

SAFARI DOCTORS HEALTH AMBASSADORS

DIABETES

LEARNING OUTCOMES

- ▶ What is hypertension
- ▶ Why is it important
- ▶ How can it be prevented
- ▶ How can it be treated

WHAT IS DIABETES?

- ▶ Disease when your body stops responding to and producing a hormone called *insulin*
- ▶ Insulin helps your body to take in the sugar that you eat and turn it into energy your body can use
- ▶ Without insulin the levels of sugar (*glucose*) can build up very high in the body, causing damage to various organs

HOW WOULD I KNOW I HAVE IT?

- ▶ Often there are not any symptoms - you do not feel different
- ▶ BUT this does not mean it isn't causing damage
- ▶ If it's severe you might get:
 - ▶ Sleepy/pass out
 - ▶ Wee a lot
 - ▶ Thirsty
 - ▶ Weight loss
 - ▶ Blurry vision
- ▶ So you can have complications without knowing

HOW WOULD I KNOW I HAVE IT?

- ▶ It is diagnosed by doctors/nurses if:
 - You have a test of your urine (wee) showing high levels of sugar
 - You have a blood test showing your blood sugar (*blood glucose*) is raised - this is done by a small fingerprick
 - You have a blood test showing longer term raised sugar - blood is taken and sent away to be tested
 - You have symptoms that fit with diabetes

WHAT ARE THE RISKS FOR IT?

▶ Diet

- ▶ High sugar (sugary/fizzy drinks, adding sugar to food and drinks when cooking, sweets, honey...)
- ▶ Too much fat
- ▶ Too much salt

▶ Obesity

▶ Lack of exercise

▶ Family history - other people in your family having diabetes

WHAT PROBLEMS DOES IT CAUSE?

- ▶ Damage to organs
 - ▶ Heart and blood vessels
 - ▶ Eyes
 - ▶ Kidneys
 - ▶ Nerves
 - ▶ Feet
- ▶ Very high levels of sugar can cause dehydration, sleepiness and an illness which can be life threatening if not treated fast
- ▶ Links to other diseases like high blood pressure and high cholesterol

HEART & VESSELS

- ▶ Blood vessels get harder which can cause
 - ▶ Heart attacks
 - ▶ Angina (chest pain as heart doesn't get enough blood)
 - ▶ Stroke
 - ▶ Death

EYES

- ▶ Damage to the back of the eyes
 - ▶ Blurry vision
 - ▶ Blindness

KIDNEYS

- ▶ Chronic kidney disease
- ▶ This can cause many long term problems

NERVES

- ▶ Reduced sensation especially in hands and feet
- ▶ Weakness
- ▶ Impotence (tasa)

FEET

- ▶ Ulcers
- ▶ Infections
- ▶ These may cause death of toes
- ▶ Pain
- ▶ Change in shape

BUT...

- ▶ If you catch this disease early and start to treat it, you can reduce the risk of these a lot
- ▶ So it is important to try and prevent it *before* it starts
- ▶ Or to *treat it early*

HOW CAN YOU PREVENT IT?

Lifestyle changes

- ▶ Diet, especially reducing sugar and salt
 - ▶ Increase exercise/physical activity and weight loss
 - ▶ Reduce risk factors for linked diseases e.g. high blood pressure
 - ▶ Stop smoking
- ▶ 5 PORTIONS OF FRUIT AND VEGETABLES PER DAY
 - ▶ 1/3 OF MEALS SHOULD BE STARCHY FOODS (E.G. CEREALS, WHOLEGRAIN BREAD, POTATOES, RICE, PASTA) + FRUIT AND VEGETABLES
 - ▶ WHOLE GRAINS FOR STARCH E.G. BROWN RICE, PASTA, BREAD
 - ▶ REDUCE FATTY FOOD SUCH AS FATTY MEATS, CHEESES, FULL-CREAM MILK, FRIED FOOD, BUTTER, ETC.
 - ▶ 2-3 PORTIONS OF FISH PER WEEK (IDEALLY ONE OF THESE SHOULD BE 'OILY', SUCH AS HERRING, MACKEREL, SARDINES, KIPPERS, PILCHARDS, SALMON, OR FRESH TUNA)
 - ▶ EAT LEAN (LESS FATTY) MEAT, OR EAT POULTRY SUCH AS CHICKEN (WITHOUT THE SKIN)
 - ▶ IF YOU DO FRY, USE A VEGETABLE OIL E.G. OLIVE OIL
 - ▶ REDUCE SALT

HOW IS IT TREATED?

- ▶ Lifestyle changes are just as important if you know you have diabetes, especially a good diet, exercising and losing weight

Tablets

- ▶ If your blood sugar is not coming down with lifestyle changes you may be started on tablets e.g. metformin or drugs to help your blood pressure and cholesterol

Insulin

- ▶ If it is still not controlled you may have to have injections of insulin

HOW IS IT TREATED?

- ▶ The aim of these treatments is to get your blood sugar back down to a normal level
- ▶ If you manage this the risk of complications is a lot lot lower
- ▶ You should also see your doctor/nurse regularly to have checks for your blood sugar levels and complications
- ▶ If you start medications it is important to take them regularly or they do not work

QUESTIONS

1. What is diabetes (what is too high and what is too low)?
2. What are 5 risk factors for diabetes?
3. Name 5 organs which can be affected
4. Give 3 important changes to diet to prevent/help treat diabetes
5. What symptoms might you have with diabetes?