



## INTRODUCTION

Diabetes is a life-long but treatable condition that causes high levels of glucose in the body. Glucose levels in the blood are controlled by the hormone insulin. Insulin is made in the pancreas and moves the glucose, which is converted from the food we have eaten, from the bloodstream into body cells & muscles where it can be used to produce energy. The causes of diabetes are not fully known but an auto-immune process occurs and causes the body to turn upon itself (autoimmune process) and destroy the cells that produce the insulin.

There are different types of diabetes. The most known are Type 1 and Type 2 diabetes. In Type 1 diabetes the body fails to produce insulin and treatment is by insulin injection/ pump and diet. In Type 2 diabetes the body continues to make insulin but becomes resistant to it and treatment can be diet/tablets/insulin or a combination of these.

Children almost always have Type 1 diabetes.

Diabetes cannot be cured but can be treated effectively by balancing carbohydrate and insulin with physical activity. This will help to maintain blood glucose levels within a normal range.

There is no other way of giving insulin except by injection or pump. The pupil may take several injections in a day. This may involve taking an injection at lunchtime. Arrangements to allow this can be negotiated between the pupil and the school. Pupils should test their blood glucose levels during school time. Facilities and support should be made available for the pupils to be able to carry out blood glucose testing and/or and injection at school.

Advances in the development of insulin pumps have helped improve the management of diabetes. These options may require more frequent blood glucose monitoring and assistance for the young person with diabetes.

## A BALANCED DIET

The diet for a pupil with diabetes is not a special diet. It is a healthy choice of ordinary food. They should have 3 main meals which consist mainly of starchy carbohydrates. Many pupils will need to have a snack at mid-morning interval. It is important that the pupil with diabetes eats regularly to help maintain blood glucose levels throughout the day. It is carbohydrate foods which are digested to make the glucose in the blood. The more slowly the carbohydrate is absorbed, the better the insulin can work.

Carbohydrates are divided into 2 groups.

1. Fast acting e.g. ordinary puddings, sweets, chocolate, sugary drinks etc.
2. Slow acting e.g. bread, pasta, potatoes, rice, unsweetened breakfast cereal, plain tea breads/ scones, plain biscuits/ crackers, fresh fruit and milk.

The pupil should be able to go promptly for meals and snacks as any delay could result in the blood glucose level dropping too low.

## PHYSICAL ACTIVITY

Exercise is good for everybody and all pupils should be encouraged to take part. When active, the body uses up more energy than usual and so the pupil may need to take some extra carbohydrate to stop their blood glucose levels falling too low. A small snack may be needed before prolonged or intense exercise. Alternatively, glucose levels can be





maintained by sipping a sports drink throughout the period. Aim for around 200mls per hour. After intensive exercise, the pupil should have a small snack if it is going to be longer than one hour before their next meal. But for a short, fun activity, extra carbohydrate probably will not be needed during the period. If gym/PE occurs over snack time all snacks should still be given. It is a good idea to encourage all pupils to sip water during sports especially in warm temperatures.

NB – sports drinks e.g. Lucozade Sport, Powerade, Umbro Sport, have 6 – 8g of carbohydrate per 100ml and does not have enough sugar to treat a hypoglycaemic event.

## **A pupil with diabetes will:**

- Need to balance insulin, food and activity/exercise.
- Have 2 or more daily injections at home and possibly 1 at lunchtime. Pupils may need to use an insulin pump.
- Eat regular meals, containing starchy carbohydrates such as bread, rice, pasta, cereal or potatoes. Most pupils will need to eat a snack at morning interval.
- Do regular glucose blood tests at home and will need to test at school particularly before lunch and especially when hypo.
- Prepare for activity/exercise by taking extra carbohydrate snacks or sports drink.

## **A pupil with diabetes will not:**

- Be in any way different from other pupils in potential achievement.
- Need to avoid any school activity or trip. Forward planning and advice from Matron can help make the event enjoyable for everybody concerned.

## **A pupil with diabetes may:**

At times, show signs of having either too much or too little glucose in the blood. A high blood glucose is known as **HYPERGLYCAEMIA (glucose >6.9mmol/l)**.

A low blood glucose is known as **HYPOGLYCAEMIA (glucose < 3.9mmols/l)**

The blood glucose target range is between 3.9–6.9mmols/l

Carbohydrates make the blood glucose levels rise whilst insulin and exercise will make it fall.

## **HYPOGLYCAEMIA**

Hypoglycaemia, also known as a 'hypo', occurs when the blood glucose level falls too low (below 3.9mmols/l). This means that the brain/body is depleted of glucose and results in the child being unable to function properly.

Causes of HYPOGLYCAEMIA include:

- Infection (viral cold etc)
- Taking too much insulin
- Missing or delaying meals and snacks
- Too much physical activity
- Stress





- Newly diagnosed and the pancreas is producing some insulin ('Honeymoon phase')
- Overused injection sites

The signs and symptoms of hypoglycaemia include:

Glazed eyes, trembling, shakiness, hunger, stomach pains, pins and needles, pallor, headache, feeling faint, sweating, mood changes, lack of concentration, slurred speech, drowsiness.

Please refer to Appendix 1 for the Hypoglycaemic Action Plan

## **Hypo Treatment:**

**It is important to treat a hypo quickly. All diabetic pupils carry their own emergency Hypo kit.**

The pupil should not be left unattended. Do not allow the pupil to wander school corridors alone. Send pupil accompanied to matron as quickly as possible. If matron not available to the Year Tutor or a member of SMT.

IMMEDIATE ACTION should be taken whether the pupil recognises they are going 'hypo':

1. Wash hands (if possible) and check blood glucose level using monitor provided.
  - a. Blood glucose testing using a meter
  - b. Interstitial glucose testing using a Freestyle Libre device
  - c. Interstitial glucose testing using a continuous glucose monitor
2. If blood glucose is below 3.9mmols/l (regardless of whether the pupil feels symptoms or not this is a hypo. Follow below treatment depending on age and weight.
3. Give fast acting sugar- to bring blood glucose level up e.g. Lucozade energy drink 120 mls-180 mls (not Sport) **or** 3 or 4 Glucose tablets.  
or 100mls -- 150 mls of coke (not Diet)  
**or** Glucogel (1 tube or 1 ½ tube tube)
4. Wait 15 minutes then re-check blood glucose level. If this is still below 3.9 mmols/l then repeat the fast-acting sugar. If above 3.9mmols/l give long- acting carbohydrate. The pupil should be observed until fully recovered. Repeat this cycle until you are satisfied that the blood glucose level has risen above 3.9mmols/l
5. Give long acting starchy carbohydrate- to maintain blood sugar levels. e.g. give 1 digestive biscuit. Lunch/snack if immediately after hypo.

If the pupil does not recover adequately then the parents should be contacted.

Parents should supply the school with a hypo box containing fast acting glucose and biscuits. A blood glucose meter can be provided to aid diagnosis. All equipment should be kept in the class with the pupil and not in the office as it is important that a hypo is treated quickly. If there is any delay in treatment the blood glucose levels will continue to fall and could result in worsening drowsiness, unconsciousness or even hypo fits.

There is a spare blood glucose monitor and spare insulin, needles stored with matron.





Even if the staff member is unsure it is best to give some carbohydrate because a 'hypo' is easily treated, and the extra glucose will not cause harm. The pupil will respond rapidly if hypoglycaemia is present.

If treated promptly, recovery is quick, and the pupil may return to normal class activities. If you are concerned about the pupil's wellbeing, then arrangements should be made for the child to go home. If a member has any serious concerns call 999.

The pupil should be observed closely and should never be left unattended.

Most hypos only reach the early stages with most pupils being able to treat it themselves. Some young pupils will require the assistance of an adult. Occasionally, some pupils may not recognise the symptoms of a hypo and say they are "alright". Staff should react to what they see and if a blood testing kit is available in the school this can be used to assess the glucose levels.

## Important

- if the pupil is too drowsy to swallow or is unconscious do not try to give fluids/glycogen by mouth.
- place the pupil in the recovery position and maintain the airway.
- call matron
- call 999 and ask for an ambulance.

You should then call the parents to inform them of the situation.

## Hyperglycaemia

Hyperglycaemia is when the blood glucose levels are **too high – above 6.9 mmol/l**.

Causes of hyperglycaemia include:

- Missing an injection
- Poor previous control
- Illness/infection
- Overeating
- Symptoms you may notice include:
  - Thirst
  - Frequently passing urine
  - Irritable
  - Tired

A high blood glucose level changes the way the body works and will cause increased thirst with more urine being produced. It is important that the pupil can gain access to drinks and be allowed to go to the toilet. There is usually no immediate danger unless the pupil feels unwell.

Please do not restrict food or fluids to reduce blood glucose levels.

Do not encourage activity if blood glucose is above 14mmols /l.





If the pupil has developed an illness or has missed insulin doses, they will begin to develop ketones in the blood stream and this could lead to them becoming unwell, feeling nauseated, becoming flushed, sore tummy and vomiting. In the event of this and the pupil should go home for further monitoring and management.

If a pupil uses an insulin pump they must check for ketones when the blood glucose level is above 14mmol/l.

## **Treatment for High Blood Glucose:**

If the pupil appears well and ketones are not present, the treatment for high blood glucose is more insulin. A correction dose of insulin can be given with a meal or snack.

If ketones are present parents should be called.

## **General Advice:**

1. All staff in contact with a pupil with diabetes should know about his/her condition and where the hypo box can be found.
2. Pupils at secondary school should be responsible for carrying hypo treatment on them.
3. If the blood sugar is high, it is important not to miss any meals or snacks. Extra water should be drunk.
4. If a pupil with diabetes is ill, they should never be expected to rest at school or walk home alone.
5. A pupil with diabetes may have all the same vaccinations as other pupils.
6. A pupil with diabetes should be submitted to the same kind of discipline as any other pupil but should not be detained from meals.
7. Diabetes should not prevent the pupil from taking part in school trips and sporting activities etc. Extra planning will be needed, and advice is easily available from Matron.
8. If any further advice is needed, or if at any time there is concern or problems regarding a pupil with diabetes, please contact Matron.
9. Staff will be alerted to pupils with Diabetes via the school's Management Information System. In addition, a list is generated by Matron which has photographs attached and this is sent to all staff. Catering staff will be alerted separately.

## **Stored in Matron's room:**

- Dextrose tablets
- Sugary drinks (i.e. Lucozade/coke)
- Biscuits (i.e. Digestives)
- Glucagel oral hypo gel
- Test strips for blood glucose meter
- Lancets for finger stabbing device
- Sharps box for used sharps
- Pupil care plan





<b>Policy Owner</b>	Mrs L Alexander, Mrs A Mustafa (Matrons) Mrs G Clarke, Depute Rector
<b>Date Reviewed</b>	-
<b>Version Control</b>	Version 3
<b>Approved By</b>	Mr M Ronan, Rector
<b>Date Approved</b>	-
<b>Location(s)</b>	Website, Parent Portal
<b>Next Review Date</b>	November 2026

The Governors of Hutchesons' Educational Trust, Registered Charity Number SC002922, is the governing body of Hutchesons' Grammar School.





## APPENDIX 1

