



**Making
Connections**

Realising our potential



Supporting Children and Young People with Type 1 Diabetes in Education

**IMPROVING THE EDUCATION
EXPERIENCE FOR EVERYONE**

How to use this guide

Each section of this guide highlights the responsibilities of each of the partners involved and is colour coded accordingly throughout the document.

Local Authority & School

Parent/Carer

Child/Young Person

Local Paediatric Diabetes Team

Throughout this guide reference is made to schools and teachers, however the advice given is also applicable to early years settings and the further education environment.

Anyone caring for children and young people, including teachers, other school staff and day care staff in charge of children have a common law duty of care to act like any reasonably prudent parent. Staff need to make sure that children and young people are healthy and safe.

It is for local authorities, schools and governing bodies, settings and management groups to work out their own policies in the light of statutory responsibilities and their own assessment of local needs and resources. This document will act as a guide as to what these policies should contain.



Making Connections is a programme to support **young people**, **parents/carers**, **healthcare providers** and **teachers** to work together to improve the transition experience.

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Introduction

The care of a child or young person with Type 1 diabetes in school is a team effort. Doing this successfully requires everyone involved to actively play their part. The aim of this document is to try and make that easier by outlining what each partner's responsibilities are and how they can be best carried out.

The information here has been gathered from policies already successfully operating in local authorities across Scotland and also identifies good practice. It has been written in collaboration with teachers, parents, young people and healthcare professionals.

Type 1 diabetes is an auto-immune condition in which the body destroys the cells in the pancreas that produce insulin. Insulin is the hormone which regulates the level of blood glucose in the body and also enables cells to use that glucose to produce energy.

Young people with Type 1 diabetes need to inject insulin or get insulin delivered by a pump on a daily basis in order to survive. Each day is a balancing act between the amount of food eaten, exercise taken and insulin injected to maintain a safe blood glucose level. This can be difficult for children, young people and their families to manage which is why support from school staff is so important.

Children and young people with diabetes will need access to the equipment they require to monitor their blood glucose and be allowed to take the snacks and/or insulin required to correct it if necessary. It is important for staff to understand that if a child or young person's blood glucose is low they will find it difficult to concentrate, as they will feel dizzy and unwell. If their blood glucose is high they may also feel tired, thirsty and need to go to the toilet a lot. The actions required to correct these situations are usually quite simple and will be covered in greater detail in later sections.

This guide aims to help staff understand what to do and why it is so important for the child or young person's safety and well-being that there is a plan in place to cover situations that may occur in school.

There are several policies and legislation that impact on the care of a child or young person with diabetes in schools and these will be referenced as appropriate.

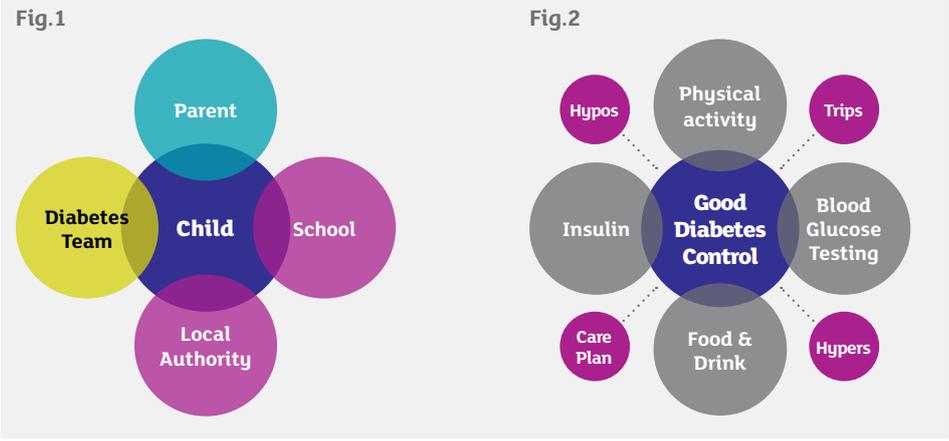
Put simply, there are two statutory bodies with responsibilities to children with diabetes – the local authority and the local NHS health board.

The local authority has a responsibility to ensure that every child reaches his or her full potential. It also has a duty to make reasonable adjustments to ensure a pupil does not suffer substantial disadvantage compared to other pupils as a result of their condition.

The local NHS health board has a responsibility to ensure that every child is receiving the correct treatment to allow them to lead as normal and healthy a life as possible.

Protecting Children and Young People: The Charter (Scottish Executive 2004) and *A Guide to Getting It Right For Every Child* (Scottish Government 2012) are two fundamental documents that should be at the heart of providing care for a child or young person with diabetes in school.

A Guide to Getting It Right For Every Child (GIRFEC) sets out the Scottish Government's approach to improving outcomes and wellbeing for all children in Scotland, while the Children's Charter sets out what children and young people in Scotland need and expect to help protect them from harm.



Both documents stress the need to put the child or young person at the centre and develop a shared understanding within and across agencies (Fig.1).

This document aims to help local authorities and schools to support another key principle highlighted by GIRFEC, which recommends there should be “common tools, language and processes considering the young person as a whole and promoting closer working where necessary with other agencies”.

The core components of GIRFEC refer to “improving outcomes for children and young people through a shared understanding of their wellbeing”. They stress the need for “an integral role for children, young people and their families in assessment, planning and intervention”. All the core components, values and principles of the GIRFEC document can be applied to the needs of a child or young person with diabetes in school. A plan to support the child or young person should be put in place keeping these principles in mind.

In order to maximise their potential, a child with diabetes will need the support of the school, teachers, healthcare professionals and their parents, if they are to maintain their blood glucose at a safe level which allows them to learn. They will also need support to manage the complex web of daily challenges they face to keep their blood glucose under control (Fig.2).

This publication aims to:

- Set minimum expectations of support for children/young people with diabetes in educational establishments in Scotland.
- Clarify the role of educational staff who support children with diabetes.
- Clarify the conditions of indemnity for staff who provide support for children with diabetes.
- Outline the responsibility of the child/young person and their parents/carers in managing their diabetes.
- Outline the responsibility of the school and local authority in supporting a child with diabetes.
- Outline the responsibility of the paediatric diabetes teams in the provision of training and support for schools.

What is Diabetes?

Diabetes is a group of metabolic conditions characterised by high levels of glucose (sugar) in the blood stream (Craig, Hattersley & Donaghue, 2009).

What is the difference between Type 1 diabetes and Type 2 diabetes?

A child with **Type 1** diabetes has an autoimmune condition in which their body has destroyed the cells that produce insulin. This means that **they must** administer insulin every day in order to survive.

This also means that they need to monitor their blood glucose regularly, especially before exercise or if they feel unwell. In order to do this they will need access to their monitoring equipment (blood glucose meter and test strips) at all times. Therefore in primary schools it is recommended that this should be stored in their classroom; in secondary school they should carry it with them at all times.

There has been a significant increase in the number of children and young people diagnosed with Type 1 diabetes (Scottish Diabetes Survey 2012) and studies suggest that there will be twice as many children under five diagnosed with this condition by 2020 (RCN,2009).

A child with **Type 2** diabetes is still able to produce insulin but their body is not able to use it effectively. They **do not** need to administer insulin in order to survive.

Why is Controlling Blood Glucose Important?

Variation in blood glucose levels can have several effects on a child or young person with diabetes. The two most relevant to the classroom situation are:

- **High blood glucose (hyperglycaemia)** will mean they need to be excused more often to go to the toilet.
- **Low blood glucose (hypoglycaemia)** will mean they need to eat a snack or drink in class in order to restore their blood glucose level.

It is important that they are able to do this because having high or low blood glucose can make the child or young person feel very unwell and, in extreme cases, lead to loss of consciousness if left untreated.

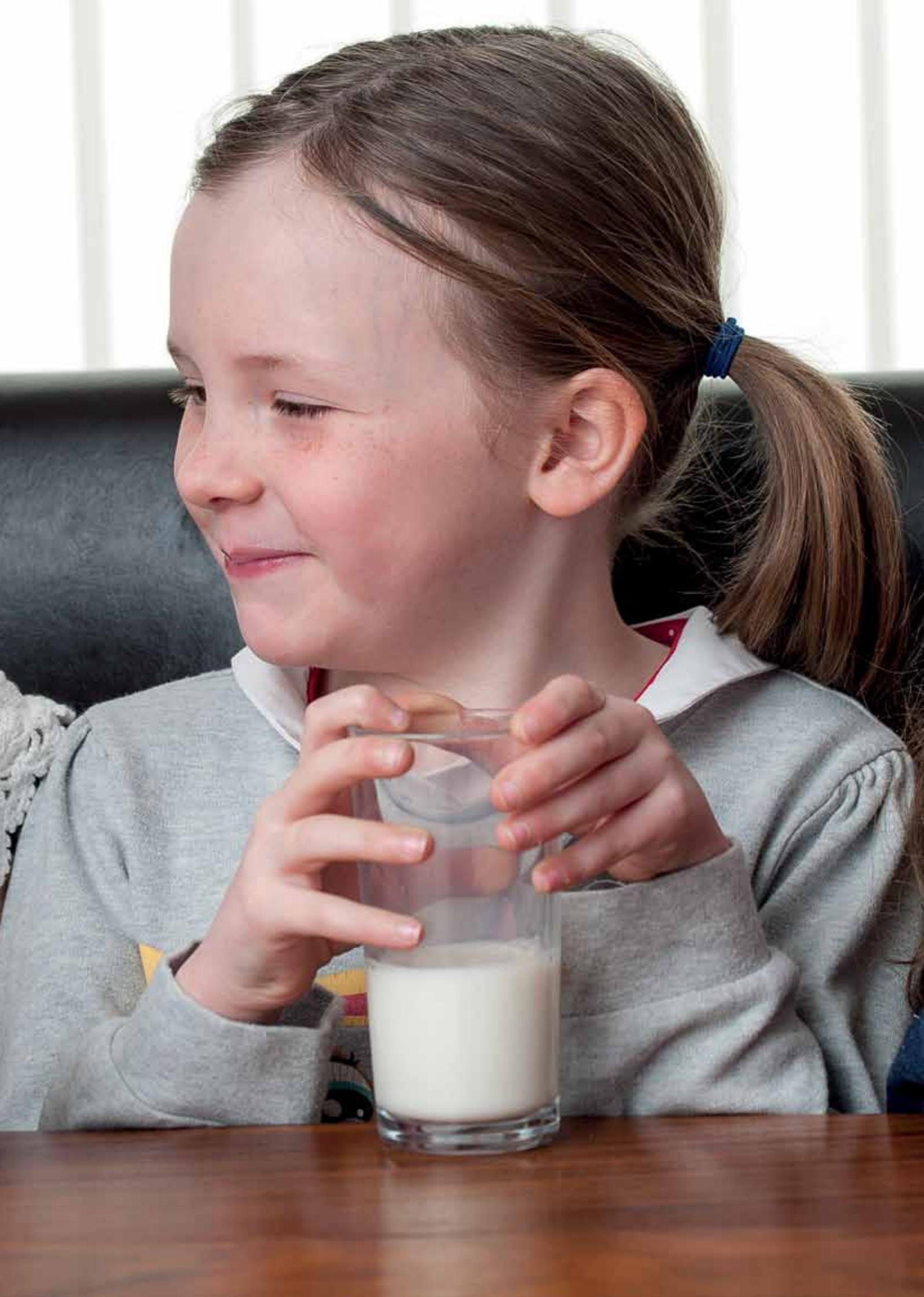
Children spend 30-40% of their time within the education system and during this time appropriate diabetes care is essential for their immediate safety, long term well-being and optimal academic performance.

(Department of Health, 2007)

Providing a supportive environment that meets the pupil's health care needs will benefit the pupil directly and also positively influence the attitudes of the whole class.

(Scottish Executive, 2001)

The level of support required for individual children/young people will be dependent on their age, development and experience with diabetes. Newly diagnosed children/young people, young children and children/young people with additional support needs may be reliant on a staff member to perform treatment tasks and manage their care in school. Children/young people attending secondary school may be completely independent and only require a supportive environment to facilitate the management of their condition.



General Information and Training

The values and principles behind the GIRFEC ethos include “the building of a competent workforce to promote children and young people’s wellbeing”. In this situation this can best be achieved by ensuring that those staff who support the child or young person and who will interact with them on a daily basis receive appropriate training about the child/young person’s condition. This will require input from local healthcare professionals and the child/young person’s parents/carers.

Responsibilities of the Local Authority

- Ensure that all staff members are made aware of this document.
- Local authority staff can undertake the administration of insulin for children/young people who are unable to do so themselves. Where a member of staff is not identified, the Quality Improvement Officer for Education (or equivalent) will assist the head teacher to make appropriate arrangements to ensure the health care needs of the child/young person are met.
- Local authority staff should be released to attend the necessary training in diabetes.

Local authority staff who assist in the health care needs of a child/young person with diabetes will be fully supported by the local authority. They will be covered through the authority’s indemnity insurance as long as they have had appropriate training and are following the child/young person’s care management plan.

Responsibilities of the School

- Allow children/young people to attend clinic appointments to review their condition. Appointments are typically every three months but may be more frequent during times when their diabetes control is more complex. They do not usually require a full day’s absence from education.
- Make general awareness training available for all staff. Such training should include an awareness of the condition, risks of untreated hypoglycaemia episodes (sometimes called hypos) and hyperglycaemia episodes (sometimes called hypers), the impact of diabetes on cognitive function and performance as well as the likelihood of erratic moods or behaviours. It should also ensure that all staff understand that children/young people must have immediate access to their blood glucose monitoring equipment, glucose tablets and snacks for the treatment of hypos, water and be allowed to go to the toilet as required.
- The school will need to be sensitive in communications with other children/young people balancing the child/young person’s privacy with the need to explain why they are treated differently e.g. eating in class.
- Ensure open channels of communication are maintained with parents and regular reviews are conducted throughout the school year or where there has been some change in circumstances, for example a child or young person feeling very unwell after a PE lesson when there are usually no problems.

Useful Resources

There are also useful resources available from the following links:

Diabetes UK (DUK)

www.diabetes.org.uk/Guide-to-diabetes/My-life/Kids/Me-and-my-diabetes/At-school/

The Juvenile Diabetes Research Foundation (JDRF)

www.jdrft1.org.uk/landing.asp?section=287§ionTitle=T1+Schools

Medical Conditions at School

medicalconditionsatschool.org.uk/

Responsibilities of the Parent/Carer

- Provide the school with written medical documentation, instructions and medications as directed by your diabetes team.
- Provide the school with a list of up-to-date contacts so that you can be notified immediately if a problem arises.
- Ensure open channels of communication with the school and regular reviews throughout the school year or where there has been some change in circumstances.
- Inform the school if your child's diabetes is going through a period of difficult control, for example if they are suffering a lot of hypos. It is important for the school to be notified so they can let the teachers know to keep a closer eye on your child.

Responsibilities of the Child/Young Person

- Be honest in telling staff how you are feeling.
- Share with friends, where appropriate, by making them aware of when you might require assistance.
- Know who to contact if help is required.
- If you are in secondary education, ensure you carry an adequate supply of snacks and hypo treatment and your blood glucose testing kit.

Share with friends, where appropriate, by making them aware of when you might require assistance



Responsibilities of the Local Paediatric Diabetes Team

- Provide schools with contact details for the local paediatric diabetes team.
- Provide training for local authority staff (both teaching and non-teaching) who have a responsibility to administer insulin or support a newly diagnosed child/young person with diabetes.
- Offer general awareness raising training to all staff in the school.
- Contact the guidance teacher (where parent/carer consent obtained) of children/young people at secondary school who are newly diagnosed.
- Provide local authority staff with the necessary training if a child/young person changes to a different method of administering insulin.
- Update the training if treatments change or new information becomes available.

General Care Management Plan

“The main purpose of an individual school health care plan for a pupil with health care needs is to identify the level and type of support that is needed at school. A written agreement with parents clarifies for staff, parents and the pupil the help that the school can provide and receive. Schools should agree with parents and medical practitioners how often they should jointly review the health care plan depending on the health care needs”.

(Scottish Executive, 2001)

The care management plan will sit alongside the child’s Getting It Right For Every Child (GIRFEC) plan and will therefore support the GIRFEC core principles of involvement, working in partnership and maintaining consistently high standards of co-operation across different agencies. An example care management plan is shown in the Appendix. Different templates may be in use in your area so please seek local guidance.

Responsibilities of the Local Authority

- Support every school to put in place a care management plan for every child/young person with diabetes in their area. Each child/young person’s plan should be reviewed annually by their school.

Responsibilities of the School

- Offer children/young people with diabetes and their families an opportunity to meet with school and health representatives to identify their individual care needs.
- Every child/young person with diabetes should have a care management plan that identifies the level and type of support required while in school. The plan should be reviewed annually by the school and parents/carers to identify any changes to the child/young person’s care. Each plan must be agreed by the head teacher prior to implementation (Scottish Executive, 2001).

Participants in a care management plan conference may include:

- Parents/carers
- The child/young person’s diabetes team nurse
- School nurse
- Relevant school staff, e.g. head teacher, class teacher, guidance teacher, support teacher, pupil support assistant and, where appropriate, school staff who have agreed to administer medication
- The child/young person, if they are mature enough and capable of understanding
- Member of the catering and cleaning service management team if the parent/carer intends to use the school meals service

Following this meeting, the head teacher will copy the care management plan to all relevant parties.

Offer children/young people with diabetes and their families an opportunity to meet with education and health representatives to identify their individual care needs



Responsibilities of the Parent/Carer

- Inform the school of any changes to your child's health care needs that will affect the current care management plan.
- Attend the care management plan meeting and provide information to the school that will help them understand how diabetes affects your child.

Responsibilities of the Child/Young Person

- Attend the meeting with your parent/carer and, if you are able, give your views on what support you think you will need.
- Highlight to staff or your parent/carer if any aspects of the agreed care plan are not working so this can be addressed.

Responsibilities of the Local Paediatric Diabetes Team

- A representative of the local paediatric diabetes team should contribute to the care management plan and attend meetings as appropriate.

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Exam planning

Schools are required under the Disability Discrimination Act 1995 and the Equality Act 2010 to take positive steps to ensure that children and young people covered by the legislation, which includes those with diabetes, can fully participate in education and other benefits, facilities and services provided for children/young people.

This includes making reasonable adjustments to examination arrangements, such as agreeing extra time (as a child/young person may need to manage their diabetes during the exam), ability to take in equipment, drinks and snacks, and possibly arrangements around where exams are held. The stress of exams, and changes from their normal routine, can affect a child/young person's blood glucose levels.

Responsibilities of the Local Authority

- Ensure that all staff are aware of the legislation and policy guidance around adjustments for exams.

Responsibilities of the School

- To include planning around exams in the child/young person's care management plan and initiate discussions with the parent/carer and child/young person through existing or, additional, care management plan meetings.
- To ensure that relevant staff such as examination invigilators are briefed and aware of the plan, including any adjustments agreed for the exams.
- To secure the plan's sign off from the head teacher.

To ensure that relevant staff such as examination invigilators are briefed and aware of the plan, including any adjustments agreed for the exams



Responsibilities of the Parent/Carer

- Attend any meetings to update the care management plan.
- Keep the school informed of any changes in the management of your child's diabetes in the run up to and during the examination period and any effects the exam period is having on your child and their diabetes.
- Be alert to examination timetables being issued and discuss these with your child and how they feel their diabetes management may be affected.

Keep the school informed of any changes in the management of your child's diabetes in the run up to and during the examination period and any effects the exam period is having on your child and their diabetes

Useful Resources

The links below may be useful in providing more information about extra support for young people during exams.

For parents

enquire.org.uk/what-is-additional-support-for-learning
www.sqa.org.uk/files_ccc/AA_GuideForParents.pdf

For young people

www.enquire.org.uk/yp/ypg-extra-support-in-exams.pdf

For staff

www.educationscotland.gov.uk/supportinglearners/additionalsupportneeds/index.asp
www.sqa.org.uk/files_ccc/AA_AssessmentArrangementsExplained.pdf



Responsibilities of the Child/Young Person

- Attend any care management plan meetings with your parents/carers and give your views on what support you think you will need.
- Highlight to staff and/or your parent/carer if you feel aspects of the care management plan are not working for you.
- Speak with staff and/or your parent/carer if your diabetes management is being affected significantly throughout the examination period and any adjustments you are making to your management as a result.
- Let your parent/carer know when information on examination timetables and other relevant information becomes available.



Injecting & Storing Insulin

“Pre-school and primary school children should be offered the most appropriate individualised regimens to optimise their glycaemic control”

National Institute of Clinical Guidance (NICE) (2009)

Most children/young people have a clinical requirement for intensive therapies which include the administration of insulin at lunchtime. These insulin regimens improve diabetes control and are recommended for the following reasons:

- Over a lifetime, intensive therapy reduces complications, improves quality of life, and can be expected to increase length of life. (Department of Health, 2007)
- Poor glycaemic control is associated with poorer academic achievement and school performance. (Court et al, 2009)
- Poor glycaemic control is associated with a number of psychological problems including anxiety and poor self-esteem. (Court et al, 2009)
- Better glycaemic control reduces low or fluctuating blood glucose concentrations, which impacts on the child/young person’s academic performance and may lead to reduced attendance. (Department of Health, 2007)

The local authority and the local diabetes team will ensure that there are provisions available for children/young people on intensive therapies while in education.

Intensive insulin therapy is usually given in two ways, either via a pen injection device or an insulin pump. The local diabetes team will explain how these work in more detail.



The Insulin Pen

This device contains either a cartridge or a prefilled reservoir of insulin which will usually last up to 30 days. It has a very small needle and the user can dial the required dose of insulin and push to inject it.

The Insulin Pump

An insulin pump is a small pager-sized device which continually delivers insulin through a small tube sited just under the person’s skin. Extra insulin can be delivered with food and/or when the blood glucose level is high.

Responsibilities of the Local Authority

- Where a member of staff is not identified by the school the Quality Improvement Officer for Education (or equivalent) will assist the head teacher to make appropriate arrangements to ensure the healthcare needs of the child/young person are met.
- Local authority staff assisting in the health care needs of a child/young person with diabetes will be fully supported by the council. They will be covered through the authority's indemnity insurance as long as they have had appropriate training and are following the agreed care management plan.
- The employer should provide written confirmation of insurance cover for staff who provide specific medical support.

Responsibilities of the School

- Where a child requires an insulin injection during the day and is unable to self-medicate, (ie test bloods, set insulin pen to the correct dosage and inject) either because of their age or physical ability, then appropriately qualified members of staff should be trained and given this responsibility.
- When a member of staff is responsible for setting the insulin dose and injecting the child it is good practice to have a second member of staff present to check the dose before it is given. This follows the standard practice in hospital when medication is given out.
- Information regarding staff members with a responsibility for administering medication should be updated and communicated to other members of staff (teaching and non-teaching), the parent/carers and the child/young person.
- All children/young people should be offered handwashing facilities and a private area to administer insulin.
- Primary school children who independently administer insulin should be supervised to ensure the insulin pen is set up properly and the correct technique is applied.
- Children/young people at secondary school who wish to remain in possession of their insulin and self-administer should be allowed to do so. This is a natural progression into self-management and essential for those young people who are about to enter employment. This arrangement should be agreed upon and documented in the care management plan.
- Only children/young people on intensive insulin therapies (multiple injections or an insulin pump) will be required to store insulin for administration.
- The insulin injection device (insulin pen) should be stored in a sealed container that is clearly marked with the child/young person's details. This container should be held in a secure place that is not effected by extremes of temperature.
- Insulin is only viable for 30 days after removal from the fridge. This date should be documented clearly on the plastic container in which it is stored.
- Insulin and glucose gel should be appropriately stored in a secure central location and be easily accessible to relevant children/young people and designated staff members. If this is a locked location **all** staff should be aware of where the keys are held.
- Parents/carers should be informed when a new cartridge of insulin is required.

- Children/young people on multiple injections will keep an insulin pen loaded with an insulin cartridge for the administration of insulin at lunchtime.
- Insulin pump users require the storage of an insulin vial in case they need to change their insulin infusion set. This should be kept in a labelled plastic container in the medical fridge if available. If not, it should be kept at room temperature and replaced monthly.
- When medication is provided by parents/carers, the school should keep a record of when this is received along with a note of the expiry date. This should be monitored regularly.
- All medications should be returned to parents/carers at the end of the school term with the request that new supplies be brought back to school on the first day of each new term.

Responsibilities of the Parent/Carer

- Ensure your child has enough insulin, insulin pen needles, insulin pump infusion sets and strips for their blood glucose monitoring meter in school.
- Be aware of which members of staff have responsibility to administer medication to your child and tell them of any changes to your child's insulin injections.
- Ensure that all medications are collected from school at the end of term with new supplies provided to school on the first day of each new term.

Responsibilities of the Child/Young Person

- Know which members of staff have responsibility for administering/ supervising your medication and who you should contact if you need help.
- If you are at secondary school, ensure you have, and safely carry and use, your insulin, pen and needles or your insulin pump infusion set and all the necessary equipment to monitor your blood glucose.
- If you are at secondary school you should remove your sharps from school on a daily basis. The following are classified as sharps: insulin syringes, insulin pen needles, insulin pump infusion set inserters and single use lancets for blood glucose monitoring.

Responsibilities of Local Paediatric Diabetes Team

- To provide all the relevant training for local authority staff who supervise or administer insulin.

Blood Glucose Monitoring

Being able to monitor their blood glucose is an essential part of the day-to-day management for a child or young person with diabetes, so support will be needed to allow them to do this safely. In terms of GIRFEC, this involves providing the child/young person with “proportionate, timely and appropriate help” and understanding how the monitoring of blood glucose supports the overall “well-being and safety” of the child or young person involved.

There will be individual targets that the child/young person will be aiming to achieve and times of the day when they should be monitoring their blood glucose. These should form part of the care management plan outlined earlier in this publication.

Responsibilities of Local Authority

- Ensure there is a clear health and safety policy followed regarding sharps. This would include safe use and disposal of lancets, needles and cannula from pumps. Your local health board will have a sharps policy and your local diabetes team will be able to advise you further on this. Advice can also be found on the Health and Safety Executive (HSE) website or by using the following link
www.hse.gov.uk/biosafety/blood-borne-viruses/avoiding-sharps-injuries.htm

Responsibilities of the School

- Children/young people who are unable to perform a blood glucose test themselves should be assisted by a member of staff who has had the appropriate training.
- Handwashing facilities should be made available for children/young people who check their blood glucose regularly.
- All primary school age children who independently test their blood glucose should be supervised.
- Blood glucose monitoring equipment should be accessible at all times. Younger children should keep their monitor in class, while children/young people in secondary education will be responsible for ensuring they have their monitor with them at all times.

Responsibilities of the Parent/Carer

- Ensure that individual targets and times for blood glucose monitoring have been agreed as part of the care management plan.
- Ensure your child has all the necessary equipment needed to monitor your blood glucose.
- Replace blood glucose monitoring strips as requested by the school.

Responsibilities of the Child/Young Person

- Carry your blood glucose monitoring kit with you at all times if you self-manage your condition.
- Tell a member of staff if you feel ill or need to check your blood glucose.

Responsibilities of the Local Paediatric Diabetes Team

- To train local authority staff in the use of blood glucose monitors and the interpretation of the results.
- To educate staff in what to do in the event of high or low blood glucose readings (see following sections).

To train local authority staff in the use of blood glucose monitors and the interpretation of the results



Hypoglycaemia (Low Blood Glucose)

Hypoglycaemia (also known as a hypo) is when the blood glucose level drops too low. For most children and young people this level is below 4mmol, unless otherwise specified in the care management plan.

These episodes happen quickly and, if left untreated, can lead to unconsciousness and seizures. Hypos tend to happen when a child has been very active, has had too much insulin or not enough carbohydrates to eat or drink. Whenever a child/young person feels any symptoms or displays any signs of hypoglycaemia, where possible, a blood glucose test should be performed prior to the appropriate treatment being given (according to the care management plan).

Responsibilities of the School

- Children with diabetes must be allowed access to hypo treatment at **all** times.
- Ensure the child/young person carries with them at all times treatment for mild to moderate hypos, e.g. glucose tablets, carbohydrate snacks, sugary drinks.
- Ensure that insulin and glucose gel are appropriately stored in a secure central location and easily accessible to relevant children/young people and designated staff members. If this is a locked location **all staff** should be aware of where the keys are held.
- Children/young people who are able to treat their hypoglycaemic episode (hypo) independently should be allowed to do so in class to ensure swift resolution and minimise disruption to their education.
- Children/young people who are unable to treat their own hypo should be supervised to ensure that the appropriate treatment is carried out.
- Any child/young person with diabetes who is experiencing a hypo should be accompanied at all times while medical support is being sought. Most hypos can be dealt with at the scene as the child/young person should have relevant treatment with them or in their bag.
- Ensure that children/young people who feel unwell are not sent on their own to the school office for help.

Responsibilities of the Parent/Carer

- Ensure that your child has an adequate supply of hypo treatment and snacks.
- If your child is in pre-school or primary school, provide them with a plastic container with their hypo treatment, including snacks, so it can be kept in a place for easy access.

Responsibilities of the Child/Young Person

- If you are at secondary school, take responsibility for carrying your own hypo treatment.
- If you are at primary school, inform a designated member of staff when you experience hypo symptoms.

Useful Resources

For general symptoms see FAQ section.



Hyperglycaemia (High Blood Glucose)

Hyperglycaemia is an episode of high blood glucose levels. This can be caused by insufficient insulin, too much food/sugary fluid, illness/stress or excitement. These episodes tend to happen over a few hours and if left untreated for a **prolonged** period of time can lead to a serious condition called Diabetic Ketoacidosis. Treatment should be as per the child/young person's care management plan. Regular blood glucose monitoring and giving additional insulin to correct high blood glucose levels can prevent this from occurring. For the majority of children and young people, a blood glucose level of 14mmol or greater is considered to be hyperglycaemia. It is important that children/young people with a high blood glucose are allowed to drink water and go to the toilet as required.

Responsibilities of the School

- If blood glucose level is high, tests should be carried out more frequently and the procedure followed as outlined in the child/young person's care management plan.
- If the child/young person has high blood glucose **and** is complaining of feeling unwell then swift action is required. The specifics of the reaction is individual to the child/young person and will be clearly outlined in their care management plan. The child/young person's parent/carer should also be called urgently.
- The child/young person will need regular access to fluids and the toilet.

Responsibilities of the Parent/Carer

- Discuss with the school how you want high blood glucose treated for your child and make sure it is written in the care management plan.
- Ensure the school have up-to-date contact numbers and know at what point you want them to phone you.

Responsibilities of the Child/Young Person

- Tell a teacher if you start to feel unwell.
- Test your blood glucose level. If your blood glucose level is high, test for ketones if this has been agreed in your care management plan.
- If self-managing, treat yourself with your usual extra dose of insulin and test again as agreed in your care management plan.
- If blood glucose or ketone levels become dangerously high, ask a teacher to contact your parents/carers.

Useful Resources

For general symptoms see FAQ section.

Food and Drink at School

Children and young people with diabetes are encouraged to follow a normal healthy diet.

Children/young people with diabetes can have either a packed lunch or a cooked school meal. For all children and young people with diabetes, eating carbohydrate at mealtimes is essential (unless documented in their care management plan) to maintain blood glucose levels. Slowly digested carbohydrates help to maintain more stable blood glucose levels and should be eaten at each meal.

These foods include wholegrain bread, potatoes, rice, pasta, milk, milk products and fruit. Foods containing glucose such as sweets, fizzy drinks and sweet puddings will act more rapidly, but these are not excluded. Where possible, sugar-free alternatives such as sugar-free drinks and jelly are encouraged to prevent sudden increases in blood glucose levels.

Responsibilities of the School

- Ensure that a child/young person with diabetes is served their lunch without delay when requested.
- Ensure arrangements for access to food and drinks are in place so children/young people with diabetes can eat and drink as and when required, in line with their care management plan.
- No child/young person with diabetes will be detained in class over either break or lunchtime without access to food and drink and, where appropriate, their blood testing kit will be fully accessible.
- Staff working with children will supervise to ensure that the child actually eats their snack or lunch as provided (or an appropriate carbohydrate alternative).
- If the school provides access to drinks, diet drinks should be available.
- Ensure that there is more than one carbohydrate option on the menu.
- Ensure the parents/carers are made aware of any "Theme" days when the menu might change from the usual options available.

Responsibilities of the Parent/Carer

- Ensure your child carries carbohydrate snacks and sugary drinks with them.
- Provide the school with the appropriate information regarding your child's insulin dose relating to the carbohydrate content of their lunch.

Responsibilities of the Child/Young Person

- Eat regularly and appropriately, i.e. meals and snacks should include some form of carbohydrate.
- Access fluids and food where necessary with minimal disruption to the class.



Physical Activity at School

Physical activity is vital for all children and young people and this is also true for children and young people with diabetes. Exercise of any kind increases the use of energy and therefore children and young people with diabetes are likely to see a drop in their blood glucose level. Therefore, they may need additional carbohydrate before, during or after sport. This should be documented on their care management plan. It is important to note that for some children and young people, exercise also includes running around at break time, or long periods of walking between classrooms.

Children/young people with diabetes should be encouraged to check their blood glucose level before exercise, if they are going swimming, or the activity is strenuous or prolonged (more than 45 minutes). High blood glucose levels (above 14 mmol) may make it dangerous for some children to participate in certain activities – this will be documented in their care management plan.

It is important that all PE staff know the signs and symptoms of hypoglycaemia (low blood glucose) and how to treat it. It will also be necessary for PE staff to carry hypo treatment (glucose and snacks) in the lesson at all times.

Responsibilities of the School

- Ensure children/young people with diabetes are included in all school activities and not excluded from any activity on the basis of their diabetes.
- Encourage the child or young person to check their blood glucose levels before and after exercise as they may need to eat or drink fast-acting sugary food and drink before the activity.
- Children/young people may also need to consume more complex carbohydrate before and perhaps after the activity to limit the risk of a hypoglycaemic episode.
- Children/young people with diabetes should be supervised when taking part in activity.
- Children/young people with diabetes should be permitted to postpone activity if their blood glucose level is too low/high.

Responsibilities of the Parent/Carer

- Ensure the school is clear about your wishes regarding your child and physical exercise.
- Provide extra snacks/drinks if you know your child will be involved in physical exercise at school.

Responsibilities of the Child/Young Person

- Test your blood glucose levels before and after exercise.
- Take your usual amount of carbohydrate to cover the exercise.
- Tell someone if you start to feel unwell.

Participation in School Trips

Diabetes should not prevent a child from going on school or residential trips. Full participation and opportunities in all academic, social and sporting activities should be encouraged as the development of self-esteem and confidence in such activities can have positive effects on the management of diabetes.

(ISPAD/IDF Guidelines for Diabetes in Childhood and Adolescence 2011)

Trips are an important part of school life and, for many children, these activities can increase their excitement and activity levels. Taking part in school trips provides opportunities for the child or young person to develop self-confidence, and means they are not singled out but supported to take an active part in their educational experiences.

Careful planning with the parent/carer is essential for the trip to be successful for all parties, no matter whether it is a few hours or a week away in another country. As soon as a child or young person is known to be attending a trip, the planning process with the parent/carer, and, where necessary, the diabetes care team and/or school nurses, should begin.

Responsibilities of the School

- Ensure children/young people with diabetes are included in all school trips and not excluded from any activity on the basis of their diabetes.
- Ensure a risk assessment is carried out by the school and any appropriate action taken.
- Provide the parents/carers with an itinerary including times for arrival and departure and the likely activities during the trip.
- Provide an emergency contact number for the parents/carers for the trip.
- Arrange a joint meeting between school staff, parent/carer and child/young person to agree how the trip can be handled safely.
- Identify at least one keyworker that the child/young person and their parent/carer can liaise with before and during the trip.
- Parents/carers do not need to go, unless they want to.
- The health care plan should be reviewed by those involved and taken on the trip.

Additional requirements for residential trips

- Provide a plan for the trip, including itinerary, meal plans etc.
- Identify at least two keyworkers that the child/young person and their parents/carers can liaise with before and during the trip.
- Additional training may be required for the overnight care of a child/young person with diabetes. Ensure that these training needs are identified and discussed to allow plenty of time to ensure an adequate number of staff are trained and supported.
- For younger children it may be advisable for contact to be made with the parents/carers each evening to review the day and highlight any areas of concern.
- Ensure a copy of the care management plan is reviewed and adapted to include evening and overnight care and taken on the trip.

Responsibilities of the Parent/Carer

- Meet with the school to discuss how the trip can work safely.
- Provide all the required medication in a clearly labelled plastic box.
- Provide an emergency contact number for the school where you can be reached.

Responsibilities of the Child/Young Person

- Know who to ask for help.
- If you feel unwell tell someone as soon as possible.

Responsibilities of the Local Paediatric Diabetes Team

- Provide extra training if required to support the staff involved with a residential trip.

Provide extra training if required to support the staff involved with a residential trip



Early Years Setting

Very young children with Type 1 diabetes pose a set of unique problems for carers for a number of reasons. These include their inability to recognise signs of hypoglycaemia or hyperglycaemia, their fluctuations in activity and food intake, and their fluctuating emotional state, which can have an effect on their blood glucose levels.

If in doubt, a blood glucose test can easily help staff decide whether action to treat a diabetes-related problem is required. It is very difficult in this age group to achieve the blood glucose target range at all times – excitement, stress, and anxiety can cause fluctuations that cannot be prevented.

Responsibilities of Early Years Organisations

- A pre-school child will require more supervision during activities, especially active ones, as they are less likely to recognise any warning symptoms of hypoglycaemia.
- Assign a 'diabetes coordinator' in the early years setting to ensure appropriate risk assessment, training and documentation is carried out.
- Activity that could cause the child's blood glucose levels to drop is not limited to scheduled PE lessons and activities, but can also include running around during break times and active play. The child's parents/carers will be able to advise on which types of activities are more likely to cause a drop in blood glucose level and therefore pose a risk of hypoglycaemia. Rainy playtimes will often make the blood glucose level rise as the child is not as active and this needs to be taken into account.
- The provision of mid-morning and mid-afternoon snacks should be discussed with the parent/carer.
- Meet with the parent/carer to agree a care management plan for the child.

Responsibilities of Parent/Carer

- Liaise with staff about snack times, as some children will require food with no carbohydrate, whereas others will require additional insulin when eating/drinking carbohydrate at snack times. These will need to be documented in the care management plan.
- Liaise with staff about how different types of activities and play are likely to affect your child's blood glucose. These should be documented in the care management plan, along with your preferred way of treating hypoglycaemia and hyperglycaemia.
- Meet with staff to agree a care management plan for your child.

Responsibilities of the Local Paediatric Diabetes Team

- Provide training and advice to staff in the early years settings.
- Attend the meeting with the parent and early years staff to help put in place a care management plan for the child.



Frequently Asked Questions

If I agree to support a child with diabetes by giving injections and monitoring blood glucose, am I covered by the local authority's indemnity insurance if anything goes wrong?

Yes – provided you:

- Act within the scope of your duties,
 - Have followed documented procedures in the care management plan,
 - Have received up-to-date training from qualified healthcare professionals.
-

How do I recognise the signs and symptoms of hypoglycaemia (low blood glucose)?

These can vary considerably depending on the child and will be outlined in their care management plan. However, in general, the symptoms are as follows:

Mild signs and symptoms – sweaty, shaky, pale colour, hunger, fast heart rate/palpitations, tingling or pins & needles in fingers, toes or around lips.

Moderate to severe signs – moody, aggressive, unusually quiet, anxiety, irritability, glazed eyes, vagueness, drowsiness, lack of concentration, inability to perform simple tasks, seizures, loss of consciousness.

How do I treat an episode of hypoglycaemia?

The treatment of hypoglycaemia should begin quickly to prevent it getting worse. The child or young person's care management plan will document what treatment is required, but this will usually consist of eating or drinking fast acting glucose such as lucozade, jelly beans, dextro energy tablets or glucose gel to boost the blood glucose level. Some children may also require longer acting carbohydrates following this initial treatment. The child should generally respond within 15-30 minutes, but their understanding and concentration may be affected for a while afterwards, particularly if the episode was of moderate severity. Full recovery will depend on the child/young person.

How do I recognise the signs and symptoms of hyperglycaemia (high blood glucose)?

The symptoms vary for each child but generally they include: thirst, going to the toilet frequently, lethargy. If a child has been hyperglycaemic for a number of hours their body may start to produce substances called ketones. If untreated for a prolonged period of time, these can lead to the child developing potentially fatal Diabetic Ketoacidosis (DKA). The presence of ketones can sometimes be detected by a pear drop or acetone scent to the child's breath. If this is detected consult the care management plan for action or contact parents/carers immediately for advice. In some cases, it may be necessary to perform a blood ketone test which is carried out in a similar way to blood glucose monitoring.

How would I treat an episode of hyperglycaemia?

The treatment of hyperglycaemia is very individual depending upon the child or young person, the cause and their insulin regimen. Specific details regarding their treatment and whether any additional insulin is required will be documented in their care management plan. It is important that any child with a high blood glucose level should be allowed to drink water and go to the toilet as necessary.

If the child is using an insulin pump, a check should be made to ensure that it is still connected to the child or young person and that the pump is still working. If the pump is not connected or it is not working, refer to the care management plan.

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East of England Schools Document

Fife Diabetes in Schools Policy

Grampian Diabetes in Schools Policy

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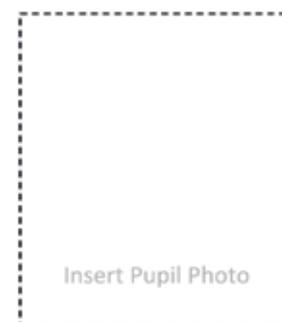
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Example Care Management Plan for Pupils with Type 1 Diabetes in School

Pupils Name:
Date of Birth:
CHI
Address
School



This document had been produced to ensure that provisions are in place for pupils with diabetes to manage their condition in school. This document should be agreed and signed by pupil/parent, school nurse/doctor/specialist nurse and the schools head teacher.

Diabetes Management

..... has Type 1 diabetes requiring treatment with: 2 injections a day
 3 injections a day
 4 injections a day
 An Insulin Pump

1. Procedure for blood glucose testing

When	Where	BG target	Supervision by (if required)
Snack			
Lunch			
During class time			
Before exercise			

2. Lunchtime insulin injection

Insulin Name	Sites of Injection	Administered by	Supervised by	Designated Area

Rapid acting insulin works very quickly so will require access to lunch immediately after administration.

The information on insulin dose will be provided by: **Parent / Pupil**

3. Hypoglycaemia

Hypoglycaemia is a blood glucose reading of below 4mmol/l

..... symptoms of Hypoglycaemia are

Our preferred treatment for hypoglycaemia is outlined below:

	<u>Fast acting carbohydrate treatment</u>	<u>Snack once blood glucose has normalised</u>
<u>Mild Hypo</u>		
<u>Moderate Hypo</u>	Glucose gel x 1 tube (25g)	
<u>Severe Hypo (unconscious)</u>	Perform basic first aid, put the child in the recovery position and phone an ambulance.	

4. Hyperglycaemia

Hyperglycaemia is a blood glucose reading over 14mmol/l.

Symptoms of high blood glucose

- Poor concentration
- Excessive thirst (allow access to sugar free fluids as required)
- Increased need to go to the toilet (allow access as required)

Actions when blood glucose is high:

5. Ketones

Some pupils may check for ketones in school. These should only be done using a blood ketone monitor only.

Monitoring and Treatment of Ketones:

<u>Name:</u>	<u>Name:</u>
<u>Relation to Pupil:</u>	<u>Relation to Pupil:</u>
<u>Address:</u>	<u>Address:</u>
<u>Home:</u>	<u>Home:</u>
<u>Work:</u>	<u>Work:</u>
<u>Mobile:</u>	<u>Mobile:</u>

Hospital Contacts

<u>Name :</u>
<u>Title:</u>
<u>Phone:</u>
<u>Bleep number:</u>

Other relevant contact information:

Consent of Parent/Carer

I wish my child to have the medications/care detailed in this plan

Name	
Relation	
Signature	date

Pupil (if appropriate)

I agree to the care arrangements as detailed in this plan

Name	
Signature	date

Health Professional

Name	
Job Title	
Signature	date

Head teacher/designated member of Staff

In the event that these procedures cannot be implemented at any time, the school will follow advice received from the health professionals in summoning the emergency services, as appropriate.

Name	
Job title	
Signature	date



Making Connections is supported by the Diabetes Scotland Type 1 diabetes: Make the grade campaign. Type 1 diabetes: Make the grade has a range of resources to support families and schools with information and tools to ensure all children with Type 1 diabetes get the support and care they need to succeed at school. For more information visit: www.diabetes.org.uk/schools

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