

Coping with type 1 diabetes



Type 1 diabetes (T1D) is a **chronic autoimmune condition** characterised by the body's inability to produce insulin, a hormone that regulates blood glucose (sugar) levels. The immune system mistakenly targets and destroys the insulin producing beta cells in the pancreas, leading to **insufficient insulin production** which requires lifelong insulin therapy to regulate blood glucose levels. Unlike type 2 diabetes (T2D), which affects how your body uses glucose for energy, **neither the cause nor the means to prevent type 1 diabetes are known.**

The symptoms of T1D typically develop quickly over a few days or weeks and may include:



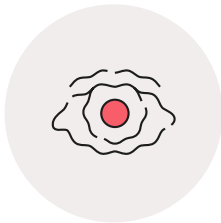
Excessive thirst



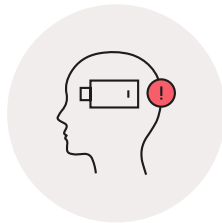
Extreme hunger



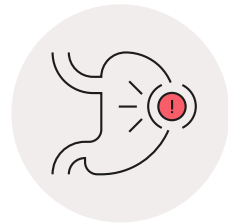
Frequent urination



Blurred vision

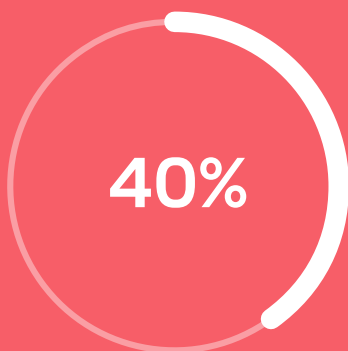


Fatigue



Nausea and vomiting

When type 2 diabetes is misdiagnosed for adults:



Nearly 40% of adults who develop T1D are initially misdiagnosed with T2D, with the risk of diagnosis error increasing with age.

The overwhelming majority of people that develop diabetes as older adults have T2D, which contributes to a confirmation bias. Even though T1D is often thought of as a disease that appears in childhood (and was even called 'juvenile diabetes' before the 1980s), about half of new cases of T1D each year are diagnosed in older adults.

It's not just that type 1 is often thought of as a disease that begins in childhood; type 1 also develops differently in adults. When children are diagnosed with T1D, it's usually because they have experienced a rapid drop in insulin-producing cells that causes their blood sugar to spike, which brings a sudden arrival of symptoms and an immediate need for insulin medication – in short, it can be very dramatic.

However, at diagnosis, adults produce more insulin than children, and they usually lose insulin at a slower rate. As a result, they may not need immediate, intensive therapy like children do, which can potentially puzzle physicians.

Getting tested for type 1 diabetes

Type 1 diabetes is diagnosed when a **raised blood sugar level** is found in the blood. When suspecting T1D, your GP may perform both a urine test and finger-prick blood glucose level test. If the GP thinks you might have diabetes, they'll generally arrange for you to be seen at the hospital on the same day for assessment and to start treatment.

You'll stay in hospital to wait for the results of a more formal blood sugar test, which will usually happen on the same day.

Common tests include:

- **Fasting blood glucose test:** Measures blood sugar after an overnight fast
- **HbA1c test:** Provides an average blood sugar level over the past two to three months
- **Random blood glucose test:** Measures blood sugar at any time of day
- **Autoantibody tests:** Detects the presence of autoantibodies that attack pancreatic beta cells

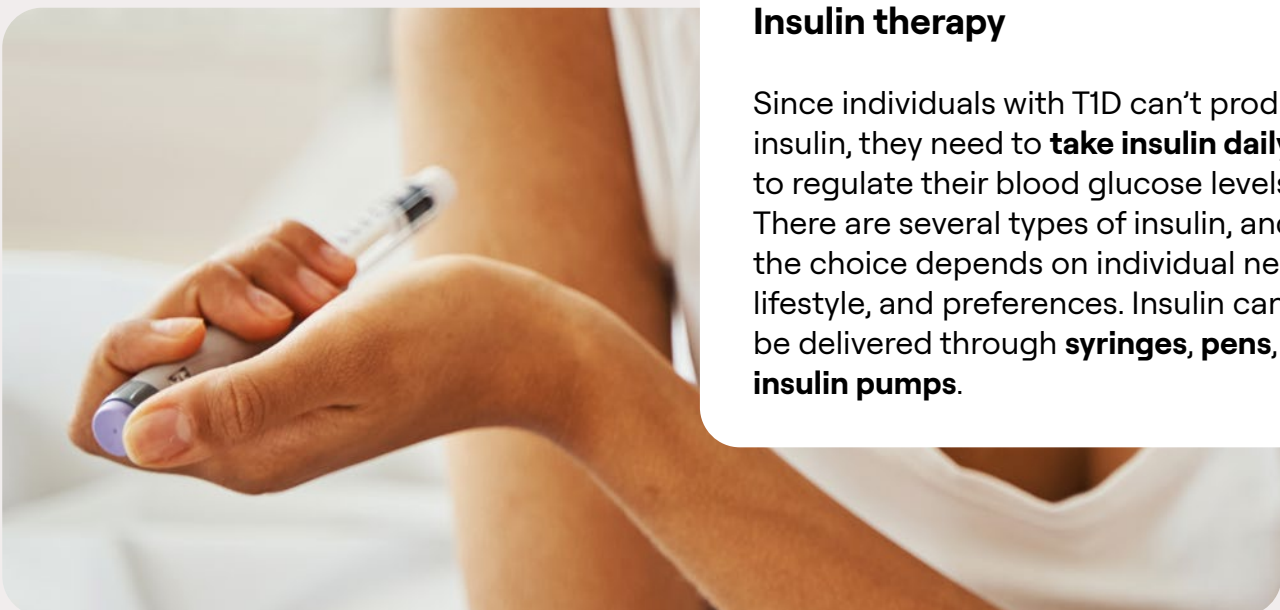
Managing type 1 diabetes

If you're diagnosed with type 1 diabetes, a diabetes nurse will show you how to start managing it, e.g. testing your own blood glucose and how to inject insulin.

Key aspects of managing type 1 diabetes include:

Insulin therapy

Since individuals with T1D can't produce insulin, they need to **take insulin daily** to regulate their blood glucose levels. There are several types of insulin, and the choice depends on individual needs, lifestyle, and preferences. Insulin can be delivered through **syringes, pens, or insulin pumps**.



Blood glucose monitoring

Regular monitoring of blood glucose levels is crucial to managing T1D. This helps individuals understand how different foods, activities, hormonal changes, alcohol and insulin doses affect their blood sugar. Depending on the type of insulin therapy you select or need, you may have to check and record your blood sugar level **at least four times a day**. Ideally, you should test blood sugar levels before meals and snacks, before bed, before exercising or driving, and whenever you think you have low blood sugar. Careful monitoring is the only way to make sure that your blood sugar level remains **within your target range** and can help you to identify patterns and prevent future episodes.



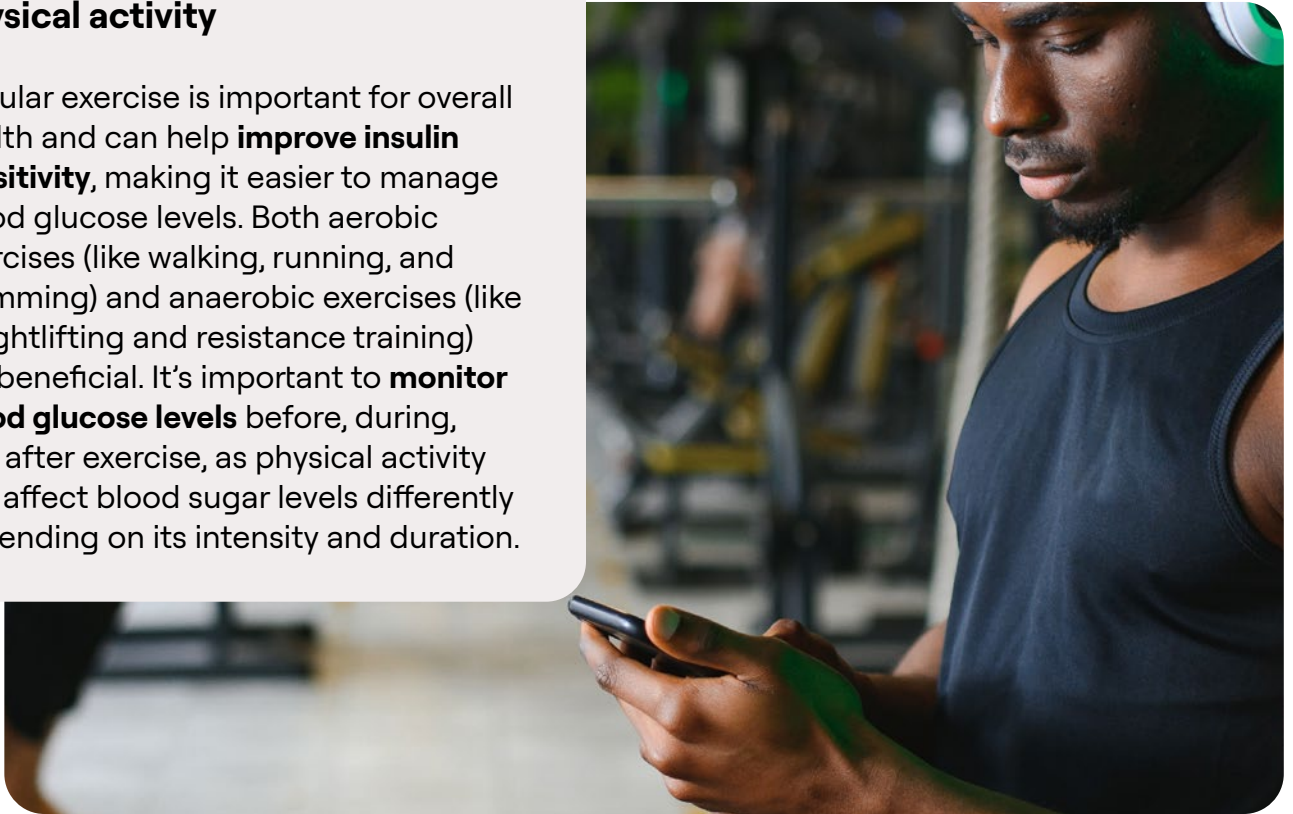
Nutrition and meal planning

Understanding how different foods affect glucose levels is essential, and maintaining a balanced diet is key to managing blood glucose levels effectively. One method of managing blood sugar is by **keeping track of carbohydrates** in each meal and adjusting insulin doses accordingly, as carbohydrates have the most direct impact on blood sugar. Choosing foods with a **low glycemic index (GI)** can help maintain stable blood sugar levels, and you should focus on a variety of nutrient-dense foods including vegetables, whole grains, lean proteins, and healthy fats. Avoid high-sugar and highly processed foods.



Physical activity

Regular exercise is important for overall health and can help **improve insulin sensitivity**, making it easier to manage blood glucose levels. Both aerobic exercises (like walking, running, and swimming) and anaerobic exercises (like weightlifting and resistance training) are beneficial. It's important to **monitor blood glucose levels** before, during, and after exercise, as physical activity can affect blood sugar levels differently depending on its intensity and duration.



Preventing and managing hypoglycemia

Hypoglycemia (dangerously low blood sugar) can occur when insulin or physical activity levels are not balanced with food intake, and it's vital to know the signs.

Symptoms include:



Shaking



Sweating



Confusion



Dizziness



Loss of
consciousness

If you feel the onset of such symptoms, you must also be prepared to act quickly. Carry **fast-acting carbohydrate items** like glucose tablets, juice, or sweets so that you can quickly raise blood sugar levels in case of hypoglycemia.

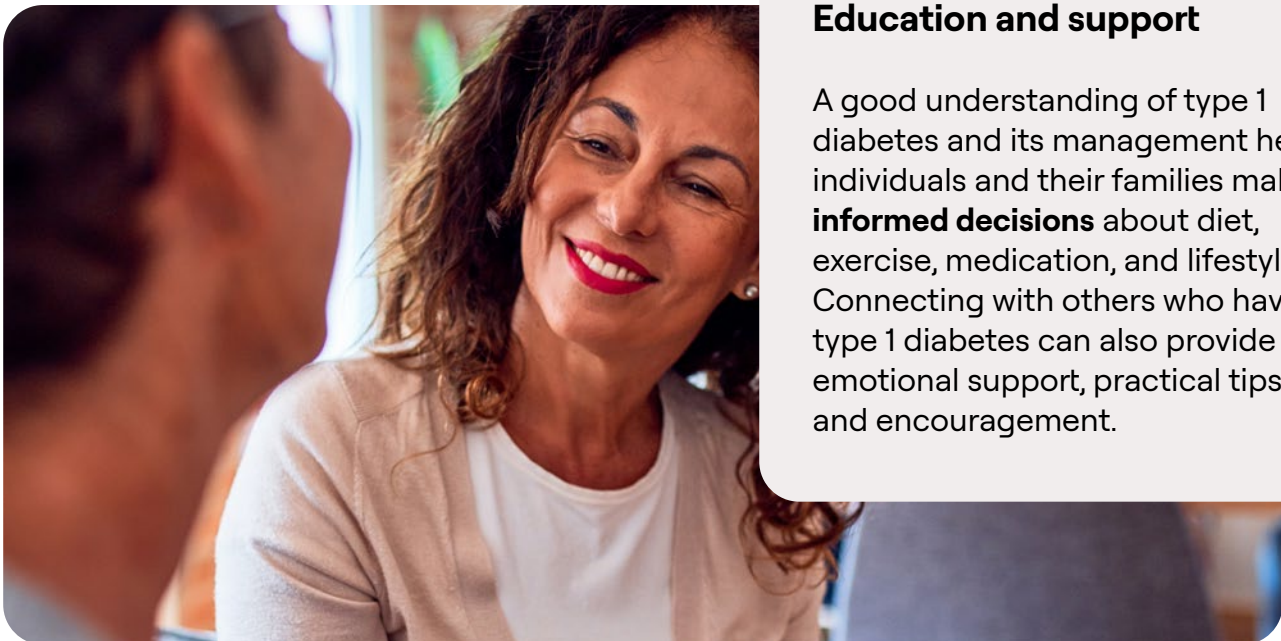
Visit your doctor

Regular visits to healthcare professionals, such as **endocrinologists**, **diabetes educators**, **dietitians**, and **ophthalmologists**, are vital for comprehensive management. These visits can help to **monitor complications**, adjust treatment plans, and provide ongoing education and support.



Education and support

A good understanding of type 1 diabetes and its management helps individuals and their families make **informed decisions** about diet, exercise, medication, and lifestyle. Connecting with others who have type 1 diabetes can also provide emotional support, practical tips, and encouragement.



Managing type 1 diabetes requires a **comprehensive, individualised approach** that includes insulin therapy, blood glucose monitoring, nutrition, exercise, and education. With careful planning, regular monitoring, and support, individuals with type 1 diabetes can effectively manage their condition and lead healthy, active lives.

Contact **HealthHero** today for more support and advice. We're with you every step of the way.
