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### Agreement for school staff to ADMINISTER A FLEXIBLE dose of insulin via injection

Name of child: ..... D.O.B: .....

It is recognised that multiple injections of insulin are the best way of achieving good control, therefore reducing the risk of developing complications later in life. In consultation with Dr Campbell and the Children’s Diabetes Team, .....’s Parent(s)/carer feel this is the best treatment for him/her. Due to the age and development, the child is currently unable to give their own injections or take responsibility for them. Several members of staff have agreed to give the lunchtime injection of insulin, these are:

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They have practiced with an insulin pen and have demonstrated their competence to the Children’s Diabetes Nurse Specialist. One of the Children’s Diabetes Nurse Specialists (CDNS) will supervise the first injection that is given to them by each the above members of staff and offer ongoing support and training to the school as needed. School staff will ensure that a trained member of staff is available every school day to give the injection, and will inform the child’s parent/carers immediately if a trained person is not available. The Children’s Diabetes Nurse Specialists can be contacted on their mobile numbers, as listed above.

Staff will check the child’s blood glucose level before the lunchtime bolus of insulin. They are aware of the target of 4-8mmol/L and will record this in the logbook. If the blood glucose is less than 4mmol/L (hypoglycaemia) they will require 50mls Lucozade OR 3 dextrose tablets followed by long acting carbohydrate e.g. plain biscuits once feeling better (or as per agreement with parents documented in health care plan). If they are unable to tolerate oral diet or fluids, then staff at school needs to administer Glucogel to avoid further deterioration. They must be conscious prior to administration of Glucogel – if in doubt, they should be placed in the recovery position and 999 should be dialled.

If the child has a hypoglycaemic episode just before lunch, the lunchtime injection should not be given until they have made a full recovery from this. If in doubt, the parent(s)/carer should be contacted prior to administration of the insulin injection as this could cause a further hypoglycaemic episode. The Diabetes Team should be contacted if unable to contact parent(s)/carer.

\*The child will have a dose of insulin at lunchtime calculated using the Carbohydrate and blood glucose scale (see attached). This dose is based on the carbohydrate content of his/her lunch and the blood glucose result. Parents will inform staff of the carbohydrate content of lunch or in an older child will write the amount and put in the child's lunch box.\* Any changes will be made in writing to the school, normally by the parent(s)/carer. On occasions this may be done by the Diabetes Team, who will also notify parents. \*The maximum amount of insulin that should be administered as a bolus is.....units.\*

High blood glucose levels (above 14mmols/l) need to be reported to parent(s)/carer at the end of the school day, **unless the child is unwell, in which case parents/carers should be contacted immediately. The diabetes team should be contacted if unable to contact parent/carers.** Blood glucose tests may be indicated at other times of the day, for example mid-morning or before PE.

This agreement has been discussed, and agreed, by the Head Teacher, all staff named above, the child's Parent(s)/carer, The Children's Diabetes Nurse Specialists (CDNS) and Dr Campbell (Consultant Paediatrician).

<b><u>Agreement:</u></b>	<b><u>Title</u></b>	<b><u>Print name</u></b>	<b><u>Sign name</u></b>	<b><u>Date</u></b>
<b>Head Teacher:</b>		.....	.....	.....
<b>Staff 1:</b>	.....	.....	.....	.....
<b>Staff 2:</b>	.....	.....	.....	.....
<b>Staff 3:</b>	.....	.....	.....	.....
<b>Staff 4:</b>	.....	.....	.....	.....
<b>Parent(s)/carer:</b>		.....	.....	.....
<b>CDNS:</b>		.....	.....	.....
<b>Consultant/Nurse Prescriber:</b>		.....	.....	.....

" ..... **School, or its staff, will not be held liable for any injury or death arising directly, or indirectly, from, or out of, the administration of the prescribed medication by appointed staff members, other than through the negligence of the Local Education Authorities employees. The school understands that the provision of emergency treatment beyond that agreed with the school, (as stated in the child's Healthcare Plan) rests with the attending health professional. The school will provide information to assist health professionals undertaking emergency care".**

**Formal risk assessment in relation to the safe disposal of sharps and storage of insulin and equipment should be undertaken**

**Name:** .....

**DOB:** .....

## **PROCEDURE FOR ADMINISTERING INSULIN VIA PEN DEVICE**

The correct insulin cartridge will be loaded into the pen by the child's parent(s)/carer. When this needs replacing, the parent(s)/carer will do this. Insulin lasts for one month when not stored in the fridge.

### **Preparation for the injection**

- 1 Check the Record of Injection Book to make sure no one else has already administered today's injection
- 2 Remove the pen cap
- 3 Attach a new pen needle
- 4 Prime the needle with 2 units of insulin, holding the pen with needle upright
- 5 Once a drop of insulin has been seen, the pen is ready to use. If a drop of insulin has not been seen - repeat the procedure
- 6 Dial the number of units calculated to inject, as per written agreement.
- 7 Choose the injection site and lift a wide skin fold. This helps to hold the skin steady and avoids injecting into the muscle.
- 8 Inject the pen device needle at 90° and press the button/plunger as far as it will go. The dial will reset back to zero to indicate that the requested dosage has been administered
- 9 Count to 10 before removing the pen device to reduce insulin leakage
- 10 Following the injection, which will always be performed in the school office/ first aid room, remove the pen needle using the outer cover(do not try to replace the inner cap)and discard carefully in the sharps container, which is kept in the medicine drawer/ cupboard in the office/ first aid room, along with the child's medical equipment.
- 11 Replace the pen cap
- 12 Fill in, and sign the logbook

## **Procedure for testing / supervising blood glucose test**

Equipment needed: Blood glucose meter, test strips, finger-pricking device, lancet, sharps bin and cotton wool.

- Ensure child washes their hands and dries them thoroughly. (If hands are cold, run them under warm water or shake them to warm them up).
- Insert lancet into finger pricking device and prepare device as taught.
- Insert test strip into or advance test strip from blood glucose meter.
- Prick the side of the finger (it is less painful than the finger tips) and wipe away the first drop of blood with cotton wool.
- Squeeze a small drop of blood by milking the finger from the base to the tip.
- Hold the test strip to the blood and allow the strip to suck up the blood, or cover the test patch on the strip with the drop of blood, depending on the type of meter. The meter will beep or the display will start counting down when enough blood is received.
- After a few seconds the blood glucose level should appear on the screen. (If an "error" appears on screen this may be due to insufficient blood sample therefore repeat the test. If problem persists, refer to meter reference guide or contact parents for advice.)
- Dispose of lancet and test strip as taught.
- Record blood glucose result.

There are many different types of blood glucose meter, each requiring a slightly different method of use. The above is only a guide – always perform/supervise the test as taught by the children's diabetes nurse specialist.

## **How to calculate the amount of insulin required for Carbohydrate (CHO) eaten and to correct a raised blood glucose**

**Check Blood glucose (BG) level to see if extra insulin is required.**

If Less than <4 mmol/l = No extra Insulin (Correct low BG first before giving insulin)

4 -10mmol/l = No extra insulin

11-15mmol/l = 1unit of Insulin

16+mmol/l = 2units of Insulin

Then add the units of insulin required for the amount of carbohydrate using the list below.

*NB: Please delete the ratio of insulin to CHO not required*

### **Carbohydrate (CHO) scale**

#### **For ratio of 1unit for 10g of CHO**

30g CHO = 3 units of Insulin

40g CHO = 4 units of Insulin

50g CHO = 5 units of Insulin

60g CHO = 6 units of Insulin

#### **For ratio of 1unit for 15g of CHO**

30g CHO = 2 units of insulin

40g CHO = 2.5 units of Insulin

50g CHO = 3.5 units of Insulin

60g CHO = 4 units of Insulin

### **For example**

#### **For a ratio of 1u/10g**

If lunch contains 40g of CHO and BG result is 12mmol/l

ADD 4units + 1unit = 5units of insulin to be administered.