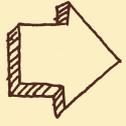




looking after type 1 diabetes

streetwise

What is diabetes?



Type 1 diabetes is when the body has stopped making insulin. This causes an upset in your body's glucose (sugar) balance. If you have developed type 1 diabetes it is possibly because you are genetically more prone to develop diabetes (genetic pre-disposition) and you have had some sort of trigger (infection, etc.) that has made your body believe that the cells that should make insulin are foreign and need to be destroyed (auto immune response).

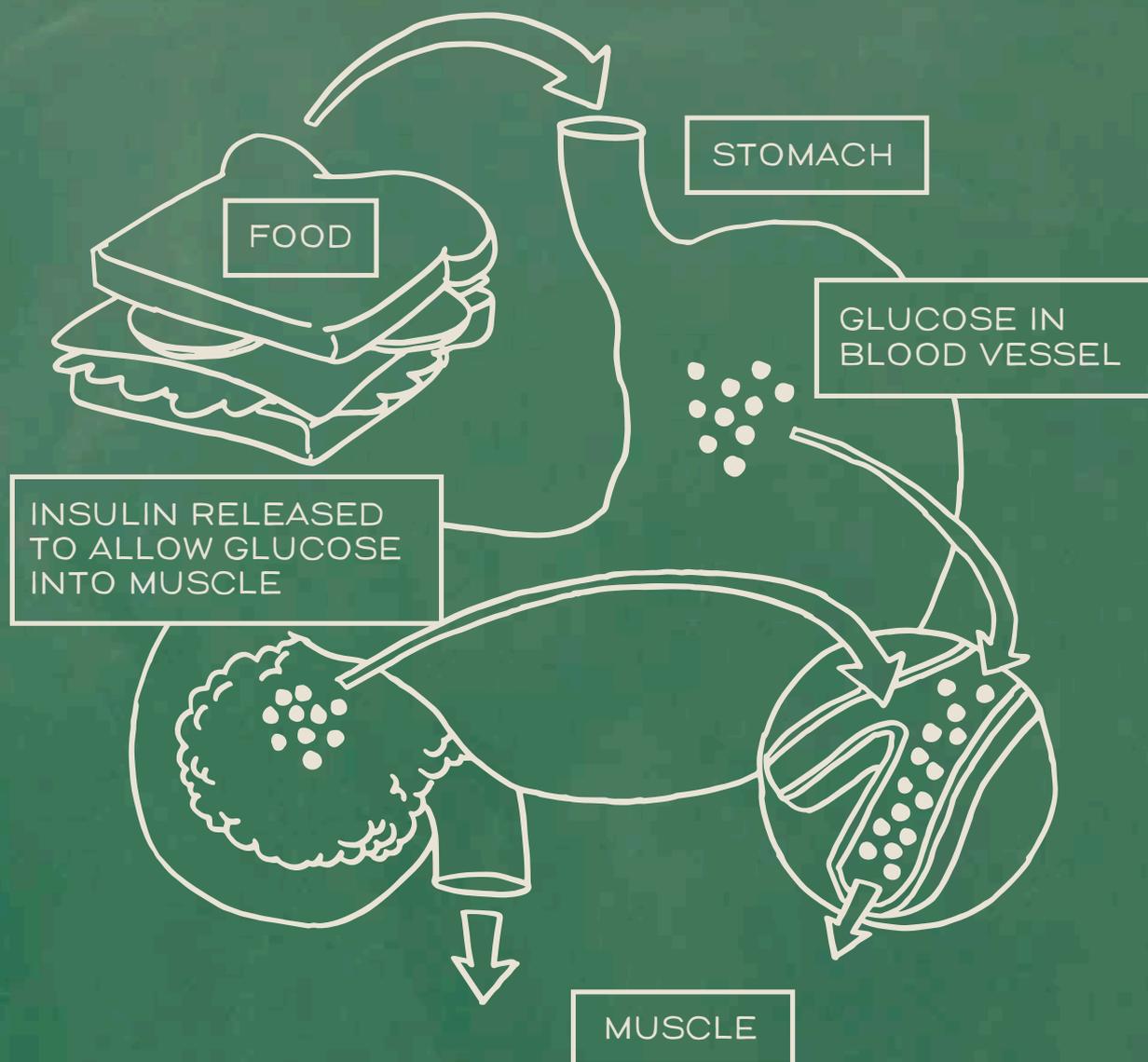
Getting type 1 diabetes is no one's fault. It just happens to some people. It does not happen because you ate too many sweets and chocolates, or because you did something wrong. You did not catch it, and you cannot give it to anyone else.



INSULIN, WHAT DOES IT DO?

Glucose comes from the digestion of carbohydrates. For the glucose from these foods to be used for energy in our body we need insulin. Insulin is made by the pancreas and allows the glucose from the bloodstream to get into our body's cells to give us energy. Without insulin the glucose gets stuck in our bloodstream and cannot give us the energy we need.

insulin



IN SOMEONE WHO DOES NOT HAVE DIABETES THE AMOUNT OF INSULIN RELEASED VARIES IN RESPONSE TO THE AMOUNT OF GLUCOSE ABSORBED FROM THE GUT IN FOODS EATEN AND THE ENERGY USED AND NEEDED. BLOOD GLUCOSE LEVELS TYPICALLY STAYS BETWEEN 3.5 MMOL/L AND 7 MMOL/L BECAUSE INSULIN IS RELEASED IN RESPONSE TO THE BLOOD GLUCOSE RISING AFTER FOOD IS DIGESTED BY THE BODY.

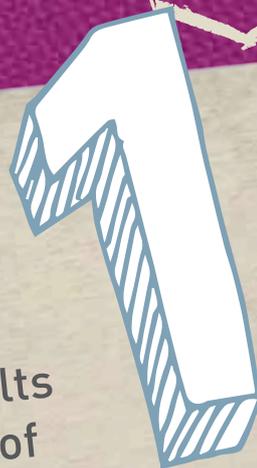
WHAT HAPPENS WHEN THERE IS NOT ENOUGH INSULIN?

When the pancreas fails to make insulin the glucose gets stuck in the bloodstream and the blood glucose level rises. This may come on gradually but eventually the glucose levels in the blood become too high and the glucose spills out of the bloodstream through the kidneys and into the urine.

The kidneys react to the high glucose levels by making extra urine which draws fluid in from the body causing thirst and excessive drinking in order to try and wash the glucose away. If the glucose in the blood cannot be used for energy the body has to find another place to get energy from. The body begins to use up its stores of fat for energy and when this happens, ketones form. High blood glucose levels and ketones can make you feel very unwell.

TYPE 1 DIABETES (THE TYPE YOU HAVE)

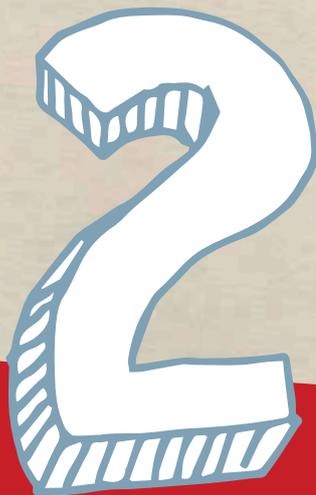
Nearly all children and young adults who have diabetes have this type of diabetes. This means these people have to take insulin injections via injection in a pen or use a pump just like you. Type 1 diabetes happens because the pancreas cannot make insulin. About 1 in 500 children in NZ have type 1 diabetes (about 2,500 in total within NZ).





TYPE 2 DIABETES

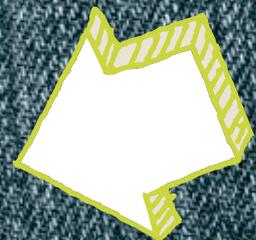
Most of the people with this type of diabetes are older adults however increasingly children and young people are being diagnosed with type 2 diabetes. People with type 2 diabetes can sometimes control it with a healthier diet and lifestyle changes. Some people also need to use tablets and some people need to use tablets and insulin injections in addition to lifestyle changes. Type 2 diabetes happens when the body still is able to make insulin but not in big enough amounts or the insulin it is making cannot work properly and blood glucose levels rise.



What is meant by good control?

If your diabetes is well controlled you can feel well, grow well and be able to take part in all the same things as other people your age. What we mean by good control is that the level of glucose in your blood and urine will be similar to people who do not have diabetes.

	PERSON WITHOUT DIABETES	PERSON WITH DIABETES
URINE GLUCOSE	NEGATIVE	NEGATIVE
BLOOD GLUCOSE (FASTING) (POST-MEAL)	3.9 - 6.1 MMOL/L < 7.8 MMOL/L	4 - 8 MMOL/L < 10 MMOL/L
HbA1c	3.6% - 5.9% OR < 41 MMOL/MOL	< 7.5% OR < 58 MMOL/MOL



If you have diabetes and you keep things controlled around these levels you will sometimes have low blood glucose feelings or hypos. This tells you and us that your diabetes is pretty well controlled and it becomes a worry if hypos happen more than 3-4 times per week or you need help from other people to treat the hypo regularly. If this happens to you regularly then you should speak to your diabetes team.





Storage of insulin & disposal of sharps

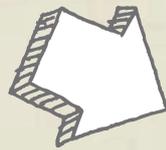
The insulin cartridge or disposable pen you are using is safe to be out of the fridge for up to 28 days as long as the date on it has not passed and it has not been allowed to get too hot or too cold.

The insulin that you have "in stock" will keep quite happily in the fridge until its expiry date as long as your fridge is working properly and not making it too cold or not keeping it cold enough.

Pen needles should be changed frequently (other wise they get blunt and might cause damage to your skin and could give you an infection).

Care also needs to be taken to make sure injection sites are moved around (rotation) as overusing any particular one can cause fatty lumps to appear over time which will make insulin absorption erratic, less effective and can affect your blood glucose levels.

No one wants to get stuck by someone else's needle so you need to take care once you have used it to dispose of it safely either in a special sharps bin – ask your diabetes nurse how to get one of these – or by clipping the needle off using a Safe-Clip™ (available for purchase from pharmacies or local Diabetes Society retail outlets).



WHATEVER YOU DECIDE TO DO – REMEMBER IT IS YOUR SHARP AND IT IS YOUR RESPONSIBILITY TO MAKE SURE IT IS SAFELY DISPOSED OF!

Contact Numbers

School Nurse:

Diabetes Specialist or Local Team:

Kidshealth

<http://www.kidshealth.org.nz>

Starship Transition

<https://www.starship.org.nz/patients-parents-and-visitors/youth-transition/diabetes-service>

Youth Law Aotearoa

<http://www.youthlaw.co.nz>

A series of leaflets is available that may be helpful for you:

- Annual Review
- Body Piercing & Tattooing
- Emotional Well-being
- Exercise
- Insulin Pumps
- Looking After Type 1 Diabetes
- Sensible Drinking
- Sex and Beyond
- Top Tips for School
- Travelling

Ask your diabetes team for the ones you want.

Provided by Lilly as a support to medicine and patients with diabetes. This leaflet has been written by the RCN Children and Young People Diabetes Community (CYPDC). Lilly's involvement is limited to production costs and a review of the content for medical accuracy only.

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