

cheat sheet for family & friends

So someone you love (or like) has just been diagnosed with Type 1 diabetes. To save them explaining it again and again here's a quick rundown.

type 1 diabetes is:

- > An autoimmune disease
- > The type of diabetes that children most commonly get BUT you can get it at any age
- > Chronic – it does not go away as you get older
- > Treated with multiple daily injections of insulin
- > Often a HUGE lifestyle change and a big deal
- > 50% genetic and 50% environmental
- > Sometimes a very challenging adjustment and hard to cope with emotionally

type 1 diabetes is not:

- > Caused by anything you ate
- > Related in any way to obesity
- > Easy to manage – it's very complex
- > Strongly genetic – even if a mother has diabetes only 4% chance her child will develop diabetes, if father has diabetes it's 7% chance.
- > Cured by taking insulin
- > A sentence to stop living, travelling, playing sport, drinking and having fun (you can still do all those things)

some common questions

Have they got too much sugar or not enough? Both!

A person with
Type 1 Diabetes

produces no insulin. This means they have to inject insulin, and then they have to carefully balance what they eat, how much exercise they do and other factors to keep the amount of sugar in their blood stable. This is very hard. At times, a person will have not enough sugar and URGENTLY need some. At other times they will have too much sugar and not feel too great and need to top up on insulin. It's not easy!

Will they have fits or pass out? What do I do?

If a person's blood sugar drops very low they may lose consciousness. Lie them on their side and call an ambulance.

In most cases, emergencies can be avoided by a treating a hypo quickly BEFORE the blood sugar level drops so low that the person loses consciousness.

Some common early warning signals of a 'hypo' include:

- > Sweating
- > Trembling
- > Hunger
- > Headache
- > Tiredness or Weakness
- > Tingling around the lips and mouth
- > Difficulty concentrating
- > Paleness

With more severe hypoglycaemia, or without treatment, it is possible that the person may progress to more severe symptoms, such as:

- > Confusion
- > Behaviour changes
- > Slurred speech
- > Marked drowsiness
- > And eventually unconsciousness

If in doubt whether a person is having a hypo, and they are conscious, give sugar – you can do no harm. Where possible do a blood glucose test. A result BELOW 4.0 indicates a hypo.

Hypos should be treated promptly.

The treatment is to give quick acting sugar of any kind.

If conscious, give any of these:

- > glucose tablets
- > sugar or honey (2-3 teaspoons)
- > jelly beans or jelly baby lollies (7)
- > sugary soft drink – not diet (1/2 can)

Symptoms should disappear in 10 – 15 minutes. If not, give more sugar and check the blood glucose level.

Never try to give food or drink to someone who is unconscious, instead call 000.

A person who has had hypoglycemia should not be left alone. They should NOT be sent alone to a sick bay or sent home from work or school immediately after a hypo. At least 15-30 minutes is required for the blood sugars to return to normal.

what is diabetes?

Diabetes is a condition in which the body cannot sufficiently convert food into usable energy. The reason for this is a lack of insulin - a hormone produced by a gland called the pancreas, or failure of the body to respond normally to insulin.

When starchy food is digested, it breaks down into glucose. This builds up in the blood stream. Insulin controls the level of glucose in the blood by helping glucose go from the bloodstream into the body's cells. Once in the cells, glucose can be used for energy or stored for future needs. With some people the above process fails to work properly and this results in the condition known as Diabetes.

The common factor in all types of diabetes is the need to keep blood glucose in the normal range. This will help reduce the likelihood of long-term health problems or 'complications'. The treatments that exist now are not a cure. Diabetes is a chronic illness. Until a cure is found, treatment must continue throughout a person's lifetime.

the types

> Type 1 or IDDM or Juvenile Diabetes

The pancreas ceases producing insulin. Those affected require daily insulin injections to survive.

> Type 2 or NIDDM or Mature-Onset Diabetes

The pancreas fails to produce enough insulin to meet the body's needs or the body is unable to respond normally to insulin (insulin resistance) and the pancreas fails to produce enough insulin to meet the body's increased needs. This most commonly affects older and often overweight people.

> **Gestational Diabetes** The hormonal changes in a woman's body during pregnancy sometimes cause insulin resistance and again the pancreas fails to respond adequately, blood glucose levels rise. All pregnant women are tested for gestational diabetes.

type 1 diabetes

Approximately 140,000 Australians have Type 1 Diabetes. The cause of Type 1 Diabetes is not totally understood. However, it is believed that people have a genetic predisposition to developing diabetes. A trigger factor such as a virus then causes the body's own immune system to incorrectly identify the insulin-producing cells as foreign and destroy them.

Managing Type 1 Diabetes is a complex question of balance. Type 1 Diabetes is treated with multiple daily insulin injections, healthy eating, regular exercise and constant monitoring of blood sugar levels through taking small samples of blood from the fingertips.

High blood glucose level (hyperglycaemia) causes one to feel fatigued, dehydrated and ill. The kidneys filtering the blood collect more glucose than usual. This glucose must be removed from the body. You pass a lot of urine. You need more water, get thirsty and drink a lot. People with Type 1 Diabetes are generally able to treat hyperglycaemia by increasing the amount of insulin at their next injection or having an extra insulin injection. Symptoms of hyperglycaemia are initially relatively mild. If a person becomes ill or omits their insulin dose, the body is unable to process glucose normally.

Low blood sugar level (hypoglycaemia or hypo) also affects the body. Initially the sympathetic nervous system responds, with symptoms such as sweating, shaking, rapid heartbeat and pallor. The brain, which relies heavily on glucose to operate properly, can also be affected, leading to tiredness, trouble concentrating, mood and behaviour changes and eventually possible coma. Treatment of mild hypoglycaemia involves consumption of sugary food or drink followed by something more substantial such as bread. If a mild hypo is left untreated, the blood sugar level will continue to fall, starving the rest of the body of glucose and energy and leading to serious episodes such as blacking out. In most cases, the early symptoms can be recognised and treated without further problems.

A complex balancing act!

There are a large number of factors which influence blood glucose levels. They include the amount and type of food you eat, the amount of insulin you inject, all forms of exercise, drinking alcohol, and taking prescribed and recreational drugs. Many less tangible factors are also involved, often relating to the interaction of hormones in the body, such as those produced during periods of stress, anxiety and menstruation. A reliable but unpredictable part of every day life for most people!

*Courtesy of Diabetes Australia - Victoria.
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