stop eating out or enjoying a takeaway. Just make sure you have the know-how to make healthier choices.

**Lunch**

- With a meal deal, watch out for triple-decker sandwiches and creamy pastas. And, with the sides, choose healthier options like water and fruit, not sugary drinks and crisps.
- Go for filling, healthy salads with lean protein and seeds. Or, try wholegrain sandwiches or wraps with lean ham, chicken, turkey or fish. Look for low-fat mayo or yogurt dressing, too.

**Healthy snacks and sneaky smoothies**

- Vegetable sticks and fruit help with your five-a-day target. And a handful of unsalted nuts, raisins or other dried fruit is a great snack.
- Go for oven-baked or lower-fat crisps. Or air-popped, sugar and salt-free popcorn.
- Check the labels of juice drinks and smoothies. They can be high in calories or fat and sugar.
- Go for a small pot of low-fat yogurt, or add some mixed berries to a few tablespoons of plain low-fat Greek yogurt.

**Takeaways**

**Fish and chips**

- Have a smaller portion or remove the batter. Go for thick-cut chips – thicker chips have less fat.

**Burger and chips**

- Try the lean or veggie option and skip the cheese and mayo. Go ‘bun-less’ to cut the calories and order more salad, but watch the dressing.

**Pizza**

- Thin bases, sharing with a friend and filling up with salad can help you cut back on fat and calories.

**Indian**

- Go for tandoori and tikka options as they’re baked and lower in fat. Choose boiled or steamed rice rather than pilau or fried. Fill your plate with salad and yogurt, before adding the rice.
- Watch out for extras like poppadoms and naan breads. Choose chapatti rather than naan bread.
- If there’s a choice of starter, think about what’s best for you. Chicken or fish tikka is generally healthier than samosas and pakoras.

**Chinese, Thai and Malaysian**

- Go for broth-based soups rather than spring rolls or satays. Choose steamed rice over fragrant rice or noodles.
- Stir-fried vegetables are a filling and healthy side.
Looking after your weight

Eighty per cent of people with Type 2 diabetes are overweight.

That’s not a cheery thing to hear, but bear in mind it’s part of a trend affecting the whole of society. As a population, we’re less active than we should be. We’re eating too much. Plus, with each year, we gain more weight, which becomes harder to lose.

Carrying extra weight is particularly bad for you with Type 2 diabetes.

Why it matters

There’s heaps of evidence that losing weight if you’re overweight improves blood pressure, cholesterol, blood sugar levels and cuts down your risk of developing long-term health problems.

Most people find they feel better, look better and have more confidence. And it tends to mean you’re more mobile for longer.

Why it matters more with Type 2 diabetes

Losing excess weight is one of the most effective ways to manage Type 2 diabetes.

It improves blood sugar levels, blood pressure and the levels of fats (cholesterol) in your blood.

What’s more, carrying extra weight, especially around your middle, can lead to your body being more resistant to the insulin you make, so it works less well. So, losing weight will help to improve this.

How to know if you need to lose weight

Measure your waist

Carrying fat around your stomach can make it harder for your body to control the levels of sugar in your blood, which is bad for Type 2 diabetes.

With a tape measure, measure around your middle, midway between the top of your hips and bottom of your ribcage.

Guideline measurements are:

- White and black men: below 94cm (37in)
- South Asian men: below 90cm (35in)
- White, black and South Asian women: below 80cm (31.5in).

It’s different for men of South Asian background as they have a higher risk of Type 2 diabetes.

Find out your BMI (Body Mass Index)

This is a measure of your weight in relation to your height.

Using the chart on page 47, find the point where your height and weight meet. You can then see what range you’re in.

It’s slightly different for people of South Asian origin, as shown in the key.

It’s a good idea to discuss your BMI with your healthcare team and set targets.

Losing weight

In short, the best way to lose weight is by eating less and being more active. You need to find something that fits with your life and a way of eating you can stick to.

Some days will be better than others. There’ll be ups and downs. Maybe you can’t manage to reach your target weight, but if it’s going in the right direction, then that’s great. You’ll be making a difference to your diabetes and how well you feel.

There’s information on our website about the different ways to lose weight, including:

- the low glycaemic index (GI) diet
- commercial weight-loss programmes.

Speak to your healthcare team about what’s best for you.

Go to www.diabetes.org.uk/t2-healthy-weight to find out much more about these.

Keeping on track

It can help you keep on track if you think about the questions ‘why’, ‘what’ and ‘how’?

Why?

Maybe it’s a few pounds to help manage your diabetes. Maybe you need to lose more so that you feel better and more confident. Maybe you want to stay as healthy as you can for the sake of your children.

Know why it matters to you.
What?
What’s the target you’re aiming for? A specific target weight can help measure your progress, which is a great boost. Often, people prefer smaller targets so they’re not overwhelmed and can tick them off more easily.

How?
Have a plan in place. Speak to your healthcare team about seeing a dietician. Do your homework and put together an eating programme that suits you. Get physical – the more active you are, the more energy you use and the easier it’ll be to lose weight. See page 52 and www.diabetes.org.uk/t2-exercise for more information.

Tips for weight loss
1. Have clear goals and write them down. A food diary can help you spot bad habits and triggers (like raiding the fridge when you come in from work).
2. Be prepared for holidays and special events.
3. Think about things that could go wrong and come up with a plan to beat them.
4. Visualise success. Think about how it will feel to get to your goal.
5. Get a good night’s sleep. Being tired makes you hungrier and more likely to crave fatty, sugary food.
6. Avoid diets that are too restrictive. If you’re allowed an occasional treat, or you’re on a diet that allows you to eat good meals regularly, you’re far more likely to stick to it. Everyone has bad days, but you have to move on.
7. Enjoy the food you eat. If you like ‘diet’ foods like rice cakes, cottage cheese or celery, then have them. But, if you’re not so keen, eat what you enjoy but watch portion sizes.

A diabetes education course can help you understand how to manage your weight and diabetes (see page 28).
Ask to see a dietician if you need help.
Be active.
Calculate your BMI and measure your waist.
Set a realistic target for your weight and how you can achieve it.
Decide on a weight-loss plan and work out how long it will take.

Need to know
• A diabetes education course can help you understand how to manage your weight and diabetes (see page 28).
• Ask to see a dietician if you need help.
• Be active.
• Calculate your BMI and measure your waist.
• Set a realistic target for your weight and how you can achieve it.
• Decide on a weight-loss plan and work out how long it will take.

Some questions
I need more support to help lose weight and get more active. What can I do?
It’s important to get the right support. Your GP, practice nurse or dietician can help. And, if you take medication, as you eat less, become more active and lose weight, it may need to be reduced. Talk to your doctor or nurse if you need to know how to do this. Remember, you should have help from a registered dietician.

I’ve heard I can get weight loss surgery for my Type 2 diabetes?
Having weight loss or bariatric surgery (usually where your stomach size is reduced) if you’re obese or severely obese and have Type 2 can help reduce weight and improve your diabetes.
Evidence shows that surgery is a very effective treatment for some people with Type 2 diabetes. It’s not a permanent cure, but can help some people to stop taking diabetes medications or put their diabetes into remission.
It’s not for everyone, but speak to your healthcare team about whether surgery is a possibility for you.
This study is researching a potential new medication for people with type 2 diabetes and elevated triglycerides (a type of fat in the blood) to see if it can prevent heart attacks and other related heart problems. Study participants must be over 18.

If you are eligible and choose to participate, you will continue using your current statin medications. You will receive all study-related care and study medication at no cost during your participation. We can also help with transport, or reimburse you for reasonable travel expenses.

Have type 2 diabetes
Or have artery disease (hardening or narrowing of the arteries)
Or you take statins for high cholesterol
Or you are concerned about heart problems

Find out more
www.synexusclinic.co.uk/diabetesuk
Call: 0800 027 0880 Quote: 136579

You may be able to take part if you:

Help us research a potential medication that might prevent them

Don’t let diabetes lead to heart problems

Moving more

Exercise is part and parcel of managing your diabetes. In just the same way that you need to eat the right things, you can also help to manage your Type 2 diabetes by being more active.

Don’t be put off by the word ‘exercise’. You don’t have to take out gym membership, wear Lycra or take up sports if you don’t want to.

But, making time to be active, and making that a priority in your life, is important now more than ever.

It’ll help you manage your diabetes and reduce your risk of heart attacks and strokes. It also reduces your risk of cancer, joint and back pain, depression and dementia. And, it helps with diabetes by:

- Helping you lose weight or keep to a healthy weight.
- Helping to improve your blood sugar levels.
- Helping with heart health by improving your cholesterol and blood pressure levels.
- Strengthening your muscles and bones.
- Reducing stress levels and symptoms of depression and anxiety.
- Improving your sleep.

Don’t be intimidated by exercise. All you need to do at the beginning is do more than you were doing before. Every little bit helps.

How much to aim for

You should aim to spend less time sitting down, and more time on your feet. These are the government guidelines:

- Aim for 30 minutes of moderately intense activity – or 15 minutes of vigorous activity – at least five days a week.
- Also, try to do activities that improve muscle strength on two or more days a week. For example, heavy gardening, carrying food shopping or yoga.

Moderate intensity – breathing is increased, but you can talk comfortably.

This could be walking quickly, cycling on flat ground or a leisurely swim.

Vigorous intensity – you’re breathing fast and it’s hard to talk.

This could be running, cycling faster or up hills, or faster swimming.

Exercises for muscle strength

This could be gardening, carrying groceries or yoga.

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Need to know

- Check with your healthcare team if you have any diabetes complications before you start anything new.
- Check if you have anything that restricts your ability to be active, like high blood pressure, angina, osteoporosis or asthma.
- Start slowly, and gradually increase the intensity and time you spend on new activities.
- Wear the right footwear.
- Check your feet before and afterwards. Wash and dry your feet properly. Drying well, especially between the toes, helps prevent infections like athlete’s foot.
- Wear diabetes ID like a bracelet or necklace, or carry an ID card. This is very important if you’re at risk of hypos (low blood sugar).
- Drink fluids regularly.

Some questions

I’ve heard of exercise on prescription – what is it?
Your local area may have this. It means that your healthcare team can prescribe and tailor a set of exercises for you. Ask your GP if it’s something you can have.

How you can move more

For a simple way to move more, start walking more than normal. Here are some ideas:

- 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

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Coping with diabetes

No one is happy to be diagnosed with diabetes.

But it’s not your fault that you have Type 2. You may feel like it is and feel ashamed about it – especially the way the condition can be portrayed in the media. But all sorts of things contribute to developing it, and you’re not in control of all of them.

Still, it’s a shock to be diagnosed with anything – and diabetes is tough because you’ll have it for the rest of your life.

If you’ve been feeling unwell, you may be relieved to know there’s a reason for it and there’s treatment. Nevertheless, knowing that you need to make lifestyle changes and perhaps take medication for the rest of your life can be hard to get your head around.

In the weeks after you’re diagnosed, it can feel a bit overwhelming and your treatment may be at the forefront of your mind. But, in time, the reality sinks in and that may be when you need help.

Worries

Everyone’s worries are different. Some people may be most worried about how it could affect work. Others about how it could affect their family. Others are most worried about making lifestyle changes.

If your feelings stop you from properly managing diabetes, it’s time to get extra support. You don’t need to go through this alone. There’s lots of support out there. Getting emotional support if you need is just as important as any other part of your treatment.

For information or to talk to someone about how you’re feeling, contact the Diabetes UK Helpline (see ‘Other ways to find support’, below). It’s also important to talk to your doctor and healthcare team.

Talking to family and friends

Opening up about your diagnosis with friends and family may be enough for you. They can give you support and encouragement when you’re first diagnosed, or at times when you’re struggling.

You may find it hard to open up to people about your diabetes. But, sharing issues will help them understand how to help you while you adjust to your new way of life.

Other ways to find support

• Our Helpline. Call 0345 123 2399* or email helpline@diabetes.org.uk for confidential support from counsellors. If you’re in Scotland, call 0141 212 8710 or email helpline.scotland@diabetes.org.uk
• Join a local Diabetes UK group, run entirely by volunteers. Find out more at www.diabetes.org.uk/t2-groups

Meet Robin

Getting advice and support helped

“Being diagnosed with Type 2 diabetes in the spring of 2013 was a really heart-stopping moment. Even though I had my suspicions, I thought that if I had diabetes I would have some dramatic symptoms, so I reassured myself I was fine. It was also a lonely moment for me because I didn’t know anyone with the condition. I wasn’t given any information – I was just told to go away and come back a bit thinner in a month’s time. I felt very much in the dark – it was scary. But it came across Diabetes UK Helpline. Knowing what I had to do to self-manage, where to go for advice, and how to start thinking about my diet and doing exercise, was really life-changing.

Getting active

I realised that I needed to improve my fitness and change my sedentary lifestyle. After a few false starts on the fitness front, I downloaded the NHS Couch to 5k course on my phone. It took me most of the summer to complete, furtively running late at night or very early in the morning so that no one would see me. But, in spite of this, I’d lost 28kg (4st 4lb) by the end of it. In the autumn, the manager of a local running shop suggested I try parkrun (www.parkrun.org.uk), an organisation offering free, weekly 5k runs. At the time, I was very conscious of my weight and slow speed – I lost count of the number of times I got as far as putting on my trainers, only to lose confidence and find something else to do. Eventually, I made it… and I have never looked back! After running over 90 parkruns and volunteering at around 50 of them, parkrun continues to enthuse and inspire me. Whether you’re there to walk, jog, run or volunteer, there’s always a friendly welcome and people with a common interest to speak to.

Making a connection

I’ve been very lucky to have stumbled into many diabetes communities and my local Diabetes UK Group in Barnet. Along with parkrun, they have all supported me with successfully managing my diabetes. Without them, my journey would have been a very different and far less positive one.

As someone who lives with diabetes, I know that there’s a lack of understanding about the condition. What I’ve learnt from peer support, community groups and Diabetes UK is that a lot of people have long, happy lives with diabetes of all types – and we need to get that message out there. Type 2 diabetes continues to tax me on a daily basis, but adopting a new lifestyle has helped me to lose 50kg (7st 9lb), reduce my medication (after a period of good blood test results, my GP and I decided on a trial of controlling my diabetes without metformin), and improved my overall wellbeing. I would never wish to have diabetes, but the process of learning to self-manage has given me a new purpose in life, amazing opportunities and some wonderful new friends.”
Some questions

I’m worried diabetes will affect my relationships and I’ll be treated differently.

Most things are easier to face with help from friends and family. But diabetes can put a strain on relationships, particularly if you’re having trouble coming to terms with your diagnosis or making changes to your lifestyle, for example.

Your healthcare team can help you fit your treatment into your day-to-day life. They can support you to make changes and refer you for more help if you need it.

My emotions are all over the place. Is this normal?

Some people go through a stage similar to mourning after being diagnosed: feeling unhappy, anxious, angry and isolated, as though grieving for lost health. You can hide feelings, but that doesn’t mean you’re coping better. Everyone’s different, but what’s certain is that most newly diagnosed people struggle at the beginning.

I feel overwhelmed. How long will it be before I feel back in control?

Many people feel a lot better before the end of a year. You may prefer to manage by yourself, but others find help from talking to someone – either family, their healthcare team or someone else with diabetes.

Tips for coping

- Talk to your healthcare team if you feel down. They can suggest ways of coping and refer you to a counsellor.
- Talk problems through with your family and friends.
- Get in touch with other people with Type 2 (see ‘Other ways to find support’, from page 54).
- Talking to our Helpline may help you to understand and cope better.

Need to know

- Don’t ignore feelings of depression – get help.
- Your GP and healthcare team can offer support and refer you for counselling.
Sex

Sex is an important part of life. And, when we’re unhappy with our sex life, it can affect our wellbeing and closest relationships. It’s difficult to talk about sexual problems, particularly if you don’t know why you’re having them. You need to recognise the symptoms and the causes, so you understand them. Then you’re halfway there in terms of getting the help and advice you need.

Sexual dysfunction and diabetes

Poorly controlled diabetes can damage the blood vessels and nerves, causing reduced blood flow and loss of feeling in sexual organs. This can cause problems called sexual dysfunction, and it’s more common in people with diabetes. You should be assessed and given the right support and education, so don’t suffer in silence – speak to your doctor.

Women

Female sexual dysfunction is twice as likely for women with diabetes. The cause can be physical, or due to medication – or both. And, emotional and lifestyle factors can also contribute.

The four main areas of difficulty are: desire, arousal, painful sex and orgasm. Treatments include aids for lubrication, clitoral stimulation and therapy.

Men

Impotence (erectile dysfunction, or ED) is the most common problem: not being able to get or keep an erection during sex.

Most men have this at some time and 10 per cent have a continuing problem. Again, physical factors or medication can contribute, along with emotional and lifestyle factors. ED is one of the earliest signs of other complications, and early detection is so important to reduce your risk of heart problems and strokes.

There’s a wide range of treatment available.

Tips for dealing with sexual dysfunction

1. Talk to your partner about any problems.
2. Talk it through with your healthcare team as it could be linked to diabetes. Ask about treatments available.

Need to know

- Other problems linked with diabetes (like heart disease and depression), along with some medications, can increase the chance of sexual problems.
- High blood sugar levels make thrush worse and sex uncomfortable.
- Active sex can cause hypos. So, if you’re on medication that increases the chance of hypos, have a hypo treatment nearby. It can also help to discuss this with your partner.

Some questions

Can I have a baby if I have diabetes?

Yes, but diabetes means it’s vital that you plan for it and get help and advice first. It’s important to use effective contraception until you know you want to become pregnant.

Speak to your healthcare team if you’re planning to have a baby. They can refer you to a pre-conception clinic.

For more on diabetes and pregnancy, go to www.diabetes.org.uk/t2-pregnancy

Need to know

- Other problems linked with diabetes (like heart disease and depression), along with some medications, can increase the chance of sexual problems.
- High blood sugar levels make thrush worse and sex uncomfortable.
- Active sex can cause hypos. So, if you’re on medication that increases the chance of hypos, have a hypo treatment nearby. It can also help to discuss this with your partner.

www.diabetes.org.uk
You can drive when you have Type 2 diabetes. But you need to be careful and informed about certain things.

If you drive a car or motorbike (Group 1 driver)
• You must tell the DVLA (UK) or DVA (Northern Ireland) if you’re on insulin. Your licence will then be renewed every one, two or three years.
• Any changes to your health or treatment between renewals (complications like eye problems or nerve damage, which might affect your ability to drive safely) should be reported to the DVLA or DVA when they happen.
• If you’re under medical supervision and using insulin only for a short time (less than three months), you don’t need to tell the DVLA/DVA. But you do if you have problems with hypos, severe hypos (where you were completely dependent on someone else to treat your hypo), or hypo unawareness (when you don’t sense your blood sugar levels are going low).

If you’re on non-insulin medication, you don’t need to tell the DVLA/DVA unless:
• You’ve had two severe hypos (where you’re completely dependent on another person to treat your hypo) within the last 12 months.
• You can’t recognise the signs that you’re having a hypo.
• You have a disabling hypo while driving.
• You have other medical conditions or changes to existing medical conditions that affect your ability to drive safely. Things like problems with vision, circulation, or sensation.

Other than insulin, problems related to hypos are most likely to happen if you’re on sulphonylureas or glinides. If you’re not sure, check with your healthcare team.

The DVLA recommends that people taking medication that can cause a hypo are supported to test their blood sugar levels when driving. You may want to mention this to your healthcare team if you need a meter and test strips to do this.

If you’re treated with insulin or medication that can cause hypos and drive a lorry, large camper van or pull a large trailer, you’ll have to notify the DVLA/DVA. You’ll need to be assessed every year to renew your Group 2 licence. There’s essential information for you on our website at www.diabetes.org.uk/t2-driving

Tips for driving
1. Don’t delay or miss meals and snacks.
2. Take breaks on long journeys.
3. Never drink alcohol and drive.
4. If you’re at risk of hypos and your blood sugar level is 5mmol/l or less, eat some carbohydrate before driving. If it’s less than 4mmol/l – don’t drive.
5. Keep hypo treatments to hand in the car.
6. If you’re at risk of a hypo, check your blood sugar levels before driving and every two hours on long journeys.

If you have a hypo while driving you mustn’t continue to drive – this is a legal requirement. Follow this guidance from the DVLA/DVA:
• Stop the vehicle as soon as possible in a safe place.
• Switch off the engine. Remove keys from the ignition. Move from the driver’s seat.
• Take fast-acting carbohydrate, like glucose tablets or sweets, and some form of longer-acting carbohydrate.
• Don’t start driving until 45 minutes after your blood sugar level has returned to normal. See page 18 for more on treating a hypo.

If you have poor warning signs of a hypo or have hypos often, you put yourself and others at risk and should probably not be driving. Talk about this with your diabetes healthcare team. If your team tells you to notify the DVLA/DVA, you must do this. If you don’t, your doctor will do this on your behalf.

Tell the DVLA/DVA you have diabetes if you’re on insulin or have a Group 2 licence:
• DVLA: www.gov.uk/dvla
• DVA: www.nidirect.gov.uk/contacts/driver-vehicle-agency-dva-northern-ireland
• Tell your insurers.
• Be clear on what you need to do if you have a hypo.

Need to know

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Illness

Like everyone, you’re bound to get ill sometimes, or may need to go to hospital.

There’s no reason to think you’ll be ill more often than others, but if your diabetes isn’t well managed you could be prone to infections.

If you don’t feel well, take care of yourself and get medical help if you need it.

Blood sugar levels may rise when you’re ill, even if you’re not eating. This is your body trying to fight off infections and illness.

Some of the culprits are:
- colds and flu
- chest infections
- urinary tract infections
- vomiting and diarrhoea
- skin infections.

Remember the signs of high blood sugar include being thirsty, passing more urine than normal, tiredness and high sugar levels in the blood or urine.

We often don’t feel like eating when we’re ill, but you still need to eat or drink something with carbohydrate to give you energy. You also need to drink plenty of sugar-free fluids. Aim for at least 2.5–3.5 litres (4–6 pints) a day.

If you start being sick or can’t keep fluids down, get medical advice straight away.

If your blood sugar levels have been very high (over 30mmol/l) for a while, you can become severely dehydrated and develop hyperosmolar hyperglycaemic state (HHS). Symptoms include frequent urination, great thirst, nausea, dry skin, disorientation and, in later stages, drowsiness and gradual loss of consciousness. It can be very serious and you’ll need hospital treatment to treat dehydration and correct blood sugar levels.

Tips for managing illness

- Keep calm. Contact your doctor if you’re not sure what to do.
- Keep taking your medication.
- If you test your blood sugar levels, you should check your levels at least four times a day.
- If you can’t face food, feel sick or can’t keep food down, replace meals with snacks and drinks. Sip sugary drinks (like fruit juice or non-diet cola). Or suck glucose tablets, or sweets like jelly beans. If you let fizzy drinks go flat, it can be easier to keep them down.
- Drink plenty of sugar free fluids – at least 2.5-3.5 litres (4–6 pints) a day.
- Get medical help if you can’t eat or drink, keep being sick and/or have diarrhoea.

Need to know

- Know the symptoms of high blood sugar and the signs that mean you need medical advice. Make sure your family, friends or your carer know them, too.
- If you’re in hospital, make sure everyone who sees you knows you have Type 2 diabetes.
- Good diabetes control is important for your recovery. Stress and longer periods of inactivity might affect blood sugar levels. So, if you test your blood sugar levels, test more often.

Some questions

If I need to stay in hospital, who’ll look after my diabetes?

The responsibility is between you and the hospital staff.

The hospital staff should be able to give you your medication, but take some with you to avoid delays. Take your own diabetes equipment (like a blood glucose meter) because they won’t be able to give you this.

Don’t assume anyone knows you have diabetes. It’s better to mention it to hospital staff. If you have concerns about your diabetes management, speak to hospital staff – they can contact the diabetes healthcare team if necessary. If any changes have been made to your diabetes treatment during your hospital stay, check if this needs to change when you go home too.

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For more information, please go to www.diabetes.org.uk/mobile-member or call 0345 123 2399*

*Calls may be recorded for quality and training purposes.
Work

Diabetes shouldn’t affect your chances of getting or keeping a job. It doesn’t matter if you’re fresh from college or counting down to retirement.

The law


Both set out the principles employers must follow in their treatment of employees and job seekers with a disability, so that they’re not put at a disadvantage. Even though you may not think of your diabetes as a disability, you’ll be protected by these acts.

Applying for jobs

It’s against the law for an employer to put a blanket ban on recruitment of people with diabetes. But some safety-critical work will have health requirements that exclude people with diabetes (among other medical conditions). Blanket bans have been lifted in some professions, there are certain requirements around certification and physical qualification, and you’ll have to disclose your diabetes to be properly assessed. But, mostly, there’s no legal requirement to disclose diabetes and it’s your decision whether to tell an employer or prospective employer. But, if an employer doesn’t know – and couldn’t have been expected to know you have diabetes, you may not be able to rely on the legislation if you feel you’ve been discriminated against.

### Recruitment and retention

- Recruitment and retention in the police, fire and ambulance services is subject to medical assessment. But the UK armed forces are exempt and can operate a blanket ban on people with diabetes.
- Some NHS Ambulance Trusts have restrictions on people with diabetes being in the ambulance crew. This is being challenged. If you develop diabetes while in work, your employer may offer to change aspects of the job, like shift patterns. If you can’t now meet the health requirements of the job, your employer may offer you a different job in the same organisation. This could be a sensible option.

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### Medical conditions

- The question asked is relevant to find out if you can carry out tasks that are necessary to the job.
- The employer wants to know whether adjustments need to be made for the assessment process.
- The employer is asking for monitoring purposes (they can’t use this information to decide whether they employ someone).
- The employer wants to improve disabled people’s chance of getting employment.
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- The employer is asking for monitoring purposes (they can’t use this information to decide whether they employ someone).
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### Telling recruiters

- You can ask about your health before offering you work.
- But there are some specific exceptions, including:
  - The employer wants to know whether adjustments need to be made for the assessment process.
  - The employer is asking for monitoring purposes (they can’t use this information to decide whether they employ someone).
  - The employer wants to improve disabled people’s chance of getting employment.
  - The question asked is relevant to find out if you can carry out tasks that are necessary to the job.

### Telling colleagues

- Telling colleagues it can be hard to decide when to tell recruiters about diabetes. Employers can’t ask about your health before offering you work.
- But there are some specific exceptions, including:
  - The employer wants to know whether adjustments need to be made for the assessment process.
  - The employer is asking for monitoring purposes (they can’t use this information to decide whether they employ someone).
  - The employer wants to improve disabled people’s chance of getting employment.
  - The question asked is relevant to find out if you can carry out tasks that are necessary to the job.

### Tips for getting the best from work

1. Be honest with your employer that you have diabetes.
2. If you don’t feel you can cope with your job as it is, ask your employer to make some reasonable adjustments to your role.

### Need to know

- We have an Advocacy service that can give you advice on employment issues. We also have an Employment Advocacy self-help pack. See below for details. There’s also more information and support on our website.
  - Diabetes UK Advocacy Service: email advocacy@diabetes.org.uk or call 0345 123 2399.
  - Download the Employment Advocacy pack at diabetes.org.uk/2-employment-your-rights.

### Some questions

- I have diabetes. What can I do?
  - You probably need specialist advice initially and, in some cases, legal advice. It’d be the same if you felt discriminated against or you felt you lost your job because of diabetes. Start by getting advice from our Advocacy service (see ‘Need to know’, above, or go to diabetes.org.uk/2-your-rights. And, if you’re a member of a trade union, ask for help from your union rep.

If you do decide to tell your employer you have diabetes, you may find it useful to show them ‘Support for diabetes in the workplace’, so they get a better understanding of it and how it may affect you in the workplace. Download it from www.diabetes.org.uk/t2-employment-your-rights.

If you’re not asked about diabetes at your interview, it’s probably best to wait until you’ve been told in writing that you’re being offered the job. By this stage the recruiters will have already decided whether you’re suitable and diabetes shouldn’t influence their final decision.

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Travel

You can travel all over the world, Type 2 diabetes needn’t stop you.

But making the right preparations can minimise any potential problems.

If you’re travelling alone, you may like to let the staff know when you check in as a precaution in case you become unwell during your stay.

Things to check before you go:
- Get diabetes ID (especially if you’re at risk of hypo). Get a letter from your GP, which says you have diabetes and the medication you need if you’re carrying insulin or injectable medication.
- Make sure you have, in advance, twice the quantity of medical supplies you would normally need.
- Flights often cross time zones. If you treat your diabetes with medication including insulin, check with your healthcare team how to best manage this.
- Be aware that hot or cold climates can affect how your insulin and meter work.
- Buy travel insurance. Even if you have the EHIC (see ‘Need to know’, right), you should still buy travel insurance, as the card doesn’t cover, for example, emergency repatriation, and not all countries give the level of cover of the NHS.

Tips for packing
1 Split your diabetes supplies into separate bags.
2 If you’re flying, make sure you have some diabetes supplies in your hand luggage in case your bags get lost.
3 Insulin should be kept in your hand luggage as it can freeze in the hold.

Need to know ⭐

- If you’re travelling within the EU, apply for an EHIC – they’re still valid for people in the UK. An EHIC lets you get state healthcare in other EEA countries and Switzerland at a reduced cost or sometimes for free. Go to www.gov.uk/european-health-insurance-card
- In some countries, blood sugar is measured in milligrams per 100 millilitres (expressed as mg/dl) and not in millimoles per litre (mmol/l). See our conversion chart at www.diabetes.org.uk/t2-travel
- Take the name – not just the brand name – of your medication.

Some questions 🤔

What if I’m sick while abroad?
Talk to your doctor for advice before you go, and get information from the tourist office, embassy or high commission of the country.
- Check your insurance policy and make sure it covers your diabetes.
- Give the doctor the generic name – not just the brand name – of your medication.
- Read more about dealing with illness on page 62.

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Tips for safer drinking

1. Don’t drink on an empty stomach – have something to eat beforehand.
2. Tell the people you’re with you have diabetes and carry medical ID, especially if you take medication that makes hypos more likely (like sulphonylureas or insulin).
3. Alternate alcoholic drinks with lower-alcohol or alcohol-free alternatives.
4. Pace yourself – enjoy your drink slowly and keep track of how much you’re drinking.
5. If you’re at risk of hypos, don’t forget to take your hypo treatment with you.

Need to know

• Don’t drink more than 14 units of alcohol a week.
• Aim for a few days a week without drinking alcohol.
• Cut back on alcohol if you’re trying to lose weight – alcoholic drinks can contain a lot of calories.
• Limit low-alcohol wines, sweet sherries and liqueurs as these tend to be higher in sugar. Also, stick to diet or sugar-free mixers.

Some questions

Should I go for lower-sugar beers and ciders?

Avoid these. Although they contain less sugar, the alcohol content is higher and as little as one pint can bring your blood alcohol level above the legal limit.

What’s in your drink?

<table>
<thead>
<tr>
<th>Drink</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pub measure (25ml) spirit, eg vodka, gin,</td>
<td>1</td>
</tr>
<tr>
<td>whisky (40% ABV approx)</td>
<td></td>
</tr>
<tr>
<td>Bottle (275ml) alcopop (5.5% ABV)</td>
<td>1.5</td>
</tr>
<tr>
<td>Small glass (125ml) white, rosé or red wine</td>
<td>1.5</td>
</tr>
<tr>
<td>(12% ABV)</td>
<td></td>
</tr>
<tr>
<td>Bottle (330ml) lager, beer or cider (5% ABV)</td>
<td>1.7</td>
</tr>
<tr>
<td>Can (440ml) lager, beer or cider (5% ABV)</td>
<td>2</td>
</tr>
<tr>
<td>1 pint lower-strength lager, beer or cider</td>
<td>2</td>
</tr>
<tr>
<td>Medium glass (175ml) white, rosé or red wine</td>
<td>2.1</td>
</tr>
<tr>
<td>(12% ABV)</td>
<td></td>
</tr>
<tr>
<td>Large glass (250ml) white, rosé or red wine</td>
<td>3</td>
</tr>
<tr>
<td>(12% ABV)</td>
<td></td>
</tr>
</tbody>
</table>

If you drink more than a few units in an evening, you will have an increased risk of hypos all night and into the next day, too, as your liver continues to get rid of the alcohol. Always have a starchy snack, like cereal or toast, before going to bed to help reduce this risk.

The morning after

If you end up having one too many, drinking a pint of water before you go to bed will help to keep you hydrated and may help to prevent a hangover. If you do wake up with a hangover, you’ll need to drink plenty of water. And, if you are suffering the hangover symptoms of headache, nausea, shaking and sweating, check your blood sugar level as you may actually be having a hypo – especially if you take medication that makes hypos more likely (like sulphonylureas or insulin). No matter how awful you feel, you need to treat a hypo straight away – don’t ignore it. Likewise, you must stick to your usual medication and have breakfast.

If you can’t face food, or if you’ve been sick, drink as much fluid as you can, including some sugary (non-diet) drinks.

Painkillers may help with a hangover headache, but try to avoid them until your liver has had time to recover. Remember, the morning after doesn’t have to feel like this – try following our tips for safer drinking on page 69, and go to www.drinkaware.co.uk.
Religious fasting

Fasting is an important part of many religions. As well as the abstinence from food (and sometimes drink), fasting is also usually a time of prayer, reflection and purification. It’s an opportunity for people to have a healthier lifestyle by learning self-control and making changes to their diet.

People with diabetes are usually exempt from fasting, but many still choose to do it. Speak to your religious leader if you want information about whether you’re exempt from fasting.

Ultimately, it’s a personal choice whether or not to fast. If you do choose to fast, then you need to talk to your healthcare team beforehand. This is to make sure that you’re able to look after yourself properly.

Tips for fasting

If, after talking to your healthcare team, you decide to fast, bear these things in mind:

1. If you’re taking insulin, you’ll need less insulin before the start of the fast. The type of insulin may also need changing from your usual type.

2. Before starting the fast, have more slowly absorbed food (low GI) – like basmati rice and dhal – in your meal, along with fruit and vegetables.

3. If you test your blood sugar, check your levels more often than you normally would.

4. When you break the fast, have only small quantities of food, and avoid only eating sweet or fatty foods.

5. At the end of fasting, have plenty of sugar-free and decaffeinated drinks to avoid dehydration.

Need to know

• If you have any diabetes complications, like damage to your eyes, or heart or kidney disease, you could make these worse. So, you should seriously think about not fasting.

• If you’re taking certain tablets and/or insulin, fasting can cause hypoglycaemia. If you feel that you’re having a hypo, you must break your fast and take a sugary drink of food followed by starchy food. Otherwise, you may need medical attention.

• You may develop high blood sugar levels during a fast if you don’t take prescribed medication or if you’re less physically active than normal.

• Don’t forget to speak to your diabetes healthcare team, if you’re planning to fast, on how to adjust your medication (including insulin), testing, and how to avoid highs and lows.

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• Don’t forget to speak to your diabetes healthcare team, if you’re planning to fast, on how to adjust your medication (including insulin), testing, and how to avoid highs and lows.
What you need to know about complications

Type 2 diabetes isn’t a condition where you just take the medication your doctor gives you and forget about it.

Diabetes needs to be managed every day and taken seriously.

If diabetes isn’t managed well it can lead to devastating complications like heart attacks, stroke, kidney failure, blindness and amputations. For 65 people a day in the UK, it means an early death. But complications aren’t inevitable.

This section of the guide will help you understand more about the different complications people can face. It also explains how you can reduce your risk of experiencing them.

Why complications happen

People with diabetes get complications mostly because their blood sugar is high for a long period of time.

When you have high blood sugar levels over a long period of time, it can damage almost every part of your body.

You’re also more likely to experience complications if you have too much fat in your blood and if your blood pressure is too high.

What you can do

There’s lots of different things you can do to lower your risk of complications. Even if you’re struggling with one thing, there will be something else you can try. And everything you do, however small, will make a difference.

Take action immediately

People with Type 2 are often diagnosed after they’ve had diabetes for some time. This can mean their blood sugar levels have been high for some time. So, it’s really important that now you’ve been diagnosed, you work with your healthcare team to start lowering your blood sugar levels.

Take control of your diabetes

Keeping your HbA1c within the target range set by your healthcare team is the single most important thing you can do. It’s easier said than done but there are lots of ways your healthcare team can help you.

Stop smoking

If you smoke, then stopping will immediately reduce your chances of complications. Again, your GP and diabetes team will be able to help you quit.

Eat well

Eating a healthy diet will help you to lose weight, bring down your HbA1c, manage your blood pressure and help you reduce the fats in your blood like cholesterol. Ask to see a diettian if you’d like extra help to eat healthily.

Keep active

No one needs to run marathons, but the more you’re on your feet and moving the less chance you have of getting complications. If you struggle to get about, there are still ways you can keep active. For tips on moving more, including chair-based exercises, go to www.diabetes.org.uk/t2-move-more

Go to all of your appointments

Everyone with diabetes is entitled to a series of test and checks each year to monitor their diabetes, look out for any problems and see if any further support is needed. These are the 15 Healthcare Essentials we’ve talked about. Take your checklist with you (see page 24). Making sure you get all of them will mean you know how you’re doing and what you need to be aware of.

What not to do

Don’t watch your blood sugar levels rise without talking to your doctor. Diabetes is a progressive condition which means that, over time, what you need to do to keep your HbA1c in target will change. This might mean more medication and that’s OK. The most important thing is to get your levels in target.

Meet Tony

Type 2 diabetes runs in Tony’s family. He’s determined to avoid complications and help others to do the same

“I’ve had diabetes for 13 years, which I control by eating healthily and lots of physical activity - I’ve never had to take any medication for it. One of my aunts had to go for dialysis three times a week, while another has had some toes amputated. I didn’t want to go down that route. I’m also a Diabetes UK Community Champion. I spoke to 53 community groups last year. I help people be more conscious of their eating habits and know the significance of physical activity. I’m passionate about it. And people take it on board. One chap formed a cycling group after he heard me talk and is now off metformin. It’s good to know I’ve made a difference.”

With physical activity, find something you enjoy and get into a routine because it’s invaluable in keeping diabetes under control naturally. I know it’s easier when you’re retired, but those who aren’t can make the time to have a schedule. I go to my local gym four times a week, as well as doing yoga, Pilates and Zumba.

And, I always stress the importance of regular medical check-ups and eye tests – we take our cars for annual MOTs, so why not our bodies?”

What you need to know about complications
Your eyes

Tips for what you can do

1. Go to your eye screening. Often retinopathy can be quite advanced before it starts affecting people’s vision. This is why going to your eye screening appointments is so important. Your doctor will register you, and you will be sent an appointment in the post. This is not the same as a regular eye test at the opticians. Your screening will be able to identify any problems at an early stage and you’ll be able to get treatment before any serious damage is done.

2. Report any changes to your vision. If you notice any changes, or are struggling to see as clearly as normal, make an appointment with your doctor immediately. Don’t wait until your next screening. If your blood sugar goes higher than usual for a short period you may notice some blurred vision. This is to be expected – once your sugar levels settle, your vision should return to normal.

3. Work with your healthcare team to lower your HbA1c. Your diabetes healthcare team should set you a target for your HbA1c levels. The closer you get, the lower your blood sugar levels, and the less chance you have of developing eye problems.

4. Keep on top of your cholesterol and blood pressure. High blood pressure and high cholesterol levels increase your chances of getting eye problems. Exercise, eating healthily and keeping to a healthy weight will make a big difference, as will giving up smoking. Your healthcare team can help you with all three. See pages 32 and 50 for more on eating well and exercising.

Treatment

There are several different treatments for damage to eyes:

Lasers

The most common is laser treatment, which is used at early and moderate stages of retinopathy. Under a local anaesthetic, a tiny laser is aimed at the damaged bits of your eye sealing any leaky blood vessels. This helps improve circulation, so that more oxygen and nutrients get to your retina. Some people will need more than one session.

Injections

If you have swelling around the centre of the retina, called maculopathy, this can be treated with an injection. It can stabilise and rapidly improve vision. Most people will need several injections, normally once a month.

Steroids

If other treatments don’t work, steroids can help people with severe damage to their eyes. A tiny implant placed in the affected eye releases small amounts of long-acting steroids over a period of three years. It reduces inflammation and stops the retina producing a protein that affects sight.

Need to know

• Your diabetes eye screening requires special equipment and will be looking for signs of retinopathy.
• You need to go to your retinal eye screening when you’re invited. This should be at least once a year.

Some questions

What happens at diabetes eye screening?

It will normally be at your GP surgery, hospital or at an opticians.

Firstly, drops may be put into your eyes to make your pupils larger. This is so that the retina (the seeing part of your eye) can be seen more clearly. A photograph is taken of the retina in both eyes. None of this hurts – but the drops may sting a bit and leave you with blurred sight for two to six hours. A specialist will look at the photograph, after your appointment, for signs of change or damage. You will be sent a letter with the results.

You should take sunglasses with you to wear afterwards because everything will seem bright. You also can’t drive immediately, so you’ll need to use public transport or arrange for a lift from a friend.

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Complications

Everyday life with Type 2 diabetes

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You should take sunglasses with you to wear afterwards because everything will seem bright. You also can’t drive immediately, so you’ll need to use public transport or arrange for a lift from a friend.
Your feet

Looking after your feet is really important for everyone with diabetes.

Every year in the UK, diabetes causes over 8,500 lower limb amputations. That’s over 160 a week.

People with diabetes are at risk of amputations and ulcers because high blood sugar levels over a long period of time lead to nerve and blood vessel damage.

Nerve damage can mean you stop feeling pain in your feet and legs, so you might not realise if you’ve cut or burned them.

Blood vessel damage also makes it more difficult for your body to heal itself. Even small cuts, blisters and burns can lead to ulcers and infections, which can end in an amputation. But, don’t worry, the vast majority of these are avoidable by getting your yearly foot check and looking after your feet.

Tips for what you can do

1  Go to your foot check. A trained professional should check your bare feet once a year. This will spot if you are at risk of any foot problems.
2  Know how your feet are doing. At the end of the foot check, you should be told if you are at high risk of developing foot problems or if you need to see a specialist for expert foot advice.
3  Look at your feet every day. Whether it’s when you’re putting your socks on or just before bed, check your feet every day. If you feel any pain, see any colour changes, swelling, cuts or bruises, build-up of hard skin, or anything unusual, tell your diabetes team.
4  If you lose feeling in your feet be extra careful. Being at high risk of foot problems or losing feeling in your feet means you might not realise when you’ve hurt yourself. Try not to go barefoot, especially on hot sand or gravel, and don’t sit too close to radiators or heaters.
5  Watch out when cutting your nails. If your body can’t heal itself properly, any kind of wound can increase the chances of a serious foot problem. So, cut your nails carefully. Don’t cut down the side of your nails to avoid ingrowing toenails.
6  Don’t use corn-removing plasters or blades. These can damage your skin and cause more problems for your feet. If you have corns, a healthcare professional should deal with them.
7  Make sure your socks and shoes fit. Blisters can be dangerous for people with diabetes. If your shoes are too tight, too loose or rub, then don’t wear them. Even if they look great.
8  Take control of your diabetes. Easier said than done, but lowering high amounts of sugar in your blood will help prevent nerve damage, and can stop things getting worse. Ask your diabetes team about the different ways they can help.
9  Ask for help to stop smoking. Smoking makes it harder for blood to travel around your body (like to your feet) so puts you at even greater risk of amputation. Your healthcare team can make it easier to quit.

Nerve damage is called neuropathy and can also affect other parts of the body, like your hands, stomach, bladder control and genitals. If you’re experiencing any of these, talk to your doctor or nurse immediately.

You need to have your feet and legs checked every year.

Some questions

What happens at an annual foot check?

After removing any footwear, your feet will be examined. They will look for corns, ulceration calluses, and changes in shape and colour. They’ll also check for numbness or changes in feeling using a fine plastic strand called a monofilament. It doesn’t hurt.

You’ll be asked some questions, such as:

- Have you noticed any problems or changes (eg cuts, blisters, broken skin or corns)?
- Have you ever had any foot problems, wounds or ulcers?
- Have you had any pain or discomfort?
- How often do you check your feet, and what do you look for?
- Do you have any cramp-like pains when walking?
- How well are you managing your diabetes?

Your footwear will be examined to make sure it’s not causing any problems.

At the end of the check, you’ll be told the results and your level of risk. It’ll be explained to you what this risk means, who to contact if you have any new foot problems, and what you now need to do to look after your feet.

To find out more about your foot check, go to www.diabetes.org.uk/t2-foot-check

www.diabetes.org.uk
Your kidneys

One in three people with diabetes may develop kidney disease.

This is also called nephropathy, or renal disease.

It happens when there’s damage to the small blood vessels in the kidneys. It develops slowly over many years. So, it usually affects people who’ve had diabetes for a while. The walls of these blood vessels may become thicker or irregular. This prevents them from filtering waste products from the blood into the urine properly and keeping the things you need, like proteins.

If it’s found early, kidney disease can be treated successfully.

Tips for what you can do

1. Keep blood sugar levels, cholesterol and blood pressure levels within your target range. Your targets for both your HbA1c (blood sugar), cholesterol and your blood pressure are set at your annual diabetes review. Keeping to these targets will help prevent damage to your kidneys. Speak to your healthcare team if you need more help with this.

2. Get your checks. Make sure your urine is tested for protein and you have a blood test to check how well your kidneys are working at least once a year, as part of your annual diabetes review.

3. Stop smoking. For help to stop smoking, speak to your healthcare team.

4. Make healthy food choices. This includes eating at least five portions of fruit and veg every day, wholegrains, oily fish twice a week, and cutting down on processed foods, salt, saturated fat and sugary foods, as well as keeping to recommended alcohol limits.

5. Keep active. Aim for 30 minutes of moderate intensity activity on at least five days of the week. See page 50.

6. Keep to a healthy weight. Get help to lose weight if you are overweight – your healthcare team can help you. See page 46 for more details.

Treatment

Catching signs of kidney damage early is key and means, it can be treated successfully. If it isn’t caught early, that could lead to kidney failure.

If you have kidney damage, the focus of treatment is to reduce some of the symptoms and stop it getting worse. Early treatment involves following a healthy lifestyle to stay as healthy as possible (see tips) and maybe taking medication. You may be asked to make specific changes to your diet, too. Your healthcare team will give you individual advice about the changes you will need to make.

A group of drugs called ACE inhibitors or ARBs may also be used to protect your kidneys from further damage. These drugs can be given for high blood pressure, but are also used to treat kidney disease (even if you don’t have high blood pressure). You may also be started on other medications to help manage the other problems caused by kidney damage (see ‘Need to know’, below).

If you’re ill and vomiting or have diarrhoea, speak to your doctor straight away – as some of your medication may need to be stopped urgently. If you have damage to your kidneys, some over-the-counter drugs are no longer safe. Always tell the pharmacist.

If it hasn’t been caught early enough or it gets worse, you may need dialysis. This can be done at home or in a clinic. You’ll also need to see a specialist renal team of doctors and nurses for information and support.

Need to know

• You need to have tests every year to check how your kidneys are working.

• Your kidneys have lots of different functions, like controlling blood pressure, keeping bones healthy and making new red blood cells. If kidneys are damaged, things like high blood pressure, anaemia, weaker bones and muscles may be more likely. If you have any of these signs, you may need medication.

Some questions

How can I tell if I have kidney disease?

You really can’t tell that you have it in the early stages. That’s why regular testing is crucial.

At least once a year, at your annual diabetes review, you need to have your urine tested for protein and a blood test to see how well your kidneys are working. You may have checks more often if any of these are out of target.

The urine test will check for the amount of albumin (protein) in the urine, which may leak from the kidneys if they are damaged. If there is protein in the urine, your healthcare team will rule out a urinary tract infection (as this could also be the reason for protein in your urine). If it’s clear, the test should be repeated at least twice to be sure the result is accurate.

You should also be given two blood tests. The urea and electrolytes test (U and Es), and the estimated glomerular filtration rate test (eGFR). These also look for signs of kidney damage.

If you don’t have your annual tests and any kidney problems are left untreated, you may start to feel unwell, tired or nauseous, and your hands and feet might look swollen.

Eventually, this could result in end-stage kidney (renal) failure. Kidney failure can only be treated with dialysis or a kidney transplant.
Heart attack and stroke

People sometimes assume that heart problems or strokes are a separate problem from diabetes. They’re not.

Heart attacks, heart failure and stroke often happen to people with diabetes because of damage to the heart and blood vessels.

This damage is known as cardiovascular disease. People with diabetes are more at risk of it because high blood sugar levels over a long period of time can damage the heart and blood vessels.

Treatment

There are a range of medications that are used to help reduce cardiovascular risk. They can be used to prevent cardiovascular disease and are often started before a problem starts. For more advanced cardiovascular problems, there is a series of different procedures that can help reduce the chances of heart attacks and strokes, like stents. These are inserted into arteries to help keep them open and let blood flow more easily.

Tips for what you can do

1. Get your annual checks. Along with being able to find out your HbA1c, you should find out your blood pressure and your cholesterol levels. If there’s room for improvement, your healthcare team will be able to help you.

2. Eat well. Making sure you eat a good balance of different foods and the right portions will help lower the fats in your blood. Because you’ve got diabetes, you’re entitled to see a dietitian.

3. Keep active. You can lower your chances of a heart attack and stroke by moving more. Exercise can help your body to bring down blood sugar levels, naturally. It’s also a great way to bring down your blood pressure and help with weight management.

4. If you smoke, quit. You can dramatically reduce your chances of a heart attack or stroke by giving up smoking. Ask your doctor or nurse for support next time you see them.

5. If you’re on medication, take it as prescribed. If you’re struggling with a tablet or treatment, talk to your doctor or nurse who should be able to offer you an alternative.

Need to know

- Watch out for tell-tale signs of a heart attack. A dull ache, pain or tightness in the arm, chest or jaw could mean you’re having a heart attack. Call 999 immediately.

- Watch out for tell-tale signs of a stroke. If you feel weakness in your arms or face, or your speech is slurred, you might be experiencing a stroke. Call 999 immediately.

Some questions

How can I tell if I have a heart problem?

A feeling of tightness in the chest or painful legs when walking can be symptoms of partially blocked blood vessels. When this happens to the blood vessels in the heart, it’s called angina, which increases the risk of a heart attack. If it happens in the legs, it can increase the risk of ulcers and gangrene.
Blood sugar levels (also called blood sugar). A measure of how much sugar (glucose) is in the blood.

BMI Body Mass Index, which shows your weight in relation to your height.

Carbohydrate The body's main source of energy, which is broken down into glucose.

Cholesterol (kol-est-er-ol) A type of fat found in your blood. Your cholesterol should be measured as part of your annual review.

Diabetes complications Health problems that can develop if you have had diabetes for a long time: these include damage to the kidneys, eyes and nerves, heart disease and stroke.

Dietitian (die-a-tish-an) An expert in food and nutrition, who'll give you information and support to help you make changes to your eating habits, if needed. Everyone with diabetes should see a registered dietitian when they're diagnosed.

Estimated glomerular filtration rate (glow-mehr-you-lar), or eGFR A test to measure how well the kidneys are working.

Exercise on prescription A scheme that allows GPs to refer you for a certain number of exercise sessions with a qualified trainer, usually free or cheaper than the normal rate.

GP The doctor with the overall responsibility for your care. If they have a special interest in diabetes or are an expert, they may play a bigger role in your care. If not, they may refer you to a diabetes clinic.

Hba1c test A finger-prick blood test or blood sample from the arm that measures blood sugar levels over the last two to three months.

Hyperosmolar hyperglycaemic state (HHS) When blood sugar levels have been very high (over 30 mmol/l) for a while. Causes severe dehydration and needs hospital treatment.

Insulin The hormone that keeps the levels of glucose in the blood under control.

Metformin A common medicine used to treat Type 2 diabetes by reducing the amount of sugar (glucose) that the liver releases into the bloodstream.

Milliones per litre (mmol/l) A measurement of the concentration of a substance in a given amount of liquid: expresses the amount of glucose in the blood.

Monofilament A fine plastic strand used for testing the nerves in your feet.

Ophthalmologist (op-thal-mol-a-jist) A doctor who specialises in conditions that affect the eye. They'll be involved with your retinal screening review and treatments, if needed.

Personal health targets The targets, usually set by your diabetes team, which you need to aim for to control your diabetes: these include blood sugar levels, blood pressure and weight.

Pharmacist (farm-a-sist) Based in pharmacies or chemist shops. As well as giving you your prescription supplies, they may give you a medication review and lifestyle advice.

Podiatrist (po-de-a-traist) An expert in the foot and legs who may be asked to look for – and manage – problems related to diabetes.

Practice nurse A nurse based at your GP surgery who'll support your diabetes care. Some may have specialist knowledge of diabetes. Many are responsible for managing the day-to-day needs of your diabetes care.

Psychologist (sy-kol-a-jist) An expert who'll give counselling to help you deal with any difficulties you're facing, especially with managing the effects and impact that diabetes has on your life.

Retinopathy (rey-in-op-a-thee) A condition where there's damage to the retina – the 'seeing part' of the eye.

BMI Body Mass Index, which shows your weight in relation to your height.
Get in touch

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@DiabetesUK

www.diabetes.org.uk

www.facebook.com/diabetesuk

www.diabetes.org.uk/t2-forum

*Monday–Friday, 9am–6pm. The cost of calling 0345 numbers can vary according to the provider. Calls may be recorded for quality and training purposes.