

SCHOOL GUIDE

SUPPORTING PEOPLE
WITH TYPE 1 DIABETES
IN SCHOOLS AND
EDUCATION SETTINGS.
#TALKTYPE1



TYPE 1 DIABETES CONTINUES TO BE AN OFTEN NEGLECTED AND MISUNDERSTOOD ISSUE AMONG CHILDREN AND SCHOOLS IN THE UK.

This guide will help to make sure you are equipped with the information you need to understand the condition and safeguard children in your school. We hope you find this information useful and will share it with the rest of your staff as appropriate.

The information and guidance is of a general nature only. Specific information should ALWAYS be sought from the child, their parents and a diabetes specialist nurse.

THE FACTS ABOUT TYPE 1 DIABETES

- Type 1 diabetes affects around 400,000 people in the UK, approximately 29,000 of them are children.
- Incidence is increasing by about four per cent each year particularly in children under five. There has been a five-fold increase in this age group in the last 20 years.
- Type 1 diabetes is when the body can't regulate blood glucose levels on its own.
- It happens because the body's own immune system attacks cells in the pancreas that produces insulin. It can occur at any age, but is often diagnosed during childhood. There is currently no cure.
- Nothing the child or their parents did or didn't do could have prevented their diagnosis.
- Children with type 1 diabetes rely on multiple daily insulin injections or pump infusions every day, just to stay alive.
- A child diagnosed with type 1 diabetes at the age of five faces up to 19,000 injections and 50,000 finger prick tests by the time they're 18.
- Type 1 diabetes should not be confused with type 2 diabetes, which is usually diagnosed in adults and can be associated with lifestyle factors, such as body weight. Type 2 diabetes can sometimes be controlled in its early stages by a healthy diet and lifestyle, it also needs careful monitoring and usually needs other treatments, including tablets and sometimes even insulin injections later on.

TYPE 1 DIABETES SHOULD NOT PREVENT ANYONE FROM FULLY PARTICIPATING.

Opportunities in all academic, social and sporting activities should be encouraged, as development of self-esteem and confidence in such activities can have positive effects on the management of type 1 diabetes.

For more information visit [gov.uk](https://www.gov.uk) and search 'school pupils with medical conditions'.

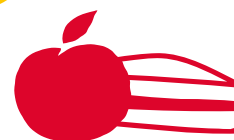


THINGS YOU NEED TO KNOW

- Children of different ages will need different levels of support to test their blood glucose (sugar) levels, take insulin injections and pump infusions.
- Maintaining good blood glucose levels is a balancing act and it's sometimes extremely difficult to avoid swings between hyperglycaemia (high blood glucose) and hypoglycaemia (low blood glucose).
- Having blood glucose levels too high for a long period of time risks causing future complications, while low blood glucose levels can cause dangerous 'hypos'.
- The general target ranges are between 4-7 mmol/L* before a meal and under 9 mmol/L two hours afterwards.
- Check with the child and their parents what their individual targets are. Children may not expect to achieve targets all the time, but it's important to try to keep good type 1 diabetes control as much as possible.

*Millimoles per litre is a measurement of the concentration of a substance in a specific amount of liquid. Numbers taken from NICE guidelines.

THE RULE OF THUMB



**FOOD
MAKES BLOOD
GLUCOSE
LEVELS RISE**



**EXERCISE
& INSULIN
MAKE BLOOD
GLUCOSE
LEVELS FALL**

↑ HYPERS

SYMPTOMS INCLUDE:

- Increased thirst
- Passing urine more frequently
- Headaches
- Lethargy
- Abdominal pain
- Unexplained weight loss

HYPERS MAY HAPPEN BECAUSE:

- An insulin dose has been missed
- Too little insulin has been given
- Too much sugary or starchy food has been eaten
- A hypo has been over-treated
- Stress
- They're unwell

“THE MOST IMPORTANT THING FOR THE SCHOOL TO DO IS TO TREAT ELLIS NORMALLY. WHILST THE STAFF PLAY DOWN TO ELLIS THAT HE ISN'T ANY DIFFERENT FROM THE OTHER CHILDREN, I AM HAPPY IN THE KNOWLEDGE THAT THEY ARE ACUTELY AWARE HIS EXTRA CARE IS ESSENTIAL AND THEY ARE COMPLETELY ON THE BALL WITH IT.”

Julie Edwards
mother of Ellis, age six



WHAT TO DO

If a child's blood glucose level is high for just a short time, emergency treatment won't be necessary. If it stays high, action needs to be taken to prevent diabetic ketoacidosis (DKA). This is when a severe lack of insulin upsets the body's normal chemical balance and causes ketones to be produced.

Ketones are acids that can build up in the blood and urine. In high levels these ketones are poisonous to the body and can cause long-term damage. Children need to drink lots of sugar-free fluids and may need extra insulin.

Talk to the child and their parents about how they recognise and treat a hyper.

Over time the effect of periods of high blood glucose can cause damage to blood vessels and organs in the body, leading to long-term complications.

↓ HYPOS

SYMPTOMS INCLUDE:

- Sweating
- Drowsiness
- Glazed eyes
- Lack of concentration
- Aggression or tearfulness
- Hunger
- Going pale

Children may not always notice that they are hypo and these symptoms may be noticed by someone else first.

HYPOS MAY HAPPEN BECAUSE:

- Too much insulin has been administered
- A meal or snack has been delayed or missed
- They haven't eaten enough carbohydrate
- They have done unplanned exercise

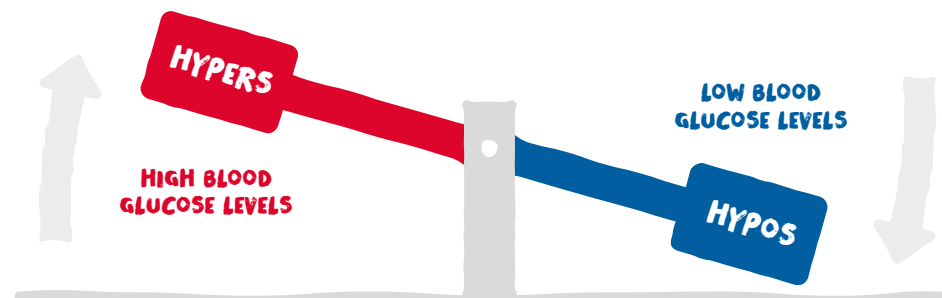
Sometimes there is just no obvious cause.



WHAT TO DO

Make sure the child sits down and eats or drinks something sugary, such as glucose tablets, jelly babies, fruit juice or a sugary soft drink (not diet or sugar free). Ensure a snack like this is always kept close to hand or can be brought to them. This quick-acting carbohydrate will raise their blood glucose levels quickly.

The amount needed will vary from child to child. Ideally the student should also carry some form of glucose with them in their bag or pocket. In time some children will learn to recognise and treat their own hypos but may still need support from adults and peers around them who may recognise their symptoms before they do.





LONG-TERM EFFECTS

TYPE 1 DIABETES IS A LIFELONG CONDITION THAT NEEDS DAILY MANAGEMENT.

It also carries a risk of long-term complications, such as heart disease or damage to the kidneys, eyes or nerves.

Medical research has shown that these complications are much less likely in people who keep their blood glucose levels as close to their target as possible.

We fund vital research to cure, treat and prevent type 1 diabetes, and support people affected by type 1 diabetes.



TOP TIPS FOR MANAGEMENT

BE PREPARED

Speak to the child's parents and healthcare team to agree an action plan before they start/return to school following a diagnosis.

This should include a school contact for the child and their family e.g. the class teacher or first aider.

Ideally the contact will already have a relationship with the family. Relevant staff should be provided with training, if needed.

We have worked with the Children and Young People Diabetes Network and Virtual College to create a CPD accredited e-learning course.

To access this free course please go to jdrf.org.uk/schools

The child's diabetes healthcare team or nurse may be able to suggest other suitable training too.



COMMUNICATION IS KEY

BUILD A GOOD RELATIONSHIP WITH BOTH THE CHILD AND THEIR FAMILY

They will all need reassurance that he or she will be well cared for in school and be treated equally to other children. If they have confidence in you from the start, the child is much more likely to share their concerns with you.

MEDICAL INFORMATION IS CONFIDENTIAL

Talk to the child or parent to agree which school staff should/need to be aware of the child's condition. Remember, if new staff are appointed, details of the child may need to be relayed to them. Agree with the family how classmates should be made aware of the child's condition.

The child should be treated the same as others but classmates should be aware of key differences, for example the importance of maintaining blood glucose (sugar) levels. See your curriculum-linked activity plans and parent information guides to help you raise awareness and manage this process. If the child has just been diagnosed, they may have had time off school and feel nervous about returning.

This might be an ideal time to introduce some discussion in the class about the condition. It may be useful to raise awareness of type 1 diabetes through an assembly before the child returns to school. A template for this is included in your pack, or you can download it at jdrf.org.uk/schools



MANAGEMENT & MEDICATION

PLANNING

You'll need to agree which staff members are willing or able to administer medication and oversee finger prick blood testing. Ensure they are fully aware of the correct procedures for blood glucose monitoring, where the hypo snack box is and the emergency procedures.

This information should be displayed in a clear and visible space and copies should be kept in the child's class register. Ideally, the school should have a spare blood-testing kit on site, with a facility for discarding needles. The child's diabetes specialist nurse may be able to assist with this.

MANAGEMENT & MEDICATION CONTINUED...

The head and class teacher should know the exact location of the hypo snack boxes and the blood-testing kit. A record book detailing the blood glucose level results, carbohydrate intake and insulin received should be shared between the school and family. A template is available in this pack. You can also download more, if needed, at **[jdrf.org.uk/
resourcesforschools](http://jdrf.org.uk/resourcesforschools)**

Planning for this can be done as part of an INSET day or staff meeting and could be delivered by the child's diabetes specialist nurse (DSN) and/or the child's parents. Many diabetes nurses also run study days at their hospital to train school staff. Please make sure relevant staff complete our e-learning module, which can be found at idrf.org.uk/schools

TESTING AND INJECTING

The child should have somewhere private to have insulin injections or monitor their blood glucose during the day, with an adult present or available.

As the child becomes older or more confident, they may prefer to test their blood glucose and inject themselves discreetly at their desk or in their classrooms.



THE TOILET IS NOT AN APPROPRIATE PRIVATE AREA TO TEST AND INJECT.

OUTSIDE SCHOOL

Provided the child's family is comfortable with it, there is no reason why the child cannot be included on a school or residential trip. A procedure needs to form part of the risk assessment and a first-aider or trained member of staff needs to accompany the group.

Talk to the child's family about whether they're comfortable making the adult volunteers aware of the child's condition.

Prepare for every eventuality by ensuring that the blood-testing kit, emergency glucose gel and additional hypo snack box is included in the outing bag that accompanies the child.

CURRICULUM-LINKED ACTIVITY PLANS

Activity plans can be downloaded from **jdrf.org.uk/resourcesforschools**, to help you teach pupils about type 1 diabetes.

You may choose to use the activities as a scheme of work or as individual lessons which can be integrated into your planned sessions. The plans are grouped into three main subject areas: science, PSHE and literacy.

NOTES

FURTHER HELP AND RESOURCES FOR SCHOOLS

- Supporting pupils at schools with medical conditions (GOV updated 2015).
- Caring for children in education settings e-learning (CYPDN, JDRF & Virtual College 2016).
- Managing Medicines in School and Early Years Settings (DfES 2005).
- Health Lives, Brighter Futures (DCSF and DH 2009).
- Department of Health report Making Every Young Person with Diabetes Matter (DH 2007).
- Including me: managing complex health needs in schools and early years settings (sister document to Managing Medicines in Schools and Early Years Settings 2005).

For links visit jdrf.org.uk/schools

YOUR SCHOOL CAN HELP CREATE A WORLD WITHOUT TYPE 1 DIABETES

Schools up and down the country are raising money to help fund our life-changing research. We have a whole host of fun activities and ideas for you to try at school or you can bring your own idea to life.

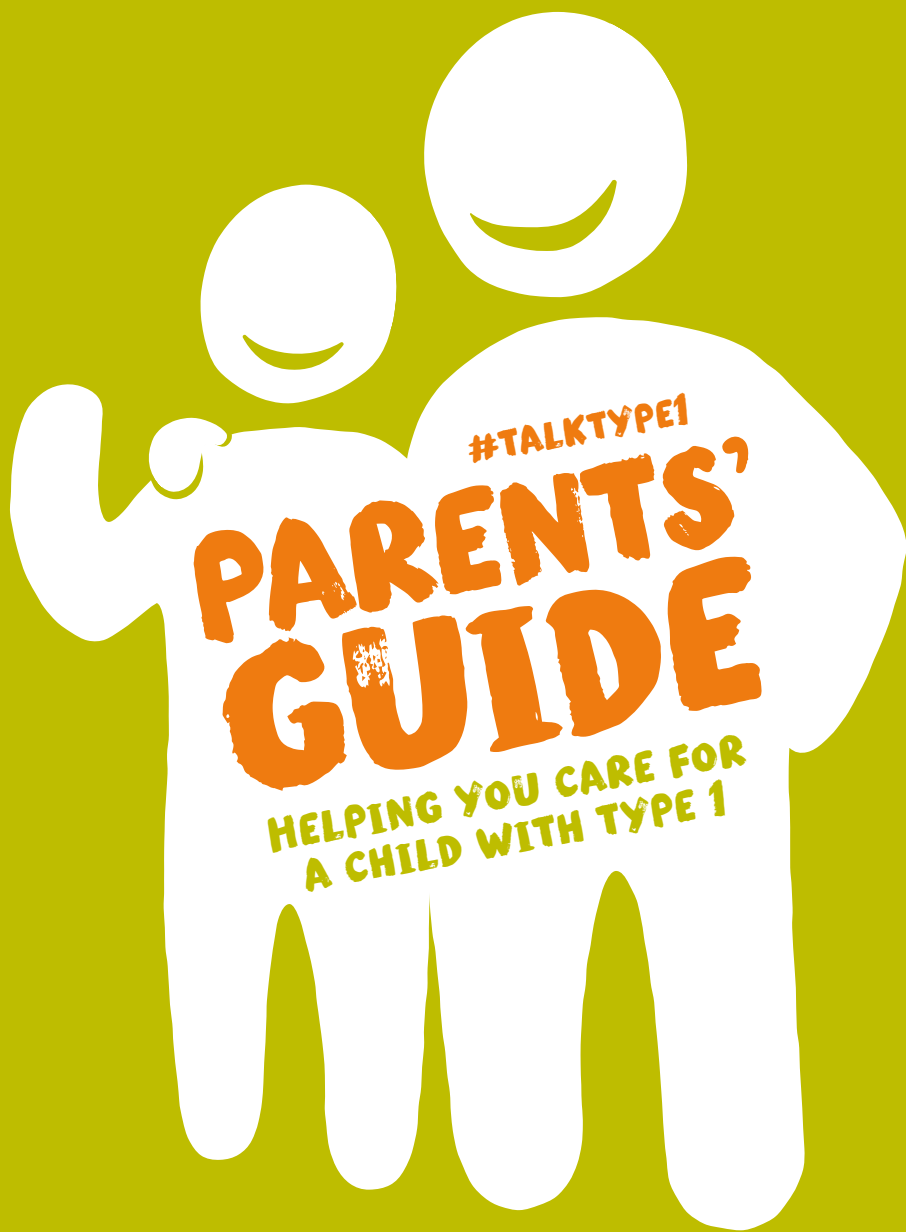
Raising money is a great way for the whole school to show support for your pupils who have type 1 diabetes and raise awareness. Whatever you decide to do, we'll be on hand to support you with anything you need to make your fundraising a big success!

Find out more and get fundraising ideas at
jdrf.org.uk/schoolfundraising

This guide has been created by JDRF with the help of practicing teachers, school nurses and families affected by type 1 diabetes.

Lilly and JDRF have collaborated to produce the schools pack. The schools pack has been developed by JDRF and supported by Lilly, who has reviewed the content for medical accuracy only.

Lilly | DIABETES



THIS GUIDE INCLUDES SOME USEFUL INFORMATION AND THINGS TO THINK ABOUT WHEN INVITING A CHILD WITH TYPE 1 ROUND FOR TEA..



Abbie and Subash have type 1 diabetes. They are still like other children; they can play and go to parties just like everyone else. They just need a bit of extra help to manage their blood glucose levels, to plan snacks and mealtimes a bit more carefully and to know that an adult is aware of the signs that they might be getting unwell. Some people think that type 1 diabetes is contagious, that you get it by eating sweets and sugary food or from being overweight. All these misconceptions are wrong.

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- Type 1 diabetes should not be confused with type 2 diabetes, which is usually diagnosed in adults and can be associated with lifestyle factors, such as body weight. Type 2 diabetes can sometimes be controlled in its early stages by a healthy diet and lifestyle. It also needs careful monitoring and usually needs other treatments, including tablets and sometimes even insulin injections later on.



If you'd like to find out more about type 1 diabetes and how it affects children like Abbie and Subash, jdrf.org.uk/abouttype1

CHILDREN NEED TO MANAGE THEIR TYPE 1 DIABETES BY REGULARLY TESTING THEIR BLOOD GLUCOSE (SUGAR) LEVELS AND TAKING INSULIN INJECTIONS, ALTHOUGH SOMETIMES THEY MAY NEED A BIT OF HELP. BY DOING THIS AND PAYING CAREFUL ATTENTION TO WHAT AND WHEN THEY EAT, THEY CAN ENJOY AN ACTIVE SCHOOL AND SOCIAL LIFE.

CAN ABBIE COME AND PLAY?



Yes! As long as her blood glucose levels can be checked beforehand to make sure she's OK, and that they won't go too low while she is playing. She might need a snack if she's going to be very active. Have a chat with her mum or dad beforehand to confirm what would work best.

CAN SUBASH STAY FOR TEA OR COME OUT TO EAT?



Yes! It's probably a good idea to talk to his mum or dad about what and how much he should have to eat. The carbohydrate he eats will be broken down into glucose and insulin lets it into his cells to give him energy. Some things contain more carbohydrates than others, which he needs to watch out for, so that he takes the right amount of insulin. But Subash can eat the same balanced diet as everyone else, with occasional treats and sweets.

CAN ABBIE STAY FOR A SLEEPOVER?



Yes! Her parents will probably want to have a chat first and might even have a checklist they can share to make sure everyone knows about how and when Abbie checks her blood glucose levels, takes her insulin and what to do if she starts to feel unwell.

Sometimes, their blood glucose levels can become unbalanced and there is the danger of hypoglycaemia (low blood-glucose levels) or hyperglycaemia (high blood glucose levels). Speak to her parents about how to manage this.



EMERGENCY CONTACT INFORMATION

PLEASE FILL OUT YOUR DETAILS BELOW:



Parent/Guardian:

Address:

Work/home phone:

Mobile phone:

Additional information:

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HYPO PROCEDURE GUIDE

#TALKTYPE1

HYP0 PROCEDURE

1 GET THE CHILD'S BLOOD GLUCOSE LEVEL TESTED

The following people can carry out this procedure:

(Primary contact)

(Other contact)

.....

.....

2 SIT THE CHILD DOWN WHERE HE/SHE IS. NEVER LEAVE THEM ALONE

3 GET THE HYP0 SNACK BOX, WHICH IS KEPT

.....

4 GIVE THE CHILD SOMETHING TO EAT OR DRINK IMMEDIATELY

Check individual care plan and get advice from parents/diabetes specialist nurse (see contact details at top). Generally 3-4 glucose tablets, a small glass of real fruit juice, or a 50-80ml sugary soft drink (not diet or sugar-free) will work. If the child is unconscious, do not give them anything to eat or drink at all and seek urgent medical attention.

5 ASSESS THE CHILD

If the child becomes drowsy or uncooperative, but is conscious and not fitting, emergency glucose gel should be used. Squeeze the gel into the child's mouth, between their cheek and teeth and massage in. After using the gel, start offering sugary snacks as identified above.

6 WAIT FIFTEEN MINUTES AND RE-TEST BLOOD GLUCOSE LEVELS

The blood glucose level should read mmol/L

If it is still below mmol/L or the symptoms remain the same, return to step 4.

7 RECOVERY AND EATING

Once the child feels better and their blood glucose returns to the normal level, they should eat starchy carbohydrates or their meal, if due.

8 CHECK THEIR BLOOD GLUCOSE LEVELS AGAIN AFTER 15 MINUTES

Ensure the parents are kept informed.

9 SEEK URGENT MEDICAL ATTENTION, IF:

- They're vomiting
- They have a high temperature
- They have stomach pains
- Their blood glucose levels remain low after two treatments
- Symptoms deteriorate
- The child becomes increasingly lethargic
- They're unresponsive or lose consciousness

If you keep glucagon in a fridge at school, inform ambulance control that you are able to administer the emergency glucagon injection; they can give you guidance over the phone.

This could save the child's life if the hypo is very severe. If the child is unconscious, do not give them anything to eat or drink at all.

CHILD'S EMERGENCY DETAILS

PLEASE FILL OUT YOUR DETAILS BELOW

Name

Class

Year group

Parent/Guardian

Phone number

Diabetes Specialist Nurse

Phone number

The signs and symptoms of 's hypo are:

Lilly and JDRF have collaborated to produce the schools pack. The schools pack has been developed by JDRF and supported by Lilly, who has reviewed the content for medical accuracy only.

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INSTRUCTIONS:

CUT OUT AND FOLD THE HYPO CARD ALONG THE DOTTED LINES. THEN FOLD INTO A CONCERTINA.

	 MY EMERGENCY SNACK BOX IS KEPT:	 IF I AM HAVING A HYPO, REFER TO MY HYPO PROCEDURE GUIDE, WHICH IS KEPT:	 OTHER SYMPTOMS MAY INCLUDE:	☐ Unusual behaviour e.g. aggression ☐ Sturring words ☐ Sudden pale skin ☐ Lack of concentration ☐ Glazed or staring eyes ☐ Dizziness ☐ Clammy/sweaty skin FOLLOWING SIGNS (TICK THOSE THAT APPLY): I MIGHT BE HAVING A HYPO IF YOU SEE THE
FILL IN THIS CARD AND SHARE IT WITH ADULTS WHEN NEEDED Lilly and JDRF have collaborated to produce the schools pack. The schools pack has been developed by JDRF and supported by Lilly, who has reviewed the content for medical accuracy only. <i>Lilly</i> DIABETES	MY NAME IS: I have type 1 diabetes and I need to regularly test my blood glucose levels. I also require insulin from a: Pump ☐ Pen ☐	MY BLOOD TESTING KIT IS KEPT: I may need to leave a lesson early to test my blood or inject, especially at lunchtime.	 is a friend/adult who can accompany me if I need help. is the member of staff to contact about my condition.	IF IN DOUBT OR I AM UNCONSCIOUS, PLEASE PUT ME IN THE RECOVERY POSITION AND CALL 999 JDRF IMPROVING LIVES. CURING TYPE 1 DIABETES.

ASSEMBLY PLAN

PLANNING AND PREPARATION

This short play, which could be performed at an assembly, will need to be rehearsed and can be used to help the children understand type 1 diabetes.



OPPORTUNITIES FOR EXTENDING/ADAPTING THE PLAY FOR OLDER MORE ABLE CHILDREN ARE SUGGESTED WITHIN THE TEXT.

WHAT YOU'LL NEED



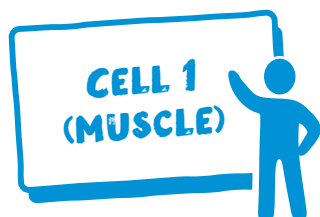
COSTUMES/NAME CARDS FOR EACH CHARACTER



A BASKET OF COLOURED BALLOONS/ BALLS TO REPRESENT GLUCOSE WHICH WILL BE GIVEN TO THE CELLS

CHARACTERS

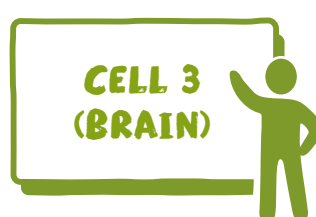
Below is the character list for the play. You can write down the actor's name underneath each character.



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INTRODUCTION

'Today our assembly is about type 1 diabetes. We have been learning all about type 1 diabetes, it is something which can affect someone's body and how it works inside.'

'We would like to tell you a bit about why we need to raise money for JDRF and raise awareness about type 1 diabetes. Our class has put together a presentation to tell you all about type 1 diabetes.'

THE SCRIPT

START HERE. (DON'T FORGET THE INTRODUCTION)

CELL 1

Hi I am a cell inside the body. I am very small but I need lots and lots of energy to make sure I work properly.

FOOD

I am food and I contain glucose, the energy that cells need. I get mashed and squashed up inside the stomach so that glucose can travel all round the body to every cell.

! FOOD COULD MOVE AROUND THE STAGE TO INDICATE MOVEMENT AROUND THE BODY.

NARRATOR

Once the food is mashed up it gives its glucose to the cells. The cells are happy because they can use the glucose for their daily work. They feel happy and strong.

! FOOD TRIES TO GIVE BALLOONS/BALLS TO THE CELLS, BUT CELLS DON'T TAKE THEM.

NARRATOR

Every single cell in our body needs glucose to live a happy and healthy life. But each cell is like a small house with a locked door. You need a key called insulin to open the door and let the glucose in.

! INSULIN KEY APPEARS ON STAGE.

INSULIN KEY

Hello everybody, my name is Insulin and I can help you open the cell's door; the glucose can then go into the cell and be turned into energy the cell needs for its everyday life.

! INSULIN KEY SHAKES HANDS WITH EACH CELL AND FOOD HANDS THEM A BALLOON. THE CELL SMILES ONCE THEY'RE GIVEN THEIR BALLOON.

NARRATOR

Insulin is produced in our body from a small number of cells called a beta cell that live in an organ called the pancreas.

! SHOW PUPILS STANDING NEXT TO EACH OTHER ON STAGE WEARING A TAG WITH BETA CELL WRITTEN ON IT.

NARRATOR

In some bodies, the beta cells cannot make enough insulin for the entire body to help the glucose to get inside the cells. So the glucose stays in the blood and the cells become tired and sad because they don't have the energy to do their daily work.

! PUPILS WEARING BETA CELL TAGS TO ACT VERY TIRED AND SAD.

NARRATOR

The only way they can get the insulin they need is to inject it into their body a few times every day. A special nurse teaches them how to do this safely. They have to find out how much insulin to inject by testing their blood.

Type 1 diabetes affects children and adults. It stays with them for the rest of their lives.

You cannot catch type 1 diabetes from someone else or get it from eating too many sweets and it does not happen because of something that anyone has done wrong.

Sometimes type 1 diabetes can make people very unwell. At the moment there is no cure for it although there are some very clever scientists who are trying to find the cure.

JDRF, the type 1 diabetes charity, is helping these scientists and until then, it supports those affected by the condition.

THE END

THANK YOU

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**FOR SUPPORTING CHILDREN WITH
TYPE 1 DIABETES IN YOUR SCHOOL**

DATE:

SIGNED:



JDRF IMPROVING
LIVES.
CURING
TYPE 1
DIABETES.

