

# What is diabetes and how do you have to look after yourself?

## What does being diabetic mean?



- **You are diabetic**

This means that the amount of sugar you have in your blood is higher than the normal. The most important type of sugar is called *glucose*. The amount of sugar in the blood is called "glycaemia". The normal glycaemia level is between 70 and 125 mg/dl.

- **Why do we have sugar in our blood?**

Sugar, glucose, is the source of energy for the brain, the muscles, the liver and other tissues. It's like petrol in a car. Sugar, along with proteins and fats, is found in most of the foods that we eat, but the proportion is different according to the food.

- **Why are you diabetic?**



Because the sugar that you eat in your food is not used by the tissues and accumulates in your blood. So that the sugar can be used in the tissues, the action of a hormone called *insulin* is needed, which is made in an organ called the *pancreas*. Insulin is the key which opens the door to let glucose (sugar) into the tissues and so be used as a source of energy.

- **Why do you have more than the normal amount of sugar in your blood?**

Type 2 Diabetes happens for 2 reasons:

- Because the tissues don't react to the insulin and don't let the glucose in. Therefore, the glucose stays in the blood and the blood-sugar level goes up. This means that the pancreas has to make more insulin to try to get the glucose into the tissues.
- After a certain time, the pancreas gets tired and stops making insulin and so, the glucose can't get into the tissues either.

- **How do you notice that you are diabetic?**

To start with you don't realise, but if the sugar is very high, you might notice that you feel more hungry, more thirsty or that you go to the toilet to pass urine more often. If the sugar stays high for a long time, you could start to have serious health problems.

## How should you look after your diabetes and what can happen?

### • What can happen?

A high level of sugar in your blood for a period of time can lead to your organism not functioning properly, the arteries which carry your blood can become blocked and the nerves damaged. All this affects many parts of the body. The most frequent are:



- The heart: the heart becomes weaker or even, if the arteries become blocked, you could have a heart attack.
- The brain: if the arteries become blocked, you could have an embolism.
- The legs and feet: when the arteries are blocked, the blood can't get through and it can become painful to walk, wounds become infected, and they could even have to be amputated (cut off). So it is very important that you keep your feet clean and well cared for. You need to check them every day to see if you have any breaks in the skin or sores.
- The nerves: you may notice strange sensations, not feel some parts of your body (they feel numb) or that it is very painful just to touch them.
- The eyes: affects the small arteries in the eyes and you could end up losing your sight.
- The kidneys: can stop working.



But all these complications can be avoided. These problems are caused when the glycaemia is badly controlled for years and there are other risk factors involved such as high blood pressure or smoking.



If you don't manage to lower your blood-sugar level (the glycaemia level), you could have serious health problems without being aware of it.

### • How can you avoid having serious health problems?

It is very important that you help your doctor to keep your diabetes well-controlled. To do this:

- Eat the right food. Later on we'll explain which ones.
- Do physical exercise every day. Later on we'll explain more.
- Take the medication every day as your doctor or nurse has instructed you to do, if they have given you tablets or insulin injections to lower your glycaemia.
- Control other things which make the complications of diabetes worse:
  - Control your blood pressure.
  - Control your cholesterol, the level of fats in your blood.
  - Don't smoke.
- Visit your health centre every 3-6 months so they can monitor your condition, check your blood pressure and levels of sugar and cholesterol (they will do a blood test). They will also check when and how you take your medications.



# What things can you eat?

You can and should eat a variety of food but watch the quantity. The best thing to drink is water. If you are getting treatment with insulin or with tablets, always follow the advice of your doctor or nurse.



## • If you are overweight

You should lose that extra weight. Try to eat less until you reach your appropriate weight. Try to distribute your food so you are eating several times throughout the day

## • Sugars, fats and vegetables

Sugars are essential for your body to work properly, so you shouldn't cut them out completely from your diet.



- Try to keep refined sugars to a minimum, because they raise the blood-sugar levels more rapidly. Avoid sugar, honey, cakes and pastries, sweets, sugary drinks (soft drinks, etc.) and icecreams.
- You can have "diet" drinks.
- Don't eat much bread or other similar food.
- Don't eat a lot of fruit.
- Don't overdo the "diabetic foods". They don't contain glucose, but they do have other sugars.
- Avoid animal fats.
- Eat some raw vegetables with every main meal: lettuce, tomato, celery, cabbage, onion, etc.



## • Cooked foods

- Eat grilled, steamed, baked and boiled foods.
- Don't eat a lot of fried foods because they are high in fat.
- It's better to cook with olive oil.
- Don't use burnt oils (they block the arteries and stop the blood from circulating properly).
- Add very little salt during or after cooking your food.

## • If you are unwell

If one day you are not well and can't eat normally, remember that you must drink plenty of fluids. You shouldn't cut out pasta, rice, potatoes or pulses. Try to eat milk, or yoghurt and fruit.



## • And during Ramadan?

You don't have to do Ramadan. You know, people who are ill are exempt from Ramadan, because if you do it, the diabetes could get worse and you would be in danger of developing complications.

If, despite this, you want to do it, talk to your doctor about it, because if you don't eat during the day and you take tablets for the sugar or insulin, your sugar could drop dangerously low. It might be possible for you just to take a different tablet that is not so strong in the morning and at night. You have to avoid drops in your blood-sugar level (hypoglycaemia) which could cause very serious problems.

## Why do you have to do physical exercise?

When you do exercise, your body uses up sugar and lowers your blood-sugar level. If you get regular exercise, 4 or 5 days a week, you'll be better controlled, possibly need less medication and you'll have less complications.



### • What type of exercise should you do?

The right kind of exercise for you, the duration and the intensity depend on your age, your own particular situation and the type of treatment you are on. If you're not sure, ask your doctor or nurse.

Moderate, prolonged exercise is better than intense physical effort of short duration. It's better to dance or go for a walk than play a game of football. A great way to get physical exercise for the majority of people with diabetes is to go for a brisk walk for an hour every day. It's also better to go up the stairs than to take the lift.

### • What things should you remember when doing physical exercise?



- Try to do your physical exercise with somebody else.
- If you don't feel well or you feel dizzy while you are doing physical exercise, stop and rest, have something sweet and tell somebody. Always carry a sweet, some sugar or a sugary drink on you.
- Wear cotton socks and comfortable shoes for doing any type of exercise.
- Don't exercise if you have sores on your feet and tell your doctor or nurse because you are at greater risk of them becoming infected.
- Wait 1 or 2 hours after eating before you do exercise.
- Drink water during and after doing exercise.

## Why do you have to take tablets to control the diabetes?

Type 2 Diabetes occurs either because your insulin is not able to help the glucose enter the tissues or because you don't have enough insulin. There are medications for trying to solve the two problems.

- Take the medication just as your doctor or nurse has told you to. Otherwise it could be dangerous.
- Never change or take anybody else's medication.



### • And if you feel fine?

You don't feel the diabetes and so even though you may feel fine, you have to take the medication.

### • It's a lot of tablets

It is possible that depending on the progression of your diabetes, you may need to take quite a few tablets every day. Do not stop taking the medication without asking your doctor or nurse.



### • And if the tablets make you feel unwell?

Some tablets for treating diabetes can cause an excessive drop in your sugar level (hypoglycaemia). The most common symptoms are blurred vision, tremors, sweating, dizziness, hunger, headache, palpitations, confusion (you don't know where you are or what you are doing). If you notice any of these and you can't prick your finger to check your sugar level at that moment, take some sugar and go to see your doctor or nurse.

If you think that any of the tablets make you feel unwell or you notice anything strange, ask your doctor or nurse, but do not stop taking the treatment without consulting them.

## Why has the doctor told you that you have to take insulin?

You need to give yourself insulin because your body doesn't make enough insulin to allow the glucose into your tissues. The insulin has to be injected because it is destroyed in the stomach and so cannot be taken by mouth.



### • Insulin is a medication for diabetes

Insulin is a wonderful medication for treating diabetes. Sometimes it is essential. But it can also be dangerous because it can lower the blood-sugar level too much (hypoglycaemia). It is very important that you strictly follow the instructions that your doctor or nurse has given you. If you have any doubts, always ask them.

### • There are different types of insulin

There are different types of insulin depending on their strength and way of acting. Your doctor or nurse will give you the one which suits you best according to your blood-sugar levels, what you eat and the amount of exercise you do. Do not swap your insulin with other people. Always use the amount that you have been told to use and at the times you have been told.



### • And if you feel unwell when you take the insulin?

If you are taking insulin and you feel unwell (dizziness, sweating, hunger), it could be because your blood-sugar level is too low (hypoglycaemia) and this could be dangerous. If at that moment, you can't prick your finger to measure your glycaemia, take something with sugar and go to see your doctor or nurse.

## What other things do you have to remember?

The fundamental objective of the treatment of your diabetes is to prevent complications and give you the maximum quality of life. It is therefore important that your blood-sugar levels are as normal as possible and that you don't have other risk factors which are as serious, such as high blood pressure, high cholesterol, smoking and/or excessive weight.

There are powerful drugs which can control blood pressure and cholesterol levels, but they have to be taken every day without fail. It is possible that your doctor will also prescribe you small doses of aspirin which will help to prevent artery disease. You may have to take quite a few tablets every day to control your diabetes, blood pressure and cholesterol. You need these medications. Do not stop taking them.

### • Hypertension (High Blood Pressure)

More than half of all diabetics have blood pressure which is too high. Generally hypertension doesn't have symptoms either. The increase in the pressure in the arteries affects the arteries all over the body and contributes to the occurrence of complications (heart attacks, embolisms, blindness, kidney failure...).



- You must cut down the amount of salt in your food.
- You should not eat salty food.
- Try to keep your weight under control.
- Do more exercise.
- Visit your doctor or nurse every 4-6 months to have your blood pressure checked. You can also have it checked at the Chemist's or at home, if you have a machine. Aim to keep it under 130/85 mmHg.

### • Cholesterol

Approximately half of all diabetics have cholesterol levels which are too high. This doesn't cause symptoms either and you can only find out about it with a blood test. High levels of cholesterol contribute to disease of the arteries all over the body and to complications.



- Your diet should be low in fat in order to reduce cholesterol levels.
- Control your weight. Obesity does not help cholesterol levels.

### • Don't smoke

- Try to keep to the right weight for your height and age.

Diabetes can be controlled.

Follow the advice of your doctor or nurse and always take all the medication as and when you have been told to.

**You too can manage it.**