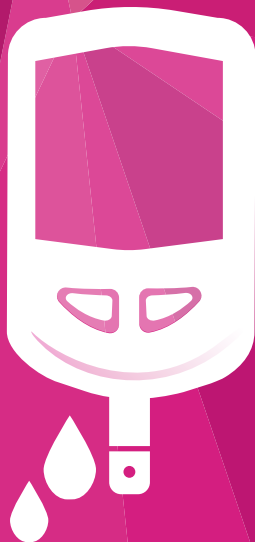


# TYPE 2 DIABETES

Chest  
Heart &  
Stroke  
Scotland



ESSENTIAL GUIDE

# This Essential Guide is about Type 2 diabetes.

## It explains:

- What diabetes is
- The risks of Type 2 diabetes
- The common symptoms of Type 2 diabetes
- How to reduce your risk of developing Type 2 diabetes or manage your diabetes if you already have it

## What is diabetes?

Diabetes is a condition caused by too much glucose in your blood.

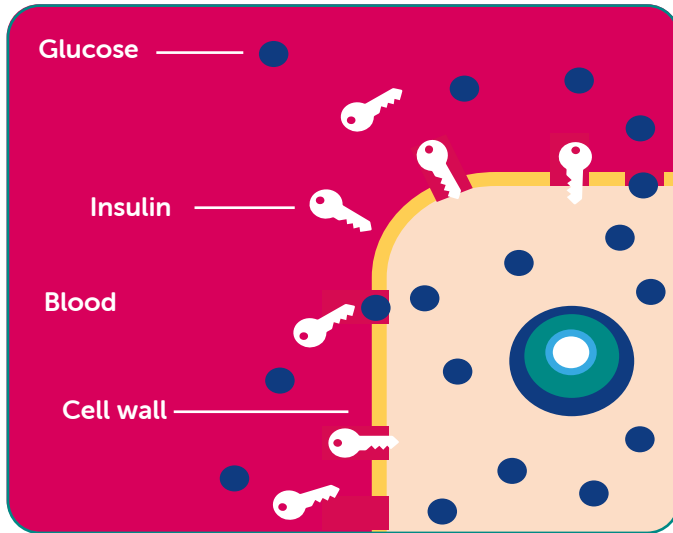
Glucose (often called blood sugar) comes from carbohydrates found in food. Glucose is used by your body for energy (fuel). It is needed by your cells and organs, including your brain.

The amount of glucose in your blood is controlled by a hormone called insulin. Insulin is produced in your pancreas.

When you eat, glucose from food enters into your blood stream. When this happens your insulin acts like a key. It sends a signal to your cells telling them to 'unlock' and let glucose in. Inside your cells glucose is then changed into energy.

Diabetes develops if you do not have enough insulin or if your insulin is not working properly. As a result, your cells cannot be easily unlocked to let glucose in to be changed into energy. Glucose then starts to build up in your blood.

**Insulin working properly**



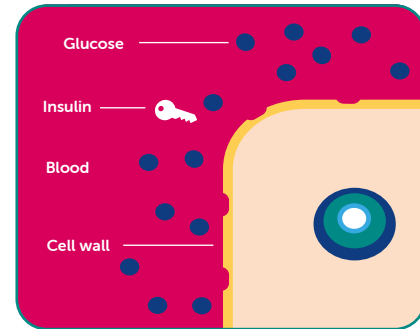
# Types of diabetes

There are 2 main types of diabetes.

## Type 1 diabetes

- In Type 1 diabetes, your pancreas is not able to make insulin. This means your cells cannot be unlocked to let glucose in.

**Type 1 diabetes - little or no insulin**

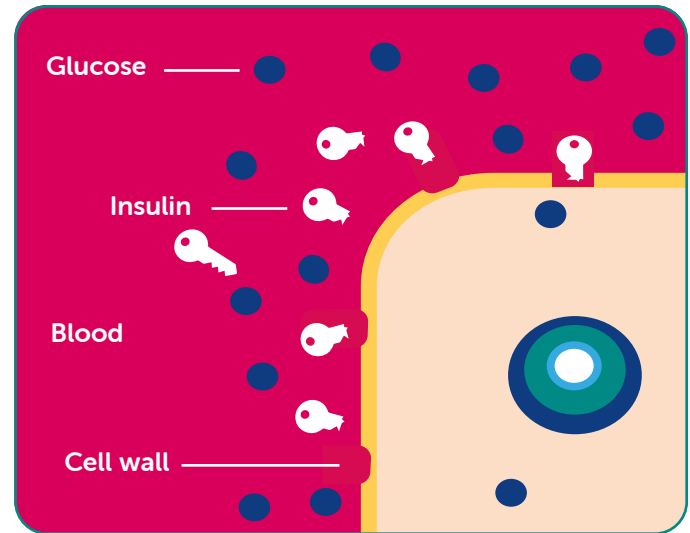


- A diagnosis of Type 1 diabetes is more common in children and young people.
- Type 1 diabetes can develop quickly over weeks or even days. It is not linked to lifestyle and cannot be prevented.

## Type 2 diabetes

- In Type 2 diabetes, your body does not produce enough insulin or your insulin is not working properly. This is called 'insulin resistance'.
- Because of problems with your insulin, not enough glucose can enter into your cells to be changed into energy.
- Until recently, only adults were diagnosed with Type 2 diabetes. However, more and more children and young people are now being diagnosed too. This is linked to an increase in weight problems and obesity in children and young people.
- Around 90% of people with diabetes have Type 2.
- With the right treatment and lifestyle changes, Type 2 diabetes can be managed well.

### Type 2 diabetes - insulin resistance



Type 2 diabetes is more common in people of black African, African-Caribbean and Asian origin. On average, Type 2 diabetes develops around 10 years earlier in people of black or South Asian origin than in people from a white European background.

# What are the risks of Type 2 diabetes?

High levels of glucose in your blood can damage your arteries. This damage can lead to a build-up of fatty patches called atheroma along the walls of your arteries. Over time, this build up causes your arteries to become narrow or blocked.

If an artery carrying blood to your heart becomes blocked, it can result in a **heart attack**. If an artery carrying blood to your brain becomes blocked, it can result in a **stroke**.

As well as heart disease and stroke, diabetes increases your risk of other serious health conditions. These include:



**Kidney disease** (nephropathy). This prevents your kidneys from being able to get rid of the waste in your blood and can make you very ill.



**Nerve damage** (neuropathy). This can cause tingling, numbness, pain, twitching and muscle weakness.



**Reduced blood flow** to your legs and feet. This can slow down healing if you get an infection. In bad cases, amputation (removal of the infected foot or leg) is needed.



**Eye problems** (diabetic retinopathy). In some cases, this can lead to blindness. In the early stages, this condition has no symptoms so it is important to attend regular diabetic retinopathy screening checks.



**Gum disease** and other dental problems.

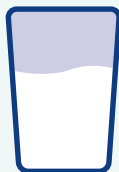


**Problems with sex**. This can include being unable to keep an erection.

# What are the symptoms of Type 2 diabetes?

Symptoms of Type 2 diabetes include:

Being very thirsty



Going to the toilet a lot, especially at night



Feeling more tired than usual



Losing weight without trying to



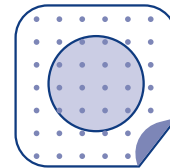
Blurred vision



Itching around your penis or vagina



Slow healing of cuts or wounds



# How is Type 2 diabetes diagnosed?

If you think you have any of the symptoms of diabetes, it is important to see your doctor as soon as possible. They will talk with you about your symptoms. You may also need to have a blood and urine (pee) test.

If you are pregnant you may be asked to do a Glucose Tolerance Test (GTT). This will show if your body is having problems processing glucose.



# Pre-diabetes

Your test results may come back as normal. However, you may still be diagnosed with 'pre-diabetes'.

Pre-diabetes means that you do not have Type 2 diabetes yet. However, you are at high risk of developing it, especially if you are overweight.

Making changes to your diet and lifestyle now can reduce your risk of developing Type 2 diabetes later.

About half a million people in Scotland are at a high risk of developing Type 2 diabetes.



# How to reduce your risk or manage Type 2 diabetes

Type 2 diabetes cannot be cured but the good news is that living a healthy lifestyle can greatly reduce your risk of developing it. If you already have it, a healthy lifestyle can also help you manage your diabetes and live well.

New evidence suggests that, for some people, it is possible to put Type 2 diabetes into remission through diet and weight management. Being in remission means that you no longer have any signs of diabetes.

Good control of Type 2 diabetes can reduce your risk of heart attack or stroke by up to 50%.

There are many things you can do to help live a healthy lifestyle and reduce your risk of Type 2 diabetes or manage it well if you already have it.

## Stay a healthy weight

Being overweight is a big risk factor for Type 2 diabetes. If you are overweight and have Type 2 diabetes, or want to prevent it from developing, it is important that you try to lose weight. Losing weight will help your body to manage your glucose levels better.





## Eat a healthy, balanced diet

A healthy, balanced diet can reduce your risk of Type 2 diabetes or help you manage your diabetes if you already have it. This means:

Eating regular meals and including high fibre, starchy foods. Starchy foods are things like potatoes, bread, rice and pasta. High fibre varieties are things like wholemeal bread and brown rice.

Eating 5 portions of fruit and vegetables a day. Get a good mix of vitamins and minerals from eating different colours of fruit and vegetables.

Avoiding fruit juices and smoothies. These are high in 'free sugars' which are bad for you.

Limiting saturated fat, sugar and salt. Check the 'traffic light' nutrition label on food packaging to find out how much saturated fat, sugar and salt is in the food. Aim to eat more foods that are colour-coded green or amber.

Eating at least 2 portions of fish a week. Include 1 portion of oily fish like salmon, sardines, herring or mackerel.

If you have Type 2 diabetes you can still eat fruit but be aware of your portion sizes. Aim for 2 portions of fruit and at least 3 portions of vegetables a day.

## Do regular physical activity



Physical activity reduces your risk of developing Type 2 diabetes. The more you do, the lower your risk.

If you already have Type 2 diabetes, physical activity can help to improve your blood glucose levels and help you lose weight if you need to.

Aim for at least **150 minutes** (2 ½ hours) of moderate physical activity a week. This could be 30 minutes on 5 or more days, or a few sessions each day of 10 minutes at a time.

Moderate physical activity is activity that makes you feel a little out of breath but still able to talk.

Aim to also do strength exercises on 2 or more days a week. This doesn't have to be in a gym - just carrying your shopping counts.

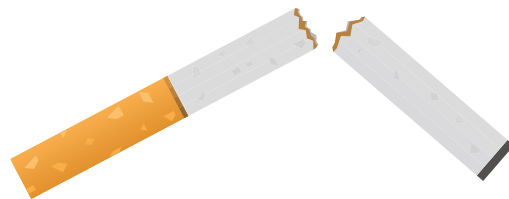
## Stop smoking

If you smoke, you are more likely to develop Type 2 diabetes.

If you already have diabetes, smoking also doubles your chance of developing the other serious health conditions caused by diabetes.

You are 4 times more likely to quit smoking with professional support and medication.

There is lots of free support available to help you stop smoking. Ask your doctor, nurse or pharmacist for information or call **Quit Your Way Scotland** on **0800 848 484**.



## Limit your alcohol intake

To keep health risks from alcohol to a low level it is safest not to drink more than 14 units a week on a regular basis. If you do drink as much as 14 units, spread them out over 3 or more days. Regularly drinking more than this increases your risk of Type 2 diabetes.

For advice on how to reduce your alcohol intake go to **[www.drinkaware.co.uk](http://www.drinkaware.co.uk)** or phone Drinkline for free on **0300 123 1110**.

### One unit is the same as:



Remember that alcohol can be high in sugar and affect your blood sugar levels. It can also be high in calories and can affect your weight.

## Take your medication

If your blood glucose level is very high, you may need medication. Your doctor will discuss with you what medication may be best for you.

Some people will need insulin injections every day to manage their blood glucose levels.


## Manage your cholesterol


People with Type 2 diabetes often have high cholesterol. This further increases your risk of heart attack and stroke.

If you have diabetes, it is important to get your cholesterol levels checked regularly. You may need to take cholesterol-lowering medicine such as statins.


Following a healthy, balanced diet can also help to reduce cholesterol.

# Myths and Facts


 If you have diabetes, eating sugar is bad for you - **MYTH**

 If you have diabetes it is OK to eat sugar as part of a healthy, balanced diet. A healthy, balanced diet is a diet that is low in sugar, saturated fat and salt - **FACT**

 Only overweight or obese people develop Type 2 diabetes - **MYTH**

 Being overweight or obese is a serious risk factor for Type 2 diabetes. However, not everyone who develops Type 2 diabetes is overweight or obese and not everyone who is overweight or obese develops Type 2 diabetes - **FACT**

 People with diabetes go blind - **MYTH**

 Diabetes is one of the leading causes of blindness in adults. However, you can reduce the risk of eye damage from diabetes by following guidance on how to live well with diabetes. It is important to go for regular diabetic retinopathy screening checks and discuss any problems with your doctor or eye specialist - **FACT**

Our publications are available for free to anyone in Scotland who needs them. Go to **[www.chss.org.uk/publications](http://www.chss.org.uk/publications)** for all our resources, including other Essential Guides in this series.

For free, confidential advice and support from our **Advice Line nurses**, call: 0808 801 0899 (Mon-Fri 9.30am-4pm), text: NURSE to 66777 or email: [advice@chss.org.uk](mailto:advice@chss.org.uk).

Across Scotland, over one million people – that's one in five of us – are living with the effects of a chest, heart or stroke condition. We are here to help everyone who needs us. But we need your support to do this. Go to **[www.chss.org.uk/supportus](http://www.chss.org.uk/supportus)** to find out how you can help more people in Scotland.

**If you would like this resource in an alternative format, please contact our Advice Line nurses.**

**Chest  
Heart &  
Stroke  
Scotland**



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