

## DIABETES - FACTS SHEET



### 12 things you should know about diabetes

#### 1. What is diabetes?

Diabetes is a chronic disease that develops when the pancreas does not produce enough insulin or when the body becomes unable to use the insulin it produces effectively.

#### 2. What is insulin?

Insulin is a hormone made by the pancreas that enables cells to absorb glucose from the blood and use it for energy. Diabetes leads to raised levels of glucose (sugar) in the blood (hyperglycaemia), which are associated with long-term damage to the body.

#### 3. What are the main types of diabetes?

There are three main types of diabetes: type 1, type 2 and gestational diabetes. Type 1 is an auto-immune condition that usually occurs early in life (infancy or childhood), while type 2 generally has a later onset (during adulthood) and is often associated with poor lifestyle choices. Gestational diabetes is the term for elevated blood glucose levels during pregnancy. These usually return to normal once the baby has been born.

#### 4. What is the most common type of diabetes?

Type 2 diabetes is the most common, accounting for at least 90% of all cases of diabetes worldwide. Its prevalence is increasing dramatically.

#### 5. What is the prevalence of type 2 diabetes both worldwide and in South Africa?

Type 2 diabetes prevalence in South Africa is estimated at between 4.5% and 5.6% in individuals aged 20-79 years. This translates into 1.3-2 million diabetes patients. In sub-Saharan Africa as a whole, the figure is estimated to be 12.1 million adults - with only 15% having been diagnosed. Worldwide, 285 million people were living with diabetes in 2010 – approximately 4.6% of the world's population. The International Diabetes Federation anticipates that these figures will increase to 438 million (7.8%) by 2030.

#### 6. What are the symptoms/warning signs of diabetes?

The onset of type 1 diabetes is usually sudden and dramatic, but type 2 diabetes often has no, or minimal, symptoms, which is what makes it an especially insidious condition that may be present for a long time before it is diagnosed. Where symptoms are present, they can include:

- frequent urination;
- excessive thirst;
- increased hunger;
- unexplained weight loss;
- tiredness/fatigue;
- lack of interest and concentration;
- vomiting and stomach pain (often mistaken for something else);
- a tingling sensation or numbness in the hands or feet;
- blurred vision;
- frequent infections; and/or
- slow-healing wounds.

#### 7. What are the risk factors for type 2 diabetes?

Several risk factors for type 2 diabetes have been identified. These include:

- obesity;
- poor diet and physical inactivity;
- increasing age;
- insulin resistance; and
- a family history of diabetes and ethnicity.

In South Africa, those of Indian descent appear to be particularly susceptible to diabetes. Changes in diet and physical activity related to rapid development and urbanisation have also led to sharp increases in the numbers of people developing diabetes, a trend especially marked in black South Africans.



### 8. How is diabetes treated?

While type 1 diabetes requires regular insulin injections, the cornerstone of type 2 diabetes management and the first strategy that should be employed is diet and lifestyle modification in the form of healthier eating choices and regular exercise. Should that prove insufficient, there are a variety of different choices in respect of pharmacological treatments that can delay or even prevent the requirement for insulin injections. Your doctor will be able to advise you in this regard.

### 9. What are the latest advances in diabetes treatment?

The latest advance in diabetes treatment is a class of drugs called incretin-based therapies, which include the GLP-1 analogues that target the gut hormone, glucagon-like peptide 1, levels of which are low in those with diabetes. GLP-1's work via a different mechanism from insulin and other currently available antidiabetic drugs, regulating blood glucose levels while also helping to preserve pancreatic functioning, thus delaying disease progression. They have additional positive effects on the heart and blood vessels, thus reducing the cardiovascular risks associated with diabetes, for example heart attack and stroke.

Because of its mode of action, incretin therapy does not carry the risk of hypoglycaemia that comes with insulin therapy. Perhaps most strikingly, these treatments promote greater feelings of satiety and hence reduced food intake. This means they help lower body weight in type 2 diabetes. This is an important consideration, as excess weight and obesity are risk factors for type 2 diabetes and maintenance of a healthy weight is an important component of its treatment. Improving control of diabetes with currently available therapies frequently leads to increases in weight, except in the case of metformin.

### 10. Can diabetes be cured?

No, but it can be well managed, allowing those with the condition to live long, essentially healthy lives.

### 11. Can diabetes be prevented?

Type 1 diabetes cannot currently be prevented. The environmental triggers that are thought to generate the process that results in the destruction of the body's insulin-producing cells are still under investigation. Type 2 diabetes, however, can be prevented in many cases by maintaining a healthy body weight and being physically active. There is substantial evidence that achieving a healthy body weight and moderate physical activity can help prevent the development of type 2 diabetes.

### 12. What are the complications of diabetes?

Type 1 and type 2 diabetes are chronic, lifelong conditions that require careful monitoring and control. In the absence thereof, very high blood sugar levels can cause long-term damage to various organs and tissues, including the heart and blood vessels (with potentially fatal complications such as heart attack and stroke), the kidneys (with the potential for kidney failure), the nerves (possibly resulting in limb amputations) and the eyes (with the potential for loss of vision).

*During the month of November the global spotlight falls on diabetes, a disease that affects millions of children and adults around the world.*

**Alan Brand**  
**POSITIVELY ALIVE** cc  
**Employee Wellness Consultant and Specialist Trainer**  
**CK2010/00285/23**  
 Mobile: +27 (82) 453-0560  
 Direct Line: +27 (11) 482-5605  
 Fax to mail: 086 245 6833  
 E-mail: [albrand@iafrica.com](mailto:albrand@iafrica.com)  
 Website: [www.positivelyalive.co.za](http://www.positivelyalive.co.za)

