

**D**isabetes

**I**nformation

**A**chieves

**B**etter

**E**xperiences for

**T**eachers and

**E**specially

**S**tudents

Welcome to the Schools Awareness of Diabetes Website. Our aim is to provide information about diabetes in children and young people so that you may feel better equipped to help and support a child or adolescent with this condition in your school. We also hope that this will ensure that the person with diabetes at school will be safe at all times.

The International Society for Paediatric and Adolescent Diabetes state that “Children and adolescents should have the same social rights as their non-diabetic peers, and no stigma or discrimination should be attached to Diabetes”. The following statements echo this view: -

- Diabetes should not alter the educational potential or achievement of the child or adolescent with diabetes
- Diabetes should not be the reason for being excluded from any type of school-based activity nor for non-attendance at school or college
- Education and the social integration within school and college are of fundamental importance.

Diabetes does not prevent any child or adolescent from participating in the full range of activities offered by any school or college. However, it may be necessary to be mindful of the following consideration: -

- Extra toilet privileges
- Extra care if unwell
- Privacy for blood sugar testing or injections if these are needed during the school day
- Extra supervision e.g. mealtimes for a very young child
- To be able to eat at additional times, especially in preparation for exercise/sport.

Schools and colleges are legally responsible to provide a safe environment and adequate supervision. They also have a responsibility to ensure the safety of the person with a medical need such as diabetes.

Parents and guardians have a responsibility to inform the school or college of their child’s medical condition and explain particular requirements for care in the educational environment.

All children and adolescents have a named Paediatric Diabetes Nurse who will act as a central point of contact for advice, training and education. You can expect contact from this healthcare professional following a young person diagnosis and as they move through various stages of their education (Nursery ← Infants ← Junior ← Secondary).

## WHAT IS DIABETES?

Diabetes, or to give it its full name, diabetes mellitus, is a condition in which the amount of sugar (glucose) in the blood is too high because the body is unable to use it properly. Two main types occur in childhood and adolescence.

The most common type of diabetes that you will come across is Type 1 or insulin dependent diabetes. Type 1 Diabetes is a chronic, autoimmune, life-long condition that occurs when the immune system destroys the insulin producing cells in the pancreas (beta cells). Insulin is needed by the body to transport sugar from the blood stream to all the cells in the body. It is fatal without life-long insulin injections, as a deficiency in insulin leads to a life-threatening condition marked by dehydration and a build up of acids in the blood (ketoacidosis).

The early signs and symptoms of developing diabetes are: -

∪Increased need to pass urine    ∪Excessive thirst

∪Weight loss                      ∪Lethargy & increasing lack of concentration

Diabetes can be controlled and managed by giving insulin regularly each day, in conjunction with a healthy, balanced diet. Blood sugar testing at various times of the day monitors control and this may need to be achieved during the school day. It is essential that insulin is never stopped or omitted even during illness. Insulin doses and injection times may vary from individual to individual, as may the frequency of blood testing and/or food intake.

Insulin lowers the level of sugar in the blood, and the aim of treatment is to achieve stable blood sugar levels. Because of the differing needs of the various age groups, the target for blood sugar levels may vary.

Most young children have two injections daily, one before breakfast and one before their evening meal. This group do not need to inject at school. Older children, particularly adolescent, more commonly need to achieve four injections each day and will need to inject insulin at school before their lunchtime meal. Members of staff are not required to give injections, however the young person may need help from staff to arrange some privacy whilst they give their insulin.

The incidence of diabetes in childhood and adolescents is consistently increasing, and Type 2 diabetes is beginning to occur in school-aged individuals as young as 5 years. Toileting and getting drinks are often independent activities by the time a child attends school and an increase in these may not be readily noticed at home in the early stages of the development of this condition. At school, however, the child who is frequently requesting toilet breaks, and is drinking more than the rest, is more noticeable in the class environment. Please let parents know if you notice these things in an individual child or adolescent.

## TYPE 2 DIABETES MELLITUS

Type 2 diabetes or non-insulin dependent diabetes in children and young people is emerging in the child and adolescent population. This form of diabetes occurs mainly in adults and is treated with sensible eating, weight control and management, increased activity/exercise and tablets. Very occasionally, this form of diabetes requires insulin injections. It appears to “run” in families but this may be because of repeated or learned lifestyle habits and patterns.

The rise in this condition in the younger population appears to be accelerated during puberty, and is strongly linked with an increasing sedentary lifestyle, obesity and high intake of calorie dense foods (high fat and high sugar) in all ages. Because of this strong lifestyle link, Type 2 diabetes in the younger population is preventable.

## HIGH BLOOD SUGAR LEVELS (Hyperglycaemia)

Elevated blood sugar levels in a person known to have diabetes occur because of: -

- ∪Not enough insulin
- ∪Common illnesses
- ∪Too much food
- ∪Stress

If blood sugar levels are running too high, the following signs and symptoms may occur: -

- ∪excessive or frequent visits to the toilet
- ∪excessive thirst
- ∪weight loss
- ∪lethargy
- ∪difficulty concentrating
- ∪change in behaviour, increased irritability, unusually emotional or moody

**PLEASE NOTE THAT THE ABOVE SYMPTOMS SHOULD ALERT STAFF TO THE POSSIBILITY OF THE ONSET OF DIABETES IN A CHILD / ADOLESCENT NOT YET DIAGNOSED. THESE SYMPTOMS MUST BE SHARED WITH THE PARENTS / FAMILY.**

In the controlled environment of a classroom, the symptoms are more easily noticed than in the home environment when the child or young person is more independent in toileting and getting drinks. Changes in a young person's moods or energy levels can be assumed to be as a result of puberty and hormonal changes as the body develops and matures.

If you notice these symptoms in a child or young person known to have diabetes, please let the family know so that adjustments to the individual's care regime can be made at home. For those at Nursery or Primary School, the use of a communication book is encouraged as this aids two-way communication between the school and the family.

Within the school environment, please just ensure that the child or young person has access to and achieves a high water based, sugar free fluid intake. If practical, additional blood sugar testing is advised. In the absence of vomiting, elevated blood sugar levels will not create a medical emergency at school.

They should NOT undertake high level or strenuous exercise.

## MANAGING ILLNESS AT SCHOOL (Sick Day Rules)

Children and adolescents with diabetes are not more prone to illness than their peer group. However, it is important that if unwell they are NOT sent to the sick bay area on their own, or left unattended when feeling unwell. It is important that a friend or available adult goes with them to the sick bay and ensures that the school nurse or first-aider is available to take over their care.

Vomiting is a potential danger signal and pupils with diabetes who are unwell and vomiting MUST be sent home to the care of their parents or other designated carer. Small amounts of sugary fluids i.e. sips can be given. They need to be collected from school by an adult, and not sent home on public transport.

If there are difficulties in contacting the parents (or other designated carer), please contact the Paediatric Diabetes Nurse Team on 01872 254560. If you are not able to contact the family or Diabetes Nurse, please arrange for the child or adolescent to be transferred to hospital.

During illness (e.g. 'flu, tonsillitis) the body frequently needs more insulin and blood sugar control becomes less stable for a period of time. When vomiting is also present, a life-threatening condition called ketoacidosis can develop.

The symptoms that require immediate medical care and prompt hospitalisation are: -

∪Rapid, laboured breathing (panting and sighing even at rest)

∪Flushed cheeks

∪abdominal pain

∪sweet acetone smell to breath (Pear Drops)

∪vomiting

∪severe dehydration – sunken eyes, dry tongue, rapid pulse

These symptoms are also the mode of presentation of diabetes in a previously undiagnosed child or adolescent with diabetes.

Less severe illness can cause diarrhoea, nausea and or vomiting. Food may not be absorbed properly leading to low blood sugar levels. If the blood sugar level is below 4mmol follow the treatment plan for Hypoglycaemia.

Minor illnesses are treated as you would for their peer group. Cut, grazes, falls, head injuries etc need to be managed according to your schools policies.



- ↳ sudden hunger
- ↳ drowsiness
- ↳ pallor, particularly around the mouth
- ↳ headache
- ↳ mood changes, often angry or aggressive behaviour
- ↳ sweating
- ↳ glazed eyes or dark ringed eyes
- ↳ trembling or shakiness
- ↳ lack of concentration and co-ordination

Hypoglycaemia needs prompt treatment to prevent it progressing and to minimise the disruption to the pupils' day. If untreated, blood sugar levels will continue to fall and this will result in a "drunk and disorderly" phase, which can then progress to loss of consciousness.

Pupils must NOT be left alone during a hypo nor sent off to get food to treat it. Recovery treatment MUST be brought to the pupil if they are not carrying emergency foods in their pocket or bag. Each pupil should have an Emergency Box on the school site which contains oral sugar, oral starch and a sugary gel called HYPOSTOP.

Most pupils know when they are going hypo and will be able to take the appropriate action themselves. In the very young, classroom staff need to be aware of children with diabetes and prompt or carry out blood sugar monitoring if there is concern.

If the pupil is drowsy but able to swallow, offer a sugary drink and prompt co-operation with simple, clear instructions. If they are reluctant, squeeze some HYPOSTOP Gel into the inside of the mouth, and massage the outside of the face and the glucose it contains will be absorbed through the lining of the mouth.

Once sugar has been taken, allow approximately 5-10 minutes for this to take effect, and then ensure that an intake of starchy food is achieved. If symptoms persist after 15 minutes, repeat the sugary intake.

### **IMMEDIATE ACTION**

Give something sugary  
as this will raise the blood sugar level rapidly

- e.g. ↳ 60 ml Lucozade drink
- ↳ 3 Glucose tablets
  - ↳ 100 ml any sugary drink (Cola)
  - ↳ 100 ml fresh fruit juice

### **FOLLOW UP ACTION**

Give some starchy food  
to prevent levels falling  
again

- e.g. ↳ roll or sandwich
- ↳ cereal bar
  - ↳ two plain biscuits
  - ↳ glass of milk
  - ↳ packet of crisps

Even if a hypo occurs during activity, the pupil can continue with the activity once treatment has been successfully achieved.

**AS A GENERAL RULE HYPOS ARE NOT A REASON**

## **FOR BEING SENT HOME FROM SCHOOL**

### **SEVERE HYPOGLYCAEMIA**

In the unlikely event that the pupil loses consciousness, do not give anything by mouth. Place them in the recovery position (lying on their side with the head tilted back). Call an ambulance, informing them that the pupil is known to have diabetes. A paramedic will attend to provide treatment. Following contact with the ambulance service, contact the parents so that they can attend the school to take the pupil home after recovery.

Even without treatment, and in the assumed absence of alcohol, pupils will recover from severe hypoglycaemia without intervention and without harm providing they are in the recovery position. Some pupils may have a “fit like” episode with the jerking of one or more limbs. This is due to the body’s reaction to being “starved” of sugar making the muscles and the brain irritable.

## **EXERCISE AND DIABETES**

Diabetes does not prevent pupils from enjoying any kind of physical activity or from being selected to represent the school and other teams providing they have made some simple preparations. An important role model is Sir Steve Redgrave and his 5 Olympic Gold Medals.

Every pupil with diabetes should be encouraged to exercise because it: -

improves fitness and well-being                      encourages life-long healthy lifestyle

builds self-esteem, confidence and team work

improves the action of insulin and enhances blood sugar control

Preparation is needed because all forms of physical activity such as swimming, football, gymnastics and walking, use up sugar. If the pupil does not eat enough, their blood sugar level will fall and they may experience a hypo during, immediately after or several hours later when prolonged or intensive exercise has taken place.

To prevent hypos, extra starchy food needs to be eaten before and sometimes during periods of exercise. For periods of intensive and sustained exercise, further intakes of starchy foods may be required at 30-minute intervals. If the sport has been particularly vigorous or lengthy, extra food will be needed after sport as well. Some pupils will reduce insulin before and/or after sports when vigorous activity is planned.

Preparation for exercise can either be an intake of quickly absorbed foods immediately before activity or more slowly absorbed starchy foods eaten some 30 minutes before the activity. In general, extra quick acting starchy food is needed for every 30 minutes of strenuous activity. If the pupil has had a very strenuous day of exercise, extra slowly absorbed starchy foods will also be required after exercise.

Quickly absorbed foods include 60 – 100 ml of sugary drink, 3-4 glucose tablets or a “Fun size” bar of chocolate.

Slowly absorbed foods include 2 plain biscuits, bread or a piece of fruit.

It is important that pupils have access to sugar foods or drinks during activity, either left in a place close by the activity, carried by the pupil or carried by the staff. Whilst it is important that staff keep watch over all pupils, the pupil with diabetes need not be singled out for special attention. This could make them feel different and may lead to embarrassment or act as an excuse not to participate.

### **PE/TEACHERS SUPERVISING ACTIVITY NEED TO HAVE AN EMERGENCY SUPPLY OF GLUCOSE AVAILABLE ON THE FIELD**

Exercise is not recommended during poor diabetes control, when blood sugar levels are high. It may cause them to become even more elevated.

Parents/ Guardians should advise the school if exercise should not be undertaken.

### **SPECIAL PRECAUTIONS FOR EXERCISE**

Appropriate food and drinks for the treatment of hypoglycaemia need to be available at the place of physical activity and sport and not left at some distance.

Pupils with diabetes need additional supervision during exercise. The younger child may also need to have meals supervised, especially before exercise.

Sports uniforms / clothing should have a pocket to allow the pupil with diabetes to carry emergency hypo food e.g. Glucose tablets.

Water sports need very careful planning and supervision because a hypo increases the risk of drowning, and cooler body temperatures as may mask some features of hypoglycaemia experienced during water-based activities.

Pupils with diabetes should not use their condition as an excuse for not participating in any physical activity. If this happens regularly, speak to their parents/carers and /or Diabetes Nurse about their individual situation.

### **DIABETES SHOULD NOT BE AN EXCUSE FOR OPTING OUT OF SCHOOL ACTIVITIES**

### **PE/TEACHERS SUPERVISING ACTIVITY NEED TO HAVE AN EMERGENCY SUPPLY OF GLUCOSE AVAILABLE ON THE FIELD**

## **PUPILS EXPERIENCES OF DIABETES AT SCHOOL**

**“As a young person with diabetes, I have already had to experience major changes in my life. I want to be accepted by my friends, family and teachers. With your help and support this can be achieved”**

**“Please stop asking me if I am alright. I will tell you when I am not”**

**“Diabetes is a serious condition which should not be underestimated by others”**

**“Please think about using different prizes and rewards than just sweets”**

**“I do need time to recover from a hypo and I do not always need to go home if I have a hypo”**

**“Diabetes can affect mood swings and concentration”**

**“I can participate in detention but still need to eat if this coincides with a planned meal time”**

**“I know when I need treatment – please listen to me”**

**“Meals are very important to me”**

**“Pencils, sharpeners are just as good rewards as sweets”**

**“I am still me”**

## BLOOD SUGAR LEVELS AND BRAIN FUNCTIONS

The brain relies on sugar for its energy supply. Thinking, reasoning, reactions, abstract thoughts, reflexes and other aspects of brain function deteriorate if the brain is not supplied with enough sugar. Think how you feel when you miss a meal.

This occurs when the blood sugar levels is too low. Children who do not have diabetes maintain a blood sugar level at 3.5 – 7.5 mmol/L (approximately).

As blood sugar levels fall and the pupil becomes hypo you may notice a series of changes occur: -

- ∪ Reflexes and reaction time slows progressively slows down
- ∪ Paleness
- ∪ Changes in mood and behaviour
- ∪ Sweating
- ∪ Deteriorating performance generally

If untreated, loss of consciousness or seizures or other signs of hypoglycaemia can occur.

You may find some of the above symptoms familiar to you, as people who do not have diabetes also experience low blood sugar levels from time to time, usually because they have not eaten enough.

Following an episode of hypoglycaemia, it may take several hours for the brain function to be fully restored to normal. If hypos occur during an exam situation, the pupil may not achieve as expected. Moderately severe hypoglycaemia may result in a persistent, severe headache, which will further affect performance. Pupils are encouraged to let staff know if they experience a hypoglycaemic episode during exams. If these are GCSEs, the Examining Board must be notified of this event.

High blood sugar levels, associated with poor diabetes control, may also affect brain function but the effects are not as clear-cut as with low levels. High blood sugar levels may be accompanied by an inability to concentrate and mood changes (especially irritability), headaches, thirst and frequent need for the toilet.

## EXAMINATIONS

Pupils perform best at examinations when their diabetes is in good control.

When blood sugar levels are high, there is a need to visit the toilet more frequently.  
Easy access to the toilets needs to be granted.

When blood sugar levels are too low, the brain is deprived of sugar for energy causing cognitive and other changes.

Blood sugar levels should be measured immediately before important examinations.

Pupils with diabetes need to be allowed to bring food and drinks (not in noisy wrappers) in case of hypos during the examination.

**Some Examination Boards allow an additional few minutes if a mild hypo has occurred immediately before or during an examination. If a severe hypo occurs, then a claim for special consideration should be filed. Before an examination, an application can be made to the Local Education Authority in writing for special considerations in case of the possibility of the occurrence of low blood sugar during an examination.**

## SCHOOL TRIPS

Planning is the key to trouble free school trips whether it is a day trip, an overnight stay or several days away either in the UK or abroad.

It is important to consider the following when planning a trip: -

- ∪ timing of meals
- ∪ timing of injections and blood tests
- ∪ carrying an adequate supply of food e.g. sandwiches, crisps, fruit, biscuits etc without relying on being able to buy food or snacks when needed.

Day trips should not cause any real problems, as the routine will be similar to a school day. The pupil should take their blood testing kit and insulin in case there is a delay in the travel plans. If insulin needs to be given, this must be followed by an intake of complex starchy foods. Their usual hypo treatment must also be carried.

Overnight stays will include the need to achieve injections as well as blood sugar monitoring. You will need to be confident that the pupil is able to give their own insulin injection or that a member of staff has been trained and is willing to help with injections and testing if the child is not yet able to do this. It is more usual that parents would not consider allowing their child to go away overnight if they are not able to self-care. If any medical equipment is lost or forgotten, contact the nearest paediatric unit or Accident & Emergency Department who will be able to help.

Residential trips and excursions enhance self-esteem, are fun, promote independence and confidence. Pupils with diabetes can participate fully with any residential trip. Usually pupils who attend camp are reliably independent in the care of their diabetes. This includes:-

- ∪ insulin injections
- ∪ blood sugar testing
- ∪ recognising and treating hypos
- ∪ understand need for regular meals & snacks
- ∪ understand & are able to choose appropriate types and volumes of foods for meals and snacks
- ∪ understand the need for additional intake before, during and after increased activity

Parents / guardians need to meet with the organisers well beforehand to discuss special needs, to obtain the itinerary and to discuss how and where food will be provided.

Parents / guardians of younger pupils could be invited to attend the trip, if the pupil is not fully independent.



## FOOD AND DIABETES

A regular intake of slowly absorbed starchy (carbohydrate) foods is vital to minimise the risk of hypoglycaemia. The foods recommended for diabetes are based on the same healthy eating practices recommended for everyone. Sugar free or no added sugar products can be used freely. All regular drinks must be sugar free or diet.

Parents should provide the school with the right type and amount of food and drink, including an emergency box for treating hypoglycaemia or to prepare for exercise. School meals as provided by the school are acceptable but some of the puddings may contain too much sugar. When this happens, the pupil is encouraged to choose a portion of fresh fruit. Parents should be given a copy of the menus and kept up-to-date with any changes so that meals can be planned with the pupil.

If any difficulties arise in relation to meals or snacks, these should be discussed with the parents.

It is important to ensure that food containing slowly absorbed carbohydrates are eaten at every main and snack meal. Each meal or snack should be made up of 50% carbohydrate and meals must never be skipped. If the pupil is struggling with the planned meal volume and missing out on social / play time, the parents should be notified and adjustments can be planned.

Pupils with diabetes need to achieve three main meals and three snack meals every day. If the interval between meals and snacks is too long, an additional snack intake needs to be achieved to avoid hypoglycaemia.

Very young children will probably require extra supervision at meal and snack times. It is important that meals and snacks are eaten as planned to prevent hypoglycaemia. Most pupils will have an eating pattern that fits in with the school routines, avoiding the need to regularly eat in the classroom or at odd times. Pupils with diabetes usually cannot delay meal times. If an activity is running over time, they may need to eat during that activity.

Mealtime assistants and school staff should be familiar with the dietary needs of all pupils in the school with diabetes.

Examples of slowly absorbed carbohydrate foods are: -

- |                                |                       |
|--------------------------------|-----------------------|
| ubread, scones, teacakes       | u rice and cereals    |
| u milk, low fat flavoured milk | ucrisps               |
| u biscuits and crackers        | u cereal bars         |
| u fruit (fresh and tinned)     | u digestive biscuits  |
| u pasta, noodles               | u sugar free yoghurts |
| u baked beans                  | u vegetables          |

## **BLOOD SUGAR MONITORING**

Most pupils with diabetes will need to test their blood sugar levels on a regular basis. They may need to do this at school, especially before or after physical activity, or if they are feeling that their blood sugar level is falling too low or climbing too high.

Blood sugar testing involves pricking the skin on the fingers using a special finger-pricking device. This enables a small drop of blood to be obtained and applied onto a special test strip that fits into their blood testing meter. The test can be completed in around one minute.

If these tests are needed at school, the family can advise on how often and where they should be done.

Pupils are taught that they should not dismantle the finger pricking device at school, and that used test strips should be taken home in the blood testing kit. These actions reduce the risk of needle stick injury and accidental contact with body fluids by another person. Pupils are also taught they must not carry out a blood test in any of the science facilities within the school.

With very young children who are not able to safely self-test, the school staff may be approached to undertake this. If agreeable, the Paediatric Diabetes Nurse will train school staff and risk management will be discussed.

Being able to complete a blood test is the most accurate method of knowing what is changing within the sugar levels in the blood, and this means that the most appropriate form of treatment can be achieved.

## **FAMILY AND LIFESTAGE ISSUES**

Diabetes care, management and treatment is life-long, continuous and at times painful. It is frequently frustrating for the individual and the family. The demands of diabetes are relentless, and can cause enormous stress on children and adolescents, their families including siblings, and other carers.

Before coming to school, pupils should have checked their blood sugar levels, had their insulin and eaten an appropriate breakfast meal.

The threat of developing one of the long-term complications of diabetes (blindness, kidney disease, nerve damage and gangrene) adds to the stresses of the disease. The uncertainty can cause great anxiety and impact on the day-to-day well-being and psychological development of the child and adolescent and their family.

It is important for members of the school staff to also be aware of the emotional stresses faced by siblings. Siblings at the same school should not be expected to take the responsibility of supervising their brother or sister with diabetes at school.

Children and adolescents whose diabetes is well controlled are no more liable to infections than other pupils are. School attendance is therefore largely unaffected apart from routine clinic appointments every few months. Occasionally, unstable diabetes will lead to hospital admission or more frequent medical reviews. If the child or adolescent is admitted to hospital, staff from the hospital school will be in contact to discuss the sort of work that the pupil should be doing. It is uncommon for diabetes to be the cause of significant absenteeism.

Diabetes control is commonly less stable during puberty. The changing hormonal patterns are partly responsible. The emotional turmoil of adolescence contributes, making it more difficult to adhere to diabetes routines, treatment and testing schedules.

Children and adolescents can attend boarding schools. Parents / guardians need to inform the school administrators, nurse, catering officer, matron and school doctor. This information should include details about the individual's current treatment and medication, recent results and investigations, hypoglycaemic episodes including symptoms and treatment, plus any additional special information. An individual Management Plan needs to be formulated, discussed and agreed.

Details of emergency contacts and arrangements for sick days need to be provided before the initial attendance at school. Clear guidelines need to be available. The school nurse should be given Glucagon (and the authority to use it) for an emergency caused by severe hypoglycaemia, as well as urine testing equipment for use in sick day management.

Adolescents with diabetes are no more or less likely to experiment with or use drugs. The most common drugs are tobacco and alcohol. Tobacco is discouraged because it increases the risk of heart disease, eye disease and gangrene. Alcohol predisposes to

hypos. The combination of alcohol intoxication and hypoglycaemia is very dangerous, and has been noted as the commonest cause of fatality in this age group.

Drugs alter perception, ability to reason, consciousness and sensation. They reduce interest in achieving diabetes control. Diabetes routines may be forgotten, and injection and meal schedules disrupted. Signs of hypoglycaemia may also be misinterpreted or ignored. Most drugs reduce appetite and interest in food, and increase the risk of hypos. However, marijuana may stimulate appetite (the “munchies”) with a craving for carbohydrate foods causing a high blood sugar level. Regular drug use, which is often denied, can be associated with poor diabetes control. Such drug use is generally part of other risk taking behaviours, psychosocial distress, and peer group or family drug usage.

The combination of diabetes and eating disorders (anorexia or bulimia) is dangerous because of the increased risk of hypoglycaemia. Pupils with eating disorders are also prone to omit their insulin injections.

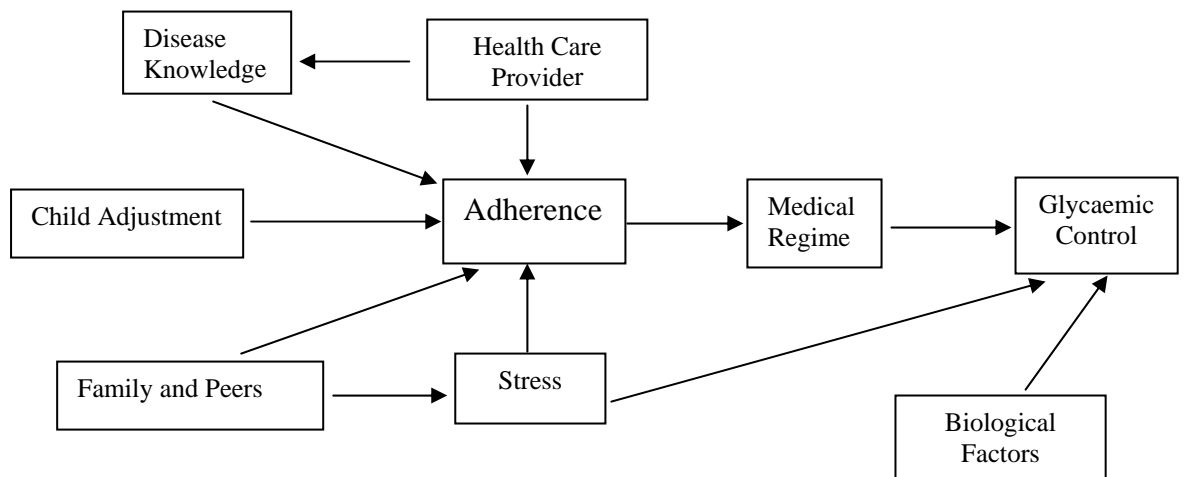
Most diabetes emergencies can be prevented or handled at home, camp or school if help is sought early. If the pupil is unconscious, call an ambulance and indicate to the operator that the pupil has diabetes. Make sure that as a member of the school staff you know the location of your school in respect of the postcode.

## DIABETES PSYCHOSOCIAL CONSIDERATIONS

For children and adolescents diagnosed with diabetes one of the important elements for successfully living with the condition is the integration of managing the practical aspects of the disease, such as diet, injections and the monitoring of blood sugar levels. To successfully incorporate these elements into one's life it is important to recognise the psychological impact diabetes can have on the individual.

The psychology of having diabetes is an important aspect of the condition and can evoke a variety of emotions from shock, confusion fear and anxiety to sadness and anger. Alongside the impact of being told you have diabetes and the psychological concerns regarding how the condition will affect you from a physical point of view there are secondary aspects regarding the condition which involve establishing and implementing the management of diabetes into one's life.

Alongside having to come to terms with the initial diagnosis from a personal perspective, there are additional external factors that can also impact on the condition. These external factors and how they impact on the individual are known as the psychosocial aspects.



**Table 1. A hypothetical model of psychological predictors for managing blood sugar levels (Handbook of Paediatric Psychology 1995)**

Looking at Table 1. Relationships with family and peers can influence adherence and adjustment to diabetes, a diagnosis of diabetes can have a major impact on the child's family who also have to adjust to the condition, which in turn may create stress. Diabetes is a serious condition that requires constant management that may affect schooling. A child with diabetes may have periods when they cannot attend school and may need a special diet different from peers, and have to take medication at school. How this is managed can affect adjustment and contribute to stress, affecting adherence. Peers can respond positively to these factors, alternatively there can be a negative response such as bullying. Alongside these factors, there is the individuals' personal adjustment to accepting the condition and awareness of specific medical knowledge that belongs with the disease, which may also impact on treatment adherence.

In summary all of the above psychosocial features impact on the child's well-being and as such the psychological aspects of diabetes plays an important part in allowing the child to come to terms with, manage and integrate the condition successfully into their lives.

## USEFUL LINKS

[www.diabetes.org.uk](http://www.diabetes.org.uk)

[www.childrenfirst.nhs.uk](http://www.childrenfirst.nhs.uk)

Cornwall Diabetic Education Website

Cornwall Health Promotion Website

Food Zones Website

Action Zones Website

Healthy Schools Initiatives Weblinks

## SUPPORT FOR SCHOOLS AND PEOPLE YOU CAN CONTACT

∪ Paediatric Diabetes Nurse Team CDEC RCHT Truro Cornwall TR1 3LJ Tele No; 01872 254560 Fax No: 01872 254570	Provide education, training and support. We can also supply literature, leaflets etc.
∪ Your local School Health Adviser	As above
∪ Diabetes UK 10 Parkway London NW1 7AA Tele No: 020 7424 1000 Fax No: 020 7424 1001 Email: <a href="mailto:info@diabetes.org.uk">info@diabetes.org.uk</a> <a href="http://www.diabetes.org.uk">www.diabetes.org.uk</a>	An excellent source of information, leaflets and advice including travel and insurance. Free School Packs can be obtained.

This information has been collated together from a variety of sources including many healthcare professionals and comments from children and adolescents themselves, for which we are very grateful.

With thanks to the Clinical Psychology Team, Child Health Directorate and members of the Paediatric Diabetes Nurse Team.

Reviewed and updated January 2010

June 13<sup>th</sup> to 19<sup>th</sup> is National Diabetes Awareness Week.

Why not get your school involved in a fun fundraising activity.