Type 1 diabetes in brief
Diagnosed with type 1 diabetes

Type 1 diabetes can be managed. With the right treatment and support, you can live the life you desire.

Millions of people of all ages, from all walks of life, are living with type 1 diabetes. Diabetes can be life-changing, but, if managed well, it doesn’t need to prevent you from living a full and active life.

This leaflet will help you get to know the basics about diabetes and will help you to gain a better understanding of how to manage your type 1 diabetes.

If you have questions, ask your doctor or diabetes care team.

The information in this leaflet is not intended to replace your doctor’s advice or medical consultation.

1 in 10 people with diabetes have type 1 diabetes
How diabetes affects your body

Type 1 diabetes is known as an ‘autoimmune disorder’. This means that your immune system is damaging the beta cells in the pancreas that make insulin. In type 1 diabetes, the body therefore produces little or no insulin at all.

The body needs insulin to help remove sugar (glucose) from the bloodstream and turn it into fuel for tissues that need it, such as muscles.

Lack of insulin results in high blood sugar, also known as hyperglycaemia. Low blood sugar is called hypoglycaemia.

Keeping your blood sugar under control is essential to managing your type 1 diabetes.

IN TYPE 1 DIABETES, THE BODY PRODUCES LITTLE OR NO INSULIN AT ALL
How diabetes affects your body

NADINE ABRAHAMS
South Africa
Nadine has type 1 diabetes

What causes diabetes?
The exact cause of type 1 diabetes is unknown, but autoimmune, genetic and environmental factors are involved.

Signs of diabetes
Type 1 diabetes occurs suddenly, with symptoms like extreme thirst, weight loss and fatigue. It can develop at any age, but it most often strikes younger people (under 20 years of age) of slim build, and especially children at the beginning of adolescence.

Type 1 diabetes is a lifelong condition. People with type 1 diabetes must inject insulin daily and balance their food intake and physical activity levels with insulin. This will help control blood sugar levels.

COMMON SYMPTOMS

- Frequent urination
- Fatigue, weakness, drowsiness
- Extreme thirst
- Quick, excessive weight loss for no apparent reason
- Sugar (glucose) in the urine
Managing your type 1 diabetes

If you are diagnosed with type 1 diabetes, you can still live a long, healthy and fulfilling life if you take very good care of yourself.

The keys to managing your type 1 diabetes are:
• monitoring your blood sugar
• taking your insulin as recommended by your doctor
• making healthy food choices
• staying active
• teaming up.

Monitor your blood sugar
Monitoring your blood sugar is essential. Not only does it show you how exercise and eating affects your blood sugar, it also tells you if your medication is working.

Ideally you should be aiming to achieve the following long-term blood sugar targets:

• 70-130 mg/dL (3.9-7.2 mmol/L) before meals
• Less than 180 mg/dL (10.0 mmol/L) after meals.

Work with your diabetes care team, both to set goals that are right for you and to learn how to manage episodes of hypoglycaemia.
Medication
When you have type 1 diabetes, insulin is vital. Today, there are different kinds of treatments that allow you to live well on medication.

Work with your diabetes care team to create an insulin plan that’s right for you. This includes a discussion of how and when to inject your insulin.

- Long-acting insulin (also known as basal insulin) releases a steady amount of insulin throughout the day and is usually injected once or twice a day.

- Rapid-acting insulin (also known as bolus insulin) can be taken around mealtimes to provide control.

- Premixed insulin includes a long-acting and rapid-acting insulin, and is given at mealtimes.

- Insulin pump
A device that delivers insulin via a tube that is inserted under the skin in the abdomen.

WORK WITH YOUR DIABETES CARE TEAM TO CREATE AN INSULIN PLAN THAT’S RIGHT FOR YOU
Eat healthy
Having diabetes doesn’t mean that you have to give up all of the foods you like or buy special ‘diabetic’ foods. It just means that you should try to follow a balanced meal plan.

Eating healthy will give you more energy to do all the things you want and need to do in your daily life. Following a healthy meal plan helps you manage your blood sugar levels.

Healthy tips
Aim for a balanced meal including protein, carbohydrates and vegetables. Carbohydrates result in increased blood sugar levels, while protein and vegetables do not.

- Eat a wide variety of healthy foods.
- Limit the amount of saturated fat and salt.
- Cut down on added sugars.
- Keep to sensible amounts of alcohol.
- Space your eating throughout the day and don’t skip meals.

Approach every meal as a chance to make a healthy food choice

Coaching 
Carbohydrate
Potato, pasta, rice ...
Lead to increase in blood sugar.

Protein
Meat, chicken, fish, eggs ...
Do not increase blood sugar.

Vegetables
Broccoli, cabbage, lettuce, tomato, carrots, peas ...
Do not increase blood sugar.

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Stay active
Daily physical activity is recommended for all people. Regular activity can help prevent health problems, make medication work better to lower your blood sugar levels and give you more energy.

Be aware that physical activity lowers blood sugar, so insulin doses or food intake may need to be adjusted prior to exercise.

Measure your blood sugar before and after exercise to get to know your body and learn how to balance your medication with exercise.

Don’t let your diabetes get in the way of staying active!

Maybe you’d enjoy one of these activities:
• Walking
• Jogging
• Bicycling
• Swimming
• Dancing
Team up and make success a habit

Stay on top of managing your diabetes. For the best results, start thinking about what your daily routine for success will be. When you find something that works for you, stick to it. The results will add up.

- **Take your medication as recommended by your doctor.** Measure your blood sugar levels. Track your daily progress in your diary. Keep it in a convenient place so you’ll be more inclined to use it.

- **Make healthy food choices.** Aim for a balanced meal including fat, protein, carbohydrates, fruit and vegetables.

- **Stay active.** Find simple ways to exercise during your daily routine. Measure your blood sugar and balance exercise with your medication.

- **Team up.** Be an active part of your diabetes care team, find the best treatment plan and set goals that are right for you!

It may also be helpful to talk to other people with diabetes. Your doctor or local diabetes association may be able to introduce you, and provide other resources.

For further tips and ideas on how to live with type 1 diabetes, go to:

- novonordisk.com
- dawnstudy.com
Common words in diabetes

**Autoimmune disorder** A disorder in which the body attacks its own cells.

**Beta cells** Cells in the pancreas that make insulin.

**Blood sugar (glucose)** The concentration of sugar in the bloodstream – the body’s main source of energy.

**Carbohydrate** Type of food that provides the body with energy. Carbohydrates are mainly sugars and starches that are broken down into glucose, a simple sugar that the body’s cells use as fuel.

**HbA1c** A blood test to measure blood sugar to estimate levels of control over the past 2–3 months, and a marker of the risk of developing complications.

**Hyperglycaemia** High blood sugar (glucose). Occurs in diabetes when there is a lack of insulin so glucose is not removed from the bloodstream.

**Hypoglycaemia** Low blood sugar (glucose). Can be triggered by taking too much insulin, inadequate food intake or by participating in unusually strenuous or prolonged activity or exercise.

**Insulin** A hormone produced by the beta cells in the pancreas. Needed to remove sugar from the bloodstream so other cells can use it as fuel.

**Pancreas** An organ in the body that stretches across the back of the abdomen behind the stomach. The pancreas is where insulin and digestive enzymes are made.