

**Exercise**

Exercise lowers blood glucose levels. When you are active your body uses blood glucose faster. Choose an activity that is going to become a regular part of your life – there is not much point if you feel like giving up in the first week, so choosing something you enjoy and can easily fit into your week is important.

**Blood Glucose Monitoring**

A blood glucose test tells you how much blood glucose is in your blood. A drop of blood from your finger is placed on a blood glucose test strip and inserted into your Accu-Chek® blood glucose meter. The glucose reading will be displayed electronically on the screen. Test your blood glucose at certain times of the day. Your healthcare team may suggest testing blood sugar at one or more of the following times, depending on your individual needs:

- upon waking in the morning
- before breakfast
- 1-2 hours after breakfast
- before lunch
- 1-2 hours after lunch
- before supper
- 1-2 hours after supper
- before bedtime
- in the middle of the night
- before and after exercising

**ACCUCHEK® Support**

With ACCUCHEK® Support you'll get all the support you need to manage your diabetes more effectively, allowing you to live your life to the full, every day.

So what are you waiting for?  
Join ACCUCHEK® Support today and get:

- Lifetime warranty on your meter
- Free ACCUCHEK® diary for diabetes monitoring
- Full monitoring support with our ACCUCHEK® careline 080-DIABETES (Dial 080-34-22-38-37)
- Free info Pack and newsletter available on our website
- Latest information on diabetes and control

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[www.accu-chek.co.za](http://www.accu-chek.co.za) / [www.diabetes.co.z](http://www.diabetes.co.z)

**ACCUCHEK®**

Which meter should your customers use?

**ACCUCHEK® Active**  
More meter for your money.

- Affordable
- Accurate & fast results
- Safety features
- Connects with Diabetes management tools
- New design compatible with former versions of Accu-Chek Active strips

**Easy to learn, easy to teach**



**ACCUCHEK® Performa**  
More checks. More confidence.

- Extensive safety checks in seconds
- Bigger screen
- Accurate and fast results
- Intelligent technology
- Infrared download capability

**Reliable results under any conditions**



**ACCUCHEK® Performa Nano**  
Small in size. **BIG** in performance!

- Innovative and discreet
- Brilliant backlit display
- Simple sampling
- Pre- and post-prandial markers

**Patients are proud to test, giving valuable information**



**ACCUCHEK®**



**Understanding Diabetes**

Diabetes Mellitus is a life long physical condition in which there is too much sugar in the blood due to a lack of insulin or due to inappropriate action of insulin. There is no reason why you can't learn to manage your diabetes and live a normal and productive life.

Experience what's possible.

**ACCUCHEK®**



## Blood sugar (Glucose) and Insulin

To understand diabetes, it helps to know how your body uses food for fuel. Have you ever wondered why sugar is in your body in the first place? Why eating sugar gives some people more energy and leaves others feeling poorly?

When you understand the roles of sugar and insulin in your body, it is easier to answer these questions. Sugar is found in the foods that you eat.

When you eat, your body turns food into glucose – a type of sugar that moves through the bloodstream – enabling growth and providing energy to the cells that make up your muscles, nerves and other internal systems.

Glucose cannot enter the cells without some help. An organ called the pancreas produces the hormone insulin. The role of insulin is to move glucose from the bloodstream into the body cells, where it can be used as fuel.

People diagnosed with diabetes have high blood sugar (glucose). This is because the pancreas does not make enough insulin or the insulin produced is not working effectively. As a result a build-up of glucose in the blood occurs, which passes into the urine where it is eventually eliminated, leaving the body without its main source of fuel.

With no fuel in your body's muscles and organs, it feels like you are running on empty. The extra sugar in the blood stream actually begins to damage the blood vessels and nerves in the body, leading to problems in the eyes, heart, kidneys, feet, legs and other areas.

## Signs and Symptoms of Diabetes

- Frequent urination
- Excessive thirst
- Sudden weight gain or loss
- Constant fatigue
- Blurry vision
- Slow healing cuts or bruises
- Numbness in hands and feet
- Erectile dysfunction
- Hunger

## Risk Factors for Diabetes

- A family history of diabetes
- People that are overweight
- Diabetes during pregnancy
- Race/ethnicity
- Physical inactivity
- Age (>40 years)
- Impaired glucose tolerance

## Types of Diabetes

### Type 1 – Insulin Dependant Diabetes

Type 1 Diabetes typically develops in children and young adults. Type 1 Diabetes occurs when the body's immune system destroys the pancreas's beta cells – cells which produce the hormone insulin. Insulin is the key that opens the door for glucose to enter the body's cells. When the cells are destroyed the pancreas makes very little or no insulin of its own, resulting in the abnormal build up of glucose in the blood. Symptoms appear quite rapidly and patients must take daily insulin injections to survive.

### Type 2 – Non-Insulin Dependant Diabetes

Type 2 Diabetes represents more than 90-95% of all cases of diabetes. In Type 2 Diabetes, the pancreas may not make enough insulin or the body is not able to use the insulin it has made. This is known as insulin resistance. Eventually, the pancreas may stop producing insulin altogether.

Traditionally affecting older people, Type 2 Diabetes was previously known as Adult Onset Diabetes. We know that it can affect people of any age. Type 2 Diabetes develops gradually and is more common in people who are overweight or obese. It tends to run in families and is more common in members of certain ethnic groups.

## Pre-Diabetes

Type 2 Diabetes is often preceded by Pre-diabetes. This occurs when a person has higher than normal blood sugar, but not high enough to be classified as diabetes. It's important because it identifies when a person may be at a higher risk of Type 2 Diabetes, and allows the person to take the steps necessary to prevent the disease from occurring.

## Gestational diabetes

Women who have high blood sugar levels during pregnancy can develop Gestational diabetes. This results in the inability to use the insulin that is present, usually disappearing after the pregnancy is over.

## Treating diabetes

Although diabetes cannot be cured, it can be treated very successfully.

### Type 1 Diabetes

Type 1 Diabetes is treated by insulin injections and diet, and regular exercise is recommended. Insulin is a protein and would be destroyed by the digestive juices if taken in orally. Your doctor will advise you on how much insulin you should inject each day. Your aim will be to balance your insulin with your diet and exercise programme, to mimic the work of a normal pancreas as closely as possible.

### Type 2 Diabetes

Type 2 Diabetes is treated with lifestyle changes such as a healthier diet, weight loss and increased physical activity. If diet and exercise are insufficient in lowering your glucose levels the doctor might prescribe diabetes tablets which can act in different ways to stimulate the pancreas to produce more insulin.

Type 2 Diabetes is progressive. If your diabetes cannot be controlled through lifestyle changes, diet, exercise or tablets your doctor may recommend that you take insulin injections.



## Coping with Diabetes

Being diagnosed with diabetes and living with diabetes can sometimes feel overwhelming – this is quite normal. Everybody reacts differently to the news that they have diabetes. One of the most difficult things to come to terms with is that diabetes is for life. Fortunately, with the right information, a well developed care plan and an optimistic attitude, it can be managed with ease.

## Managing Diabetes

Because diabetes is a chronic condition, caring for yourself is every bit as important as the treatment you receive from your doctor and healthcare team. Taking responsibility involves many choices, including what you eat and how frequently you exercise. It also involves testing your blood sugar to make sure it stays within acceptable levels, an important factor in reducing your risk of serious diabetes related complications.

Diabetes can be controlled with:

### Medications

Medications like tablets or insulin lowers the blood glucose levels. Consult with your healthcare professional on which medication is right for you.

### Healthy Eating

Everyone with diabetes should follow a healthy diet and lead a healthy lifestyle. Although the food choices you make and your eating habits are important in helping you manage your diabetes, you should be able to continue enjoying a wide variety of foods as part of healthy eating. Consult a dietician for advice on a healthy eating plan. Food and drink will increase your blood glucose levels. How much you eat and when you eat is important.

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