

# WHAT IS DIABETES?

**Diabetes** is the term given to conditions where there are elevated glucose levels in the blood. There are many different types of diabetes, with the main ones being type 1, type 2 and gestational diabetes. The reason for high blood glucose levels is different for each type of diabetes, and this is important because the treatment for each type is different. In children, the most common type of diabetes is type 1 diabetes.

## 1.1 WHAT IS TYPE 1 DIABETES?

- **Type 1 Diabetes** is a **non-preventable disease** and is **NOT caused by eating too many sugary foods. This means it is not your fault.**  
It used to be known as: **juvenile diabetes or insulin dependent diabetes**
- **In type 1 diabetes**, the body's immune system gets confused and attacks and kills the beta cells of the pancreas, like it would a virus or bacteria when we're sick. This is why type 1 diabetes is called an **autoimmune disorder**.
- **The beta cells of the pancreas are responsible for producing a hormone called insulin.**

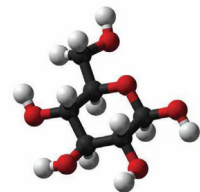
### Insulin

Insulin acts like a key to unlock your cells which lets the glucose be used for energy.



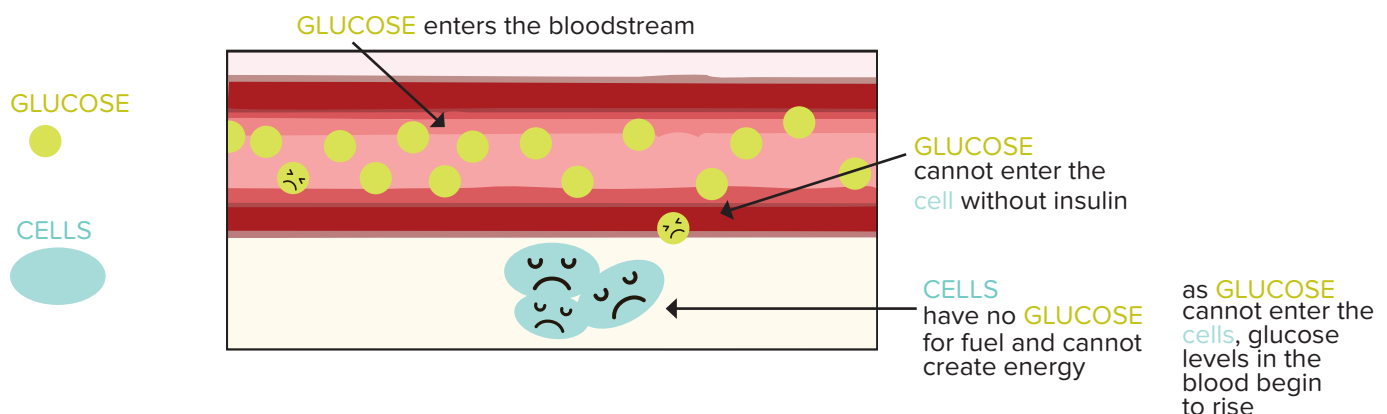
### Glucose

Comes from the carbohydrate-containing foods we eat and is our body's preferred source of energy.



Insulin is vital in the growth and development in children (see Section 8: **Food planning** for more information)

Without insulin, the glucose levels in the blood rise uncontrollably (because it is unable to enter the cells) and the body is not able to use it as energy.



- Type 1 diabetes **does not decrease your child's potential** and children with diabetes are **still able to participate in activities, including sport.**

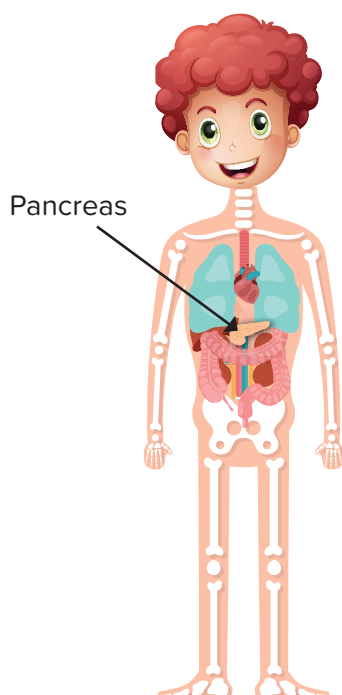


- The key to **understanding how to keep things in balance** is through **knowledge and continued education.**



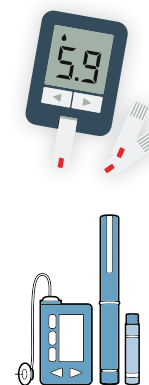
## 1.2 TREATMENT

**The treatment of type 1 diabetes** involves taking over the job of the pancreas by aiming to keep blood glucose levels as close to target range as possible.



This involves:

- 1 The administration of insulin-** People with type 1 diabetes require insulin through injections or an insulin pump and need to regularly test blood glucose levels by pricking a finger or using continuous glucose monitoring.



- 2 Keeping a healthy lifestyle-** This includes physical activity and a healthy balanced diet. The amount of carbohydrates in food needs to be considered in order to give the correct insulin dose.



**When a child is newly diagnosed with type 1 diabetes,** the diabetes team will meet with you and plan education sessions during your stay in hospital.

They will teach you:

- How to **give insulin**
- How to **monitor glucose levels**
- How to **manage diabetes** in day-to-day life



The purpose of this guide is to give you **written information for you to refer to once you are back at home**

**Once discharged,** the team will plan outpatient visits to build on the knowledge that you have learnt and to monitor your child's progress.

The team comprises of:



Specialist paediatric diabetes doctors called **endocrinologists**



Nurse practitioners



Teacher liaison team



Dietitians



Psychology liaison team



Diabetes nurse educators



Social workers



**The diabetes team** will continue to provide ongoing education and support to ensure you are able to self-manage type 1 diabetes successfully.

Your child will be seen a minimum of **4** times a year from the ages of **0-18 years** to:

- **help care for your child** with diabetes
- **monitor** their growth and development
- **and** ensure your family is up-to-date with the latest in **diabetes management**

Our **diabetes team** also provides out of hours emergency support. Please call the **oncall endocrinologis** on **6456 5993** or the **PCH switchboard** on **6456 2222**.

## Key messages

- ❑ **There are different types of diabetes.**
- ❑ **Type 1 diabetes is an autoimmune disorder where the beta cells of the pancreas are targeted and attacked by the person's immune system.**
- ❑ **The beta cells are responsible for producing insulin.**
- ❑ **Insulin is a hormone that is vital for allowing the glucose in our blood into our body's cells to produce and use energy.**
- ❑ **Glucose comes from the food we eat. It is also made by the body. It is the preferred source of energy and is vital for growth in children.**
- ❑ **In type 1 diabetes, because the beta cells have been destroyed, there is no insulin production by the pancreas which results in elevated blood glucose levels.**
- ❑ **Therapy includes giving insulin, monitoring blood glucose levels, healthy eating and physical activity.**
- ❑ **The diabetes team is a multidisciplinary team who will help guide and support you through your diabetes journey.**