Breakthrough T1D™
Formerly JDRF

School guide

Supporting children and young people with type 1 diabetes in school and education settings

breakthrought1d.org.uk

What is type 1 diabetes?

Type 1 diabetes (T1D) is a serious autoimmune condition that occurs when your immune system mistakenly attacks beta cells within the pancreas, which then stops producing insulin. As a result, glucose levels in your blood begin to rise to dangerous levels, and your body is unable to operate effectively unless insulin is replaced. T1D is treated with insulin.

T1D continues to be an often overlooked and misunderstood condition among children and young people and schools in the UK.

Type 1 diabetes should not be confused with type 2 diabetes. T1D is an autoimmune condition where the body stops producing insulin, whereas type 2 diabetes is a metabolic condition and occurs when the body doesn't use insulin efficiently, or doesn't make enough insulin. Type 2 diabetes is managed differently to T1D. Over time, many people with type 2 diabetes need additional treatments, including oral medications and, in some cases, insulin injections.

This guide is designed to equip you with the information you need to better understand T1D and support the wellbeing of children and young people in your school or care. We hope you find this information useful and encourage you to share it with your colleagues as appropriate.

Please note that the information and guidance provided are general in nature. For specific advice, it is always important to consult directly with the child or young person, their parents/carers, their diabetes healthcare team, and to refer to the child or young person's personalised care plan.

Facts about type 1 diabetes:

The main signs and symptoms of T1D are:

Going to the toilet more

Being extremely thirsty

Tiredness

Weight loss

- T1D affects over 400,000 people in the UK, and approximately 32,809 of them are children (England and Wales, 2023/24 NPDA report), with diagnoses increasing each year
- T1D is an autoimmune condition where the body stops making insulin. This means that insulin needs to be injected or infused throughout the day, and blood glucose levels need to be closely monitored
- It can occur at any age and nothing the child or young person, or their parents did or didn't do could have prevented the diagnosis
- People living with T1D rely on multiple daily insulin injections or pump infusions every day to stay alive

Treatment options for type 1 diabetes

Children and young people with T1D manage their condition by replacing the insulin their body no longer produces. This is done through daily treatment, which may vary depending on the child or young person's age, preferences, and medical advice. The main treatment options include:

A blood glucose meter:

this is a small medical device that checks the amount of glucose in the blood from a finger prick. Some devices can also check blood ketone levels using

A continuous glucose monitor (CGM):

a CGM uses a sensor attached to the body to send glucose readings to a smart phone, watch or reader. It can alert when blood levels are going out of range.

An insulin injection (pen):

insulin pens use a small needle to inject insulin from a cartridge. Treatment usually involves short-acting insulin before meals and longer-acting insulin once or twice daily. They can also be "connected" which means they send usage data to an app.

An insulin pump:

insulin pumps deliver insulin every few minutes 24/7, with extra doses at mealtimes, mimicking the body's natural rhythm. The insulin flows through a cannula which sits under the skin.

Hybrid closed loop (HCL):

hybrid closed loop systems combine a CGM, pump, and algorithm to calculate insulin needs and deliver it automatically. Users input carbohydrate amounts before eating.

Each child and young person's treatment will be tailored to their needs and outlined in their individual care plan. It's important for school staff to be familiar with the devices a child uses and to know how to support them in checking glucose levels, administering insulin, and responding to changes. Some diabetes systems require access and connection to a mobile phone. Training and communication with the child and young person's parents and diabetes team are key to ensuring safe and confident care in school.

T1D should never be a barrier to learning, socialising, or sporting activities

Children and young people should be encouraged to engage fully in all aspects of school life - academic, social, and physical. These experiences help build confidence and self-esteem, which can positively affect the management of T1D.

Schools play a vital role in ensuring pupils with medical conditions are properly supported. Planning is needed to keep children and young people with T1D safe during and after activities.

For statutory guidance on how to do this, visit:

Supporting pupils with medical conditions at school – GOV.UK

For practical guidance on what an individual child or young person needs to ensure they are properly supported, liaise with the child or young person, their healthcare team and their parents.

Hypoglycaemia (hypo)

Hypoglycaemia is when glucose levels are too low (usually below 3.9 mmol/L). There may be physical symptoms that you can often see, or you can be told about.

These could include:

- Sweating
- Drowsiness
- Glazed eyes
- Dizziness
- Lack of concentration / being confused
- Aggression or tearfulness
- Hunger
- Going pale

Children and young people may not always notice that they are hypo, and these symptoms may be noticed by someone else first. Checking the child or young person's blood glucose level is essential to confirm if they are having a hypo. This may be done using their CGM sensor and reader/phone, or with a finger-prick test and a blood glucose meter. Information about hypos and how to treat them can be found in the individual care plan.

Sometimes there is no obvious cause, but hypos may happen due to:

- Illness
- Too much insulin in the body
- A meal or snack has been delayed or missed
- Doing unexpected or unplanned physical activity
- Temperature - hot and cold
- Some types of medication
- Stress, including exam situations

What to do during a hypo

It is important that the child and young person aren't left alone or sent to the medical room for treatment. Instead, make sure the child or young person receives treatment where they are, 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 the child or young person. This quick-acting carbohydrate will raise their blood glucose levels quickly.

Avoid giving chocolate to treat hypos. Its fat content slows sugar absorption.

The amount needed will vary from child to child so please speak with the child or young person, their parents/carers, and their diabetes specialist nurse (DSN) about their specific 'hypo' treatments or follow the advice in their care plan. Ideally, the student should also carry some form of glucose with them in their bag or pocket. Over time, some children and young people will learn to recognise and treat their own hypos but may still need support from adults and peers around them.

What should you do in an emergency?

Most of the time, a hypo can be treated quickly by having something sugary to eat or drink. But sometimes, a hypo can come on suddenly. In those moments, the child or young person might need a bit more help, or even medical attention, to safely recover.

If the child or young person is unconscious, call 999 and do not give them anything to eat or drink.

You should also 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 or they become unresponsive

Hyperglycaemia (hyper)

Hyperglycaemia (hyper) is when glucose levels are too high (usually above 10 mmol/L), and some additional insulin may be required.

The child or young person may experience some symptoms of hyperglycaemia that you can often see, or you can be told about.

These can include:

- Increased thirst
- Passing urine more frequently
- Headaches
- Lethargy
- Abdominal pain

Hypers may happen due to:

- Stress, including exam situations
- Illness
- Growth spurts/ hormones
- Some forms of exercise
- Some types of medication
- Not having enough insulin in the body
- A hypo being over-treated
- Temperature - hot and cold

Sometimes there's no clear reason as to why a hyper has occurred.

What to do during a hyper

Checking the child or young person's blood glucose level is essential to confirm if their blood glucose is higher than it should be. This may be done using their CGM sensor and reader/phone, or with a finger-prick test and a blood glucose meter.

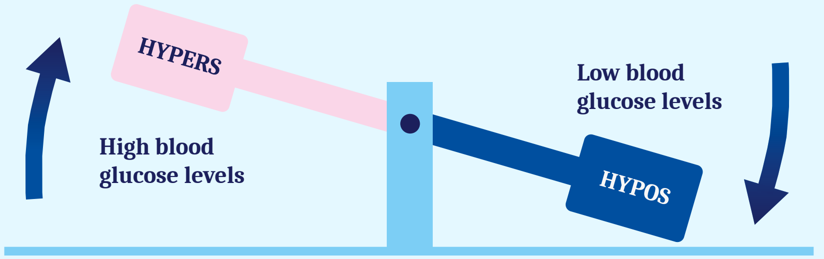
If a child or young person's blood glucose level is high for just a short time, emergency treatment won't be necessary. The child or young person is likely to need to drink lots of sugar-free fluids such as water and may need extra insulin.

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. 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.

Please refer to the personalised care plan for more information on hypers.

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



Things you need to know

- Children and young people will have different support needs depending on their age and ability. This may include support to check their blood glucose levels, take insulin injections, and/or pump infusions
- Maintaining target blood glucose levels is a balancing act and it’s 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’
- Check the child or young person’s care plan for target blood glucose levels, especially before, during and after activities
- Children and young people will not be able to maintain target blood glucose levels all the time, but it’s important to try and stay in range as much as possible

The rule of thumb

Food makes blood glucose levels rise ↑

Insulin makes blood glucose levels fall ↓

Exercise can make blood glucose levels rise, fall or both over time. ↕

Communication is key

Build a good relationship with both the child or young person and their family

For newly diagnosed children and young people, speak to their parents and healthcare team to agree on an action plan before they start/return to school. This should include a school contact for the child or young person 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.

The family will also need reassurance that their child will be well cared for in school and be treated equally to other children and young people. If they have confidence in you from the start, the child or young person is much more likely to share their concerns with you.

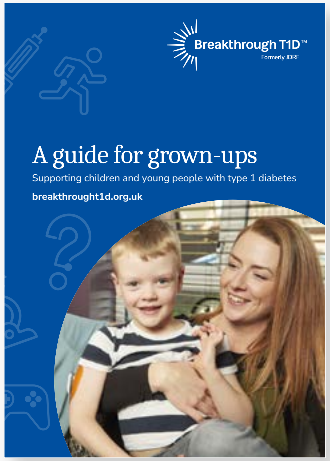
> “The most important thing for the school to do is to treat Ellis normally. Whilst the staff play down to Ellis that he isn’t any different from the other children, I am happy in the knowledge that they are acutely aware his extra care is essential, and they are completely on the ball with it.”
>
> **Julie Edwards,**
> mother of Ellis, age six

Medical information is confidential

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

The child or young person should be treated the same as others, but classmates should be aware of key differences, for example the importance of maintaining blood glucose levels. Included in this pack is an assembly plan and 'A guide for grown-ups' to help others understand T1D. If the child or young person 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 or young person returns to school.

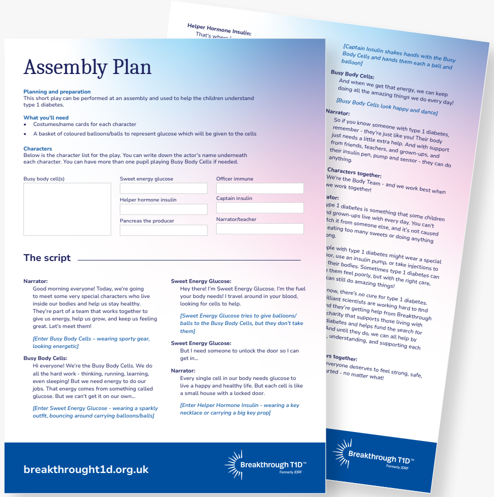


Breakthrough T1D™
Formerly JDRF

A guide for grown-ups

Supporting children and young people with type 1 diabetes

breakthrought1d.org.uk



Assembly Plan

Planning and preparation
This short play can be performed at an assembly and used to help the children understand type 1 diabetes.

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. You can have more than one pupil playing Busy Body Cells if needed.

Busy body cell(s)
Sweet energy glucose
Helper hormone insulin
Pancreas the producer
Officer immune
Captain insulin
Narrator/teacher

The script

Narrator:
Good morning everyone! Today, we're going to meet some very special characters who live inside our bodies and help us stay healthy. They're part of a team that works together to give us energy, help us grow, and keep us feeling great. Let's meet them!

[Enter Busy Body Cells – wearing sporty gear, looking energetic]

Busy Body Cells:
Hi everyone! We're the Busy Body Cells. We do all the hard work - thinking, running, learning, even sleeping! But we need energy to do our jobs. That energy comes from something called glucose. But we can't get it on our own...

[Enter Sweet Energy Glucose - wearing a sparkly outfit, bouncing around carrying balloons/balls]

Sweet Energy Glucose:
Hey there! I'm Sweet Energy Glucose. I'm the fuel your body needs! I travel around in your blood, looking for cells to help.

[Sweet Energy Glucose tries to give balloons/balls to the Busy Body Cells, but they don't take them]

Sweet Energy Glucose:
But I need someone to unlock the door so I can get in...

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.

[Enter Helper Hormone Insulin - wearing a key necklace or carrying a big key prop]

breakthrought1d.org.uk

Breakthrough T1D™
Formerly JDRF

Helper Hormone Insulin:
That's where I

[Captain Insulin shakes hands with the Busy Body Cells and hands them each a ball and balloon]

Busy Body Cells:
And when we get that energy, we can keep doing all the amazing things we do every day!

[Busy Body Cells look happy and dance]

Narrator:
So if you know someone with type 1 diabetes, remember - they're just like you! Their body just needs a little extra help. And with support from friends, teachers, and grown-ups, and their insulin pen, pump and sensor - they can do anything.

Characters together:
We're the Body Team - and we work best when we work together!

ator:
ype 1 diabetes is something that some children nd grown-ups live with every day. You can't tch it from someone else, and it's not caused eating too many sweets or doing anything ong.

ple with type 1 diabetes might wear a special sor, use an insulin pump, or take injections to their bodies. Sometimes type 1 diabetes can them feel poorly, but with the right care, can still do amazing things!

now, there's no cure for type 1 diabetes. illiant scientists are working hard to find nd they're getting help from Breakthrough charity that supports those living with diabetes and helps fund the search for And until they do, we can all help by , understanding, and supporting each

rs together:
everyone deserves to feel strong, safe, rted - no matter what!

Breakthrough T1D™
Formerly JDRF

A template for this is included in your pack, or you can download by scanning the QR code

Management and medication

Planning

You'll need to agree which staff members are willing or able to administer medication and 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 or young person's class register. Ideally, the school should have a spare blood-testing kit on site, with a facility for discarding needles. The child or young person's diabetes specialist nurse may be able to assist with this.

The head and class teacher should know the exact location of the hypo snack boxes and any back-up diabetes devices that may be needed. Please refer to the child or young person's care plan and speak with them and their family about this, and about the communication plan if a hypo or hyper happens during the school day.

T1D training and planning can be undertaken as part of an INSET day, or staff meeting and could be delivered by the child or young person's diabetes specialist nurse (DSN) and/or the parents. Many diabetes nurses also run study days at their hospital to train school staff.

We encourage all relevant school staff to complete the training available on the Type 1 Diabetes Training Platform for Schools.

This platform has been co-designed with specialist diabetes healthcare professionals, young people, teachers and parents, the platform is delivered by DigiBete and Leeds Children's Hospital Diabetes Team, in collaboration with the National Children and Young Peoples Diabetes Network, Breakthrough T1D and the Together Type 1 team within Diabetes UK.

Scan the QR code to access the type 1 diabetes schools and training community platform

Monitoring and managing type 1 diabetes

The child or young person should have somewhere private to have insulin injections, change cannulas and sensors or monitor their blood glucose during the day, with an adult present. As the child or young person becomes older or more confident, they may prefer to check their blood glucose and inject themselves discreetly at their desk or in their classrooms.

The toilet is not an appropriate private area to check their blood glucose levels, inject insulin or change any diabetes devices.

Mealtime support

Knowing information such as the carbohydrate content of school meals in advance can be hugely beneficial when trying to manage insulin dosing around meals and snacks.

Some families may choose to opt for packed lunches rather than school meals as a way to try and monitor the carbohydrates eaten during the school day.

Long-term effects of type 1 diabetes

T1D 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.

Illness

When a child or young person is unwell, their T1D may need to be managed a bit differently. Please refer to the individual care plan for specific guidance and sick-day rules.

Neurodiversity

Caring for a child or young person with T1D who is also autistic or has ADHD can provide unique challenges. Impulsivity or sensitivity to noise can have an impact on the T1D approaches or the technology used, however there is support available for you and the child or young person.

To read more about managing T1D in children and young people with neurodiversity, please scan the QR code

Emotional support

Managing T1D can be tough for young people on top of everything else that life brings. Up to two-thirds of young people experience feeling overwhelmed or frustrated with their T1D, making it harder to care for. Coping with Diabetes is a new interactive support tool to help children and young people with T1D look after their mental health and wellbeing.

To find out more, please scan the QR code

Physical activity and exercise

Children and young people with T1D can and should take part in physical activity and exercise. It's a key part of a healthy lifestyle and can support their diabetes management. However, it's important to be aware that physical activity can affect blood glucose levels. If the activity is more intense or lasts a long time, it's essential to check blood glucose levels more frequently to ensure they stay within a safe range. For specific advice on T1D and exercise, always consult directly with the child or young person, their parents/carers, and their diabetes specialist nurse (DSN), and to refer to the personalised care plan.

Scan the QR code to read more about T1D and exercise

Exams, assessments and tests

Children and young people with T1D may face extra challenges during exams, assessments and tests due to fluctuations in blood glucose levels, which can significantly affect concentration, cognitive function, and overall performance. Stress can exacerbate these fluctuations, increasing the risk of both hypoglycaemia and hyperglycaemia.

To ensure a fair testing environment, schools must offer reasonable adjustments under the Equality Act 2010. These may include supervised rest breaks with the exam clock paused, access to snacks and drinks, permission to use medical devices such as blood glucose monitors, insulin pumps, and mobile phones for diabetes management, and the option to sit exams in a separate room to manage their condition discreetly.

To arrange these adjustments, schools should work closely with the child or young person and their family to identify specific needs and then contact the relevant awarding body well in advance of the exam period. Applications for access arrangements, such as permission to use a mobile phone for medical alerts or take supervised breaks, are typically submitted via platforms like Access Arrangements Online, used by most UK exam boards under the Joint Council for Qualifications. If an application is rejected, schools can request a review by providing further details through the awarding body's referral process. Early communication and thorough documentation are key to ensuring the student receives the support they need.

Outside school

Providing the child or young person and their family are comfortable, there is no reason why the child or young person cannot be included on a school or residential trip. Planning discussions and a risk assessment may need to take place before the trip, and a First Aider or trained member of staff should be a part of the group.

- Discuss with the child or young person's family whether they are comfortable with adult volunteers being informed about the child or young person's medical condition
- Prepare for every eventuality by ensuring that spare and replacement equipment such as CGM sensors, cannulas, insulin pens, and insulin (as needed), and that these accompany the child or young person at all times. Their blood glucose monitoring kit and emergency hypo treatments must also be readily accessible throughout the trip and during all activities
- Take a copy of the child or young person's care plan on the trip, along with any specific guidance provided by their diabetes specialist nurse or family relating to the residential stay or planned activities

Further help and resources for schools

Knowledge is key to supporting children and young people with T1D. This section provides essential information, guidance and resources to help schools support students effectively - ensuring they can thrive both academically and socially.

Type 1 diabetes schools and training community platform
Digibete and Leeds Children's Hospital

Management of medicines in schools and early years settings
(PresQIPP, 2024)

Links to national guidance and legislation can be found within this document
National-CYP-diabetes-school-guide-2023.pdf

Further information about T1D can be found on our website
Breakthrough T1D UK | Type 1 Diabetes Research

Supporting learners with healthcare needs
Welsh Government

Supporting children and young people with healthcare needs in schools: guidance
Scottish Government

Information and resources for school staff and parents in supporting children and young people
Education Authority Medical Needs

Your school can help create a world without T1D

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 ideas 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!

Scan the QR code to find out more and get fundraising ideas

We are the leading global type 1 diabetes (T1D) research and advocacy charity. Together we're driving breakthroughs towards a world where no one lives with T1D. Until then, we help make everyday life better for the people who face it.

Contact us

Telephone: **020 7713 2030**
Email: **info@breakthrought1d.org.uk**

Breakthrough T1D™
Formerly JDRF

Registered with
FUNDRAISING
REGULATOR

Breakthrough T1D™
Formerly JDRF

A guide for grown-ups

Supporting children and young people with type 1 diabetes

breakthrought1d.org.uk

This guide includes useful information and things to think about when inviting a child or young person with type 1 diabetes (T1D) round for tea or a sleepover.

T1D is a serious autoimmune condition that occurs when your immune system mistakenly attacks beta cells within the pancreas, which then stops producing insulin. As a result, glucose levels in your blood begin to rise, and your body is unable to operate effectively unless insulin is replaced.

T1D continues to be an often overlooked and misunderstood condition among children and young people and schools in the UK.

Type 1 diabetes should not be confused with type 2 diabetes. T1D is an autoimmune condition where the body stops producing insulin, whereas type 2 diabetes is a metabolic condition and occurs when the body doesn't use insulin efficiently or doesn't make enough insulin. Type 2 diabetes is managed differently to T1D. Over time, many people with type 2 diabetes need additional treatments, including oral medications and, in some cases, insulin injections.

It's important to remember that T1D is an autoimmune condition that has nothing to do with diet or lifestyle.

Facts about type 1 diabetes

The main signs and symptoms of T1D are going to the toilet more, being extremely thirsty, tiredness and weight loss.

- T1D affects over 400,000 people in the UK, and approximately 32,809 of them are children (England and Wales, 2023/24 NPDA report), with diagnosesincreasing each year
- T1D is an autoimmune condition where the body stops making insulin. This means that insulin needs to be injected or infused throughout the day, and blood glucose levels need to be closely monitored
- It can occur at any age and nothing the child or young person, or their parents did or didn't do could have prevented the diagnosis
- People living with T1D rely on multiple daily insulin injections or pump infusions every day to stay alive

Treatment options for type 1 diabetes

Children and young people with T1D manage their condition by replacing the insulin their body no longer produces.

This is done through daily treatment, which may vary depending on the child or young person's age, preferences, and medical advice. The main treatment options include:

A blood glucose meter:
this is a small medical device that checks the amount of glucose in the blood from a finger prick.

A continuous glucose monitor (CGM):
a CGM uses a sensor attached to the body to send glucose readings to a smart phone, watch or reader. It can alert when blood levels are going out of range.

An insulin injection (pen):
insulin pens use a small needle to inject insulin from a cartridge. Treatment usually involves short-acting insulin before meals and longer-acting insulin once or twice daily. They can also be "connected" which means they send usage data to an app.

An insulin pump:

insulin pumps deliver insulin every few minutes 24/7, with extra doses at mealtimes, mimicking the body's natural rhythm. The insulin flows through a cannula which sits under the skin.

Hybrid closed loop (HCL):

hybrid closed loop systems combine a CGM, pump, and algorithm to calculate insulin needs and deliver it automatically. Users input carbohydrate amounts before eating.

T1D is managed by regularly monitoring blood glucose levels and taking insulin, either through injections or a pump. Some CGMs allow parents/carers to follow the readings on their mobile phone. Some children and young people can do this on their own, but they may need help from time to time.

With support and careful attention to their eating timing and options, they can enjoy a full and active school and social life.

Managing type 1 diabetes

The rule of thumb

Food makes blood glucose levels rise

Insulin makes blood glucose levels fall

Exercise can make blood glucose levels rise, fall or both over time.

Even a leisurely walk or short bike ride could have an impact. Maintaining target blood glucose levels is a balancing act and it can be difficult to avoid swings between hyper and hypo blood glucose levels. However, 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.

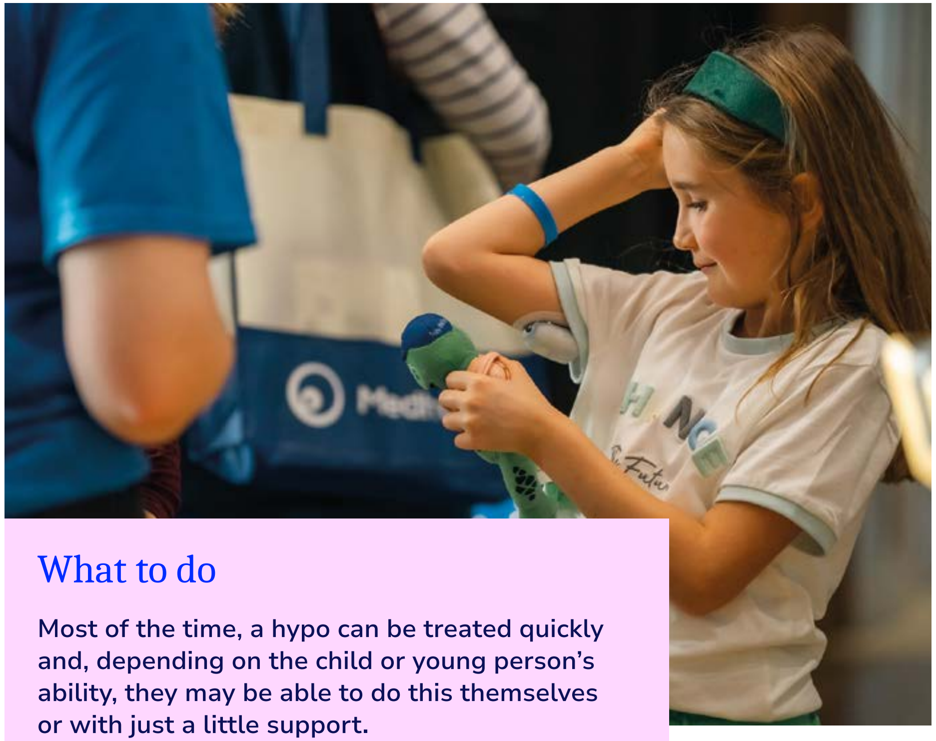
Hypoglycaemia (Hypo)

Hypoglycaemia (hypo) is when glucose levels are too low (usually below 3.9 mmol/L). There may be physical symptoms that you can often see, or you can be told about.

These could include:

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

Children and young people may not always notice that they are hypo, and these symptoms may be noticed by someone else first. Checking the child or young person's blood glucose level is essential to confirm if they are having a hypo. This may be done using their CGM sensor and reader/phone, or with a finger-prick test and a blood glucose meter. Information about hypos and how to treat them can be found in the individual care plan.



What to do

Most of the time, a hypo can be treated quickly and, depending on the child or young person's ability, they may be able to do this themselves or with just a little support.

Make sure the child or young person 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, so please speak with the child or young person and their parents/carers about their specific 'hypo' treatments.

Avoid giving chocolate to treat hypos. Its fat content slows sugar absorption.

What should you do in an emergency?

Most of the time, people with T1D can treat a hypo on their own by having something sugary to eat or drink. But sometimes, a hypo can come on suddenly. In those moments, they might need a bit of help, or even medical attention, to safely recover.

If the person is unconscious, call 999 and do not give them anything to eat or drink.

You should also 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 or they become unresponsive

Hyperglycaemia (hypers)

Hyperglycaemia is when glucose levels are too high (usually above 10 mmol/L), and some additional insulin may be required. The child or young person may experience some symptoms of hyperglycaemia.

These can include:

Increased thirst

Passing urine more frequently

Headaches

Lethargy

Abdominal pain

What to do

Checking the child or young person's blood glucose level is essential to confirm if their blood glucose is higher than it should be. This may be done using their CGM sensor and reader/phone, or with a finger-prick test and a blood glucose meter. If a child or young person's blood glucose level is high for just a short time, emergency treatment won't be necessary.

The child or young person is likely to need to drink lots of sugar-free fluids such as water and may need extra insulin. 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.

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

Supporting children with type 1 diabetes

Abbie and Subash have T1D. 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 there's an adult nearby who understands the signs that they might be feeling unwell and can help if needed.

There are many common misconceptions about T1D, such as the belief that it's caused by eating too many sweets or being overweight. These myths can be deeply upsetting and misleading, especially for those living with T1D.

Can Abbie come and play?

Yes! As long as her blood glucose levels can be checked to make sure she's within a normal range, and that she won't go too low while she's playing. She might need a snack or to reduce her insulin on her pump if she's going to be very active. If Abbie uses a hybrid closed loop system, her insulin delivery may already adjust automatically based on her glucose levels. If she wears a CGM, her parents will also be able to view her glucose readings remotely using a connected app, even if they're not with her. Have a chat with her mum or dad beforehand to confirm how she manages her T1D and what you need to consider.

Can Subash stay for tea or come out to eat?

Yes! Subash can enjoy the same balanced diet as everyone else, including occasional treats and sweets. People with T1D don't need to avoid any specific foods; they just need to match their insulin to the amount of carbohydrates they eat. Carbohydrates are broken down into glucose, which insulin helps move into the body's cells for energy. Some foods contain more carbohydrates than others, so it's helpful to talk to Subash's mum or dad about what you might be cooking. If Subash uses a hybrid closed loop system, it can automatically adjust his insulin based on his glucose levels, making it easier to manage meals and snacks. However, he still needs to be aware of what he's eating, the carbohydrate content, and how it might affect his glucose levels.

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 how and when Abbie needs to check her blood glucose levels, take her insulin, and what to do if she starts to feel unwell.

Abbie may wear a CGM, which means her glucose levels are tracked continuously using a small sensor on her body. The CGM sends real-time readings to a device or app, and it can alert her, and her parents, if her levels go too high or too low. This helps prevent emergencies and makes it easier to manage her diabetes, especially overnight.

Sometimes, blood glucose levels can become unbalanced, and there's a risk of hypoglycaemia or hyperglycaemia. It's important to speak with her parents or carers to understand how best to manage these situations and what signs to look out for, such as shakiness, confusion, tiredness, or irritability. If she wears a CGM, this may be set to alarm if her levels go too high or too low. Speak to her parents beforehand and ensure you feel comfortable and confident in what to do if Abbie needs help, including how to treat a hypo or when to call for support.

Scan the QR code to find out more about T1D and how it affects children like Abbie and Subash

Notes

This page is for any additional information that the parents or guardian may want you to know.

Contact details for parents or guardian:

Further information:

We are the leading global type 1 diabetes (T1D) research and advocacy charity. Together we're driving breakthroughs towards a world where no one lives with T1D. Until then, we help make everyday life better for the people who face it.

Contact us

Telephone: **020 7713 2030**
Email: **info@breakthrought1d.org.uk**

Breakthrough T1D™
Formerly JDRF

Registered with
FUNDRAISING
REGULATOR

Instructions

Cut out and fold the hypo card along the dotted lines. Then fold into a concertina.

Breakthrough T1D™
Formerly JDRF

Student hypo card

My preferred hypo treatment is

and can be found

I usually have

to treat a hypo.

If I am unable to eat or drink, please call 999 for medical assistance

Other symptoms may include:

I might be having a hypo if you see the following signs:

- Clammy/ sweaty skin ☐
- Lack of concentration ☐
- Dizziness ☐
- Sudden pale skin ☐
- Glazed or staring eyes ☐
- Slurring words ☐
- Unusual behaviour e.g. aggression or confusion ☐

Fill in this card and share it with peers/adults when needed

My name is:

I have type 1 diabetes, and I need to regularly check my blood glucose levels using a

sensor and you can check my blood glucose on

My blood glucose testing kit is kept

I also require insulin throughout the day from an

- Insulin pen ☐
- Insulin pump ☐
- Tick here if your insulin pump is part of a hybrid closed loop (HCL) system ☐
- I need access to my phone at all times as it is a medical device ☐

is a friend/adult who can accompany me if I need help.

is the member of staff to contact about my condition.

Breakthrough T1D™
Formerly JDRF

Assembly Plan

Planning and preparation

This short play can be performed at an assembly and used to help the children understand type 1 diabetes.

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. You can have more than one pupil playing Busy Body Cells if needed.

Busy body cell(s)

Sweet energy glucose

Helper hormone insulin

Pancreas the producer

Officer immune

Captain insulin

Narrator/teacher

The script

Narrator:

Good morning everyone! Today, we're going to meet some very special characters who live inside our bodies and help us stay healthy. They're part of a team that works together to give us energy, help us grow, and keep us feeling great. Let's meet them!

[Enter Busy Body Cells – wearing sporty gear, looking energetic]

Busy Body Cells:

Hi everyone! We're the Busy Body Cells. We do all the hard work - thinking, running, learning, even sleeping! But we need energy to do our jobs. That energy comes from something called glucose. But we can't get it on our own...

[Enter Sweet Energy Glucose - wearing a sparkly outfit, bouncing around carrying balloons/balls]

Sweet Energy Glucose:

Hey there! I'm Sweet Energy Glucose. I'm the fuel your body needs! I travel around in your blood, looking for cells to help.

[Sweet Energy Glucose tries to give balloons/balls to the Busy Body Cells, but they don't take them]

Sweet Energy Glucose:

But I need someone to unlock the door so I can get in...

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.

[Enter Helper Hormone Insulin - wearing a key necklace or carrying a big key prop]

Helper Hormone Insulin:

That's where I come in! I'm Insulin, the helper hormone. I'm like a key that opens the door so glucose can enter the cells and give them energy. Without me, glucose just floats around with nowhere to go.

[Helper Hormone shakes hands with each Busy Body Cell and hands them a balloon. The Cells smile once they're given a balloon/ball]

[Enter Pancreas the Producer – wearing a lab coat or tool belt]

Pancreas the Producer:

I'm Pancreas the Producer. I make insulin! I'm usually behind the scenes, but I'm super important. I keep everything running smoothly.

Narrator:

But sometimes, something goes wrong...

[Enter Officer Immune - wearing a security badge, looking confused]

Officer Immune:

I'm Officer Immune. I act as the body's immune system. I'm supposed to protect the body from germs. But sometimes I get confused and attack the cells that make insulin. That's what happens in type 1 diabetes.

[Officer Immune shoos Helper Hormone Insulin away and both walk to the side of stage. Helper Hormone Insulin takes the balloons off the Busy Body Cells – who then look sad]

Narrator:

When the immune system attacks insulin-making cells, the pancreas can't make insulin anymore. That means glucose can't get into the cells, and the body needs some help.

[Enter Captain Insulin - wearing a superhero cape]

Captain Insulin:

I'm Captain Insulin, and I help people when their pancreas can't make insulin anymore. That's why some children and grown-ups need to get insulin from outside their body, using injections or an insulin pump. It helps their cells get the energy they need!

[Captain Insulin shakes hands with the Busy Body Cells and hands them each a ball and balloon]

Busy Body Cells:

And when we get that energy, we can keep doing all the amazing things we do every day!

[Busy Body Cells look happy and dance]

Narrator:

So if you know someone with type 1 diabetes, remember - they're just like you! Their body just needs a little extra help. And with support from friends, teachers, and grown-ups, and their insulin pen, pump and sensor - they can do anything.

All Characters together:

We're the Body Team - and we work best when we work together!

Narrator:

Type 1 diabetes is something that some children and grown-ups live with every day. You can't catch it from someone else, and it's not caused by eating too many sweets or doing anything wrong.

People with type 1 diabetes might wear a special sensor, use an insulin pump, or take injections to help their bodies. Sometimes type 1 diabetes can make them feel poorly, but with the right care, they can still do amazing things!

Right now, there's no cure for type 1 diabetes. But brilliant scientists are working hard to find one, and they're getting help from Breakthrough T1D, a charity that supports those living with type 1 diabetes and helps fund the search for a cure. And until they do, we can all help by learning, understanding, and supporting each other.

All Characters together:

Because everyone deserves to feel strong, safe, and supported - no matter what!