



# Advice



Eat healthy food



Exercise regularly



Don't smoke



Being overweight can increase the risk of getting diabetes.



A Hypo is when your blood glucose level is too low.



Not enough food, cold weather, vomiting cause a Hypo.



Watch out for sweating, headache, shaking, drowsiness.



When you feel a Hypo stop and take some sugar.



# Advice



**Diet:** Maintaining a healthy diet and preventing or reducing overweight will help you control your diabetes. Aim for 5 portions of fruits/ vegetables daily.

**Exercise:** Regular exercise will help to maintain an optimum weight and will benefit all members of the family. Usually 30 mins of brisk walking, 5 times a week is enough.



**Smoking:** It is widely accepted that smoking causes heart and lung disease. Most diabetes complications are worsened by smoking.

**Weight control:** There is a greater risk of developing diabetes and heart disease with increasing waist circumference.



**Alcohol:** Alcohol lowers the blood sugar, so it is important not to drink on an empty stomach.

**Driving:** Plan your trip carefully, avoid hypos while driving, keep glucose in the car.



**What is hypoglycaemia or Hypos:** Hypoglycaemia (a 'hypo') is when your blood glucose levels are too low, usually less than 4 mmol/l.

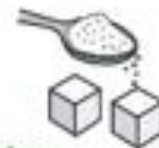
### What causes a Hypo?

- Not enough food to fuel an activity
- Too little food at any stage of the day
- A missed or delayed meal or snack
- Too much insulin
- Cold weather
- Vomiting

### Whats out for!!

- Sweating
- Drowsiness
- Mood change
- Pallor
- Lack of concentration
- Glazed eyes
- Headache
- Hunger
- Trembling or shaking

As soon as you feel as if you may be going into a hypo, you should stop what you are doing and take some sugar.



*Are you eating for health?*

*How often do you exercise?*

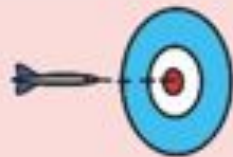
*Do you smoke?*

*Do you know your target weight?*

*How will you know you are having a hypo?*



# Blood Pressure



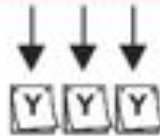
Target -  
**140 / 80**



Good blood pressure control.



Raised blood pressure can increase diabetes complications.



You must check blood pressure regularly.



Eat healthy food, reduce salt and exercise regularly.



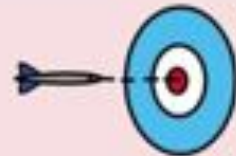
Remember  
your target is





**140 / 80**



# Blood Pressure

Target - **130 / 80**



-  Excellent control of blood pressure is required!
-  Raised blood pressure can increase most complications of diabetes.
-  It is important that it is checked regularly.
-  You may need to change what you eat and exercise more.

## UK Prospective Diabetes Study Blood Pressure Control Study

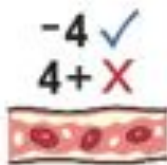
A Blood Pressure of 144/82 versus 154/87

Death related to diabetes reduced by	32% !
Heart Attacks reduced by	21% !
Stroke reduced by	14% !

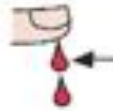


Remember your target is  
Have you hit the bulls eye?

**130 / 80**



# Cholesterol



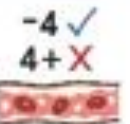
Cholesterol is the amount of 'fat' in blood.



Too much fat can make you overweight.



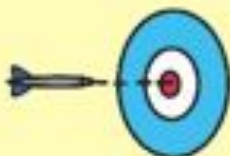
High cholesterol can lead to heart problems and strokes.



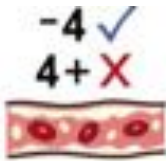
Your cholesterol level target is less than 4.



Low fat diet, exercise and tablets will reduce cholesterol.

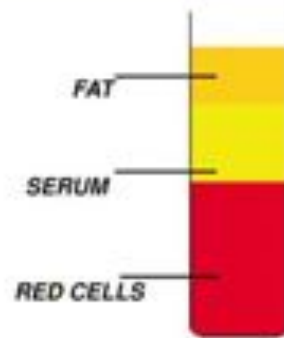


*Do you know what your cholesterol level is?  
Are you on target?*



# Cholesterol

- Cholesterol is the amount of 'fat' in blood.
- Some blood fats are necessary to provide important energy sources.
- Too much fat can cause you to be overweight, making it much more difficult to control your diabetes.
- It can cause blocking of blood vessels and lead to heart attacks and strokes.



How much fat does your blood contain? The optimal target for blood cholesterol level is

**LESS THAN 4**

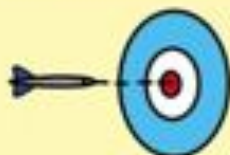


There are two types of cholesterol that we can check to find out your heart disease risk.

Good cholesterol called "HDL" and the bad cholesterol called "LDL".

Along with a low fat diet, exercise and weight loss, you will usually need to take tablets to get your cholesterol to target.



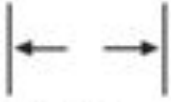
Lipid lowering drugs such as **STATINS** help you to lower the cholesterol in your body.



*Do you know what your cholesterol level is?  
Are you on target?*



# Diabetes Control

   **4 - 7**  
Good blood glucose range is 4 - 7.

    
Achieve this with regular blood glucose monitoring.

 %  **60**   
HbA1c% tells you your blood glucose every 60 days.

     
Many drugs help control diabetes including insulin.

  %      
Low HbA1c% reduces heart, eye and kidney problems.



*Are you in control of your diabetes?  
What is your HbA1c%?*



# Diabetes Control



Blood glucose should be kept within a controlled range:

**4 - 7**

This can be achieved by regular blood glucose monitoring at home.



## What is HbA1c%?

This value tells you the amount of glucose sticking to your blood over the last 60 days. It reflects how well your diabetes has been controlled.

The aim is to have a value of less than **6.5%**



## Which drugs help control diabetes?

Metformin, gliclazide, glimepiride, pioglitazone, rosiglitazone, insulin and many other drugs.

### Risk reduction with a 1% reduction in HbA1c

Poor circulation to the legs	43%
Eyes and early Kidney disease	37%
Heart Failure	16%
Heart Attacks	14%
Stroke	12%



*Are you in control of your diabetes?  
What is your HbA1c%?*





# Eyes



Your eyes have many parts, lens, retina and optic nerve.



People with diabetes can have bad retinas and eye disease.



It is important to have an eye test every year.



Eye tests help diagnose diabetic eye disease.



Laser treatment can save vision in many patients.

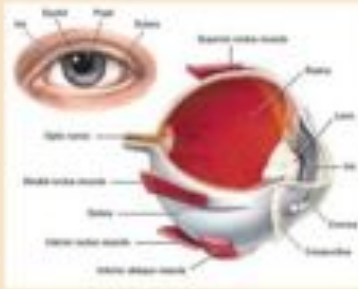


***When was the last time you had your eyes checked?***



# Eyes

## Is diabetes slowly stealing your vision?



### How your eyes work







Your eye has a lens and an opening at the front which adjust to bring objects into focus on the retina at the back of the eye.

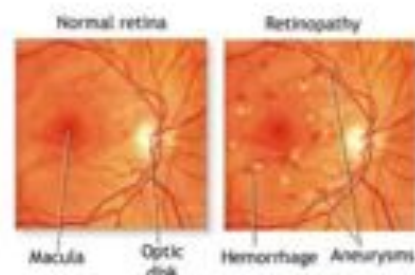
The retina is made up of delicate tissue that is sensitive to light rather like the film in a camera. The centre of the retina is a small area called the macula. It is vital because it enables you to see fine detail.

**A person with diabetes can have an eye disease and not even know it until serious, irreversible vision loss has occurred.**

**The only way to diagnose early signs of diabetic eye disease is by a dilated eye exam at least once a year.**

### DIABETIC RETINOPATHY

-  Diabetic retinopathy is the commonest cause of blindness under the age of 65 in the Western World.
-  37% of diabetes patients have retinopathy at diagnosis.
-  1500 new cases of blindness could be prevented by yearly screening in the UK.
-  20 years after diagnosis 95% with Type 1 diabetes have retinopathy.
-  60% of patients with Type 2 diabetes have retinopathy at 20 years.
-  Laser treatment can save vision in 90% of patients.



**When was the last time you had your eyes checked?**



# Feet



Patients with diabetes develop foot ulcers and numb feet.



It is important to examine your feet regularly.



You must treat foot injuries promptly.



Check inside shoes for seams that may cause blisters.



It is important to get advice about your feet.



***When was the last time you had your feet checked?***



# Feet



During a lifetime your feet may walk the equivalent of four times around the world! To ensure they continue their trip through life without complaint it pays to look after your feet!

People suffering from diabetes can often experience loss of sensation in their feet. Even the smallest injury can lead to infection which if not treated promptly may lead to serious complications.



It is important that you examine your feet regularly. You should also feel inside all shoes for any seams or stitching which could rub the foot and lead to problems. It is imperative that you receive regular foot advice or treatment.



## Foot Problems

15% of patients with diabetes will develop foot ulcers due to nerve damage and reduced blood flow.



Foot ulcers precede 85% of amputations in people with diabetes. Foot ulcers are the commonest cause of amputation in the UK.

### Liverpool Diabetes Clinic implemented a foot protection programme

When patients with diabetes and foot deformities attended weekly clinics with a trained podiatrist and foot education, it was found that at 2 years ulceration was reduced to 2.4% compared with 3.5% and amputation was reduced by 3 fold.



*When was the last time you had your feet checked?*



# Guardian Drugs

## What are Guardian Drugs?



Guardian drugs reduce further diabetes complications.



Asprin can reduce heart problems and blood pressure.



ACE-inhibitors reduce heart, eye, and kidney problems.



**'pril'**

The names of ACE-inhibitors end in 'pril'.



***Do you know if you are taking any of the guardian drugs?***



# Guardian Drugs

## What are Guardian Drugs?

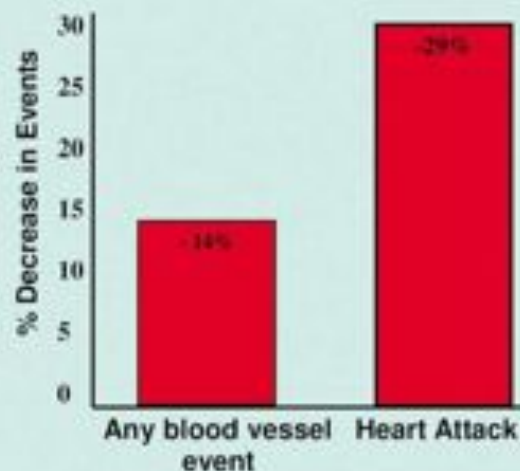
A guardian drug is given in addition to your medication in order to decrease your risk of further diabetes complications.

### ASPIRIN

Diabetes UK recommends aspirin to prevent heart problems in all diabetes patients (older than 30) with any of the following:

Heart attack, angina, high blood pressure, eye problems, blood vessel disease and kidney problems.

Also if: Indo-Asian, obese, high cholesterol, heart disease risk greater than 15%, family history of heart disease, smokers.



### ACE INHIBITORS

ACE-inhibitors are drugs that have a special role in preventing diabetes complications. The HOPE study showed that one ACE-inhibitor, ramipril, reduced:

- heart disease
- stroke
- kidney problems
- eye disease



*The names of these drugs end in 'pril'*



**Do you know if you are taking any of the guardian drugs?**