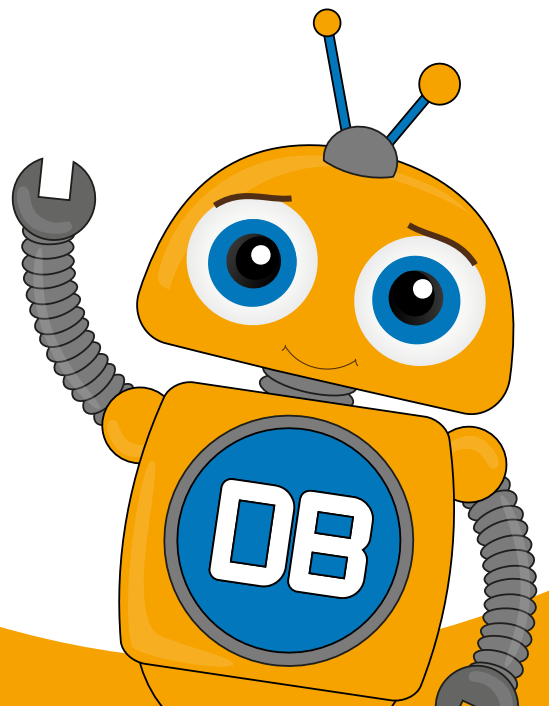


# Goals of Diabetes Education

## Resources relevant for 8-9 year olds

This handout is designed to explain what your child needs to know about the management of diabetes. It has been tailored to the educational needs of 8-9 year olds.





**DigiBete Structured Education**

# Goals for 8-9 year olds

## HANDOUT FOR PARENTS

### A Few Words About This Age Group

- Your child will be motivated to learn new things.
- They may concentrate on having things 'look right'.
- They may be ambitious, but it is important that adults do not demand more than they can handle at this age.
- They may know numbers up to 1,000.
- They may understand the concept of time and tell the time.
- Towards the end of this period, your child will be learning the units of measurement, such as metres, grams and litres.
- They may start to show genuine empathy for others.
- Children become more independent.

### Food

**Your child should:**

- Know the number of meals they need at school and after school, and when food should be eaten.
- Start to recognise food and drinks that contain carbohydrates and start to understand that grams of carbohydrates must be counted.
- Know which foods should be limited in quantity and the best time to eat them.
- Know how many portions of fruit and vegetables they should eat per day.
- Be able to recognise types of drinks they can drink freely without affecting glucose levels.



**Your child may begin to take more practical responsibility for their diabetes care, but you are still responsible.**

### Diabetes Knowledge

**Your child should be able to say in their own words:**

- That they have diabetes.
- That their body needs insulin because it cannot make enough by itself.
- Where on the body they can inject insulin, or site their pump cannula.
- That they can feel well and live like other children when they eat regularly, receive insulin and keep their glucose level steady.

**Your child should know that:**

- They will always have diabetes.
- Diabetes is not caught from other people (not contagious).
- No one knows for sure why some people get diabetes.
- It is not their fault, nor anybody else's fault, that they have diabetes.

## Exercise

- If your child participates in sports, it is your responsibility as the parent or carer to supply extra food or adjust the insulin dose accordingly, including applying higher glucose targets on automated insulin delivery systems, if appropriate. Your child's target glucose pre-exercise is 7-10mmol/L.
- Do not exercise if ketones are above 1.5mmol/L.
- Continuous glucose sensors can be hugely beneficial in managing glucose levels during activity.
- Glucose levels should be checked before exercise and active play.
- If this shows a glucose level of less than 7mmol/L, your child should take additional carbohydrate.
- If glucose levels are more than 14mmol/L before exercise, your child's blood should be checked for ketones (as exercise can increase the production of ketones).
- Your child should understand that exercise and sports require more food intake and possibly less insulin.
- It is your responsibility as a parent or carer to encourage active play or exercise for at least 60 minutes per day.

## Glucose Monitoring



A glucose monitoring system with alarms is the safest way of managing diabetes. Regular blood glucose checks throughout a 24h period (including overnight) should be done by an adult if there is no access to a glucose sensor. 6-10 blood glucose checks per day is optimal if there is no sensor.

Parents should respond promptly to alarms at all times of day or night. A blood glucose check is required if symptoms do not match sensor glucose readings. Some glucose sensors do not require blood glucose checks to confirm hyperglycaemia or hypoglycaemia.

### Children should know:

- Know why their glucose values are monitored.
- Be able to use meters and glucose sensors and understand what the alarms and arrows mean.
- Alert an adult if the glucose sensor alarms
- Recognise the numbers of when they are in target, or above or below target.
- Be encouraged to learn about the significance of HbA1c and their own target for it.

## Diabetes Technology

Children may be offered technology to help manage their diabetes. This may include glucose sensors, insulin pumps, smart insulin pens or automated insulin delivery systems. These devices may be used separately or together to create a safer environment for the child and provide more information to the adults caring for them. Any adult caring for a child with diabetes should have appropriate and ongoing training and support from healthcare staff or a parent, to ensure they feel confident in operating or using the technology.

**Operating and caring for diabetes technology is the parent's responsibility.**

- Children may help with using glucose sensors and insulin pumps under supervision.

- You should understand the importance of injection or cannula rotation and how to look after skin around sites.
- Involve your child in locating new sites and inserting new cannula/sensors.



## Hypoglycaemia or HYPO = Low Glucose Level (3.9mmol/L or less)

Your child should know their own symptoms of a low glucose level and know how much glucose (or other appropriate treatment) is needed to correct the situation.

### They should also know that:

- They have to tell an adult how they feel straight away.
- Their glucose has to be checked to confirm that they are hypoglycaemic.
- They need to take glucose tablets or a sugary drink.
- Their glucose should be re-checked 15 minutes later to confirm recovery. (20mins if using a continuous glucose monitor)
- They should also take a snack if they are not due to eat a meal or snack or about to exercise.
- If the arrows suggest glucose level is falling that they may need some glucose treatment to prevent a hypo.
- Know they may need less glucose treatment depending on the number and arrow.

Families should have an opportunity to revise how to use glucagon injections annually or access video resources. Expiration dates of stored glucagon should be checked regularly; expired glucagon may not work effectively in an emergency. Some childcare or education facilities may store glucagon on site at a family's request.



## Insulin

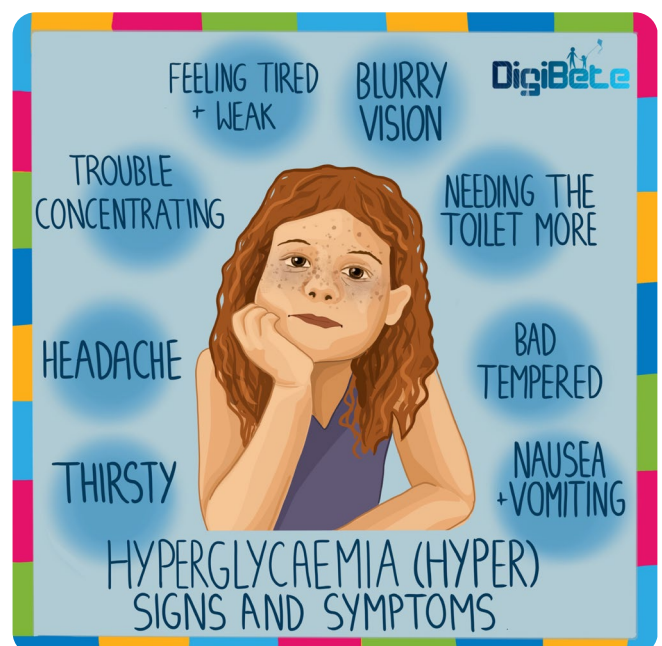
Insulin administration via injection or insulin pump is still an adult's responsibility. Anyone caring for a child with diabetes should have appropriate training from parents or healthcare staff to allow safe administration of insulin.

### Children should know:

- If on injections - What type of insulin they take and when they take each type.
- How to prepare the injection device or insulin pump.
- The importance of using different sites for insulin and rotating fully within a site.
- Be taught how to self-administer insulin using an injection or pump under supervision.
- That the meal dose of insulin will vary based on the carbohydrate content of the meal.

## Hyperglycaemia or HYPER = High Glucose Level (10mmol/L or more)

- Your child should know when the glucose level is reading too high and inform an adult.
- They should realise the importance of checking for ketones at this time.
- Parents should review their child's glucose values and insulin doses between clinic appointments by uploading data, looking for patterns and seeking help from their diabetes nurse if needing support to change doses.





## Illness

- Know the 'sick-day rules' advice.
  - Monitor your child's glucose levels and ketone levels (even if their glucose is not out of range).
  - Adjust your child's insulin doses, if necessary.
  - Ensure that your child takes fluids and eats during illness.
  - Ask for advice and help if you have any concerns.
- If sensor readings are higher than target, you may need to check with a finger prick blood glucose reading.
  - Adjust insulin doses promptly. During illness children may need significantly more insulin. Occasionally with diarrhoea and vomiting illness they may need less insulin.
  - Never stop insulin.
  - Ring for help if you are unsure what to do.

## Eating and sleeping away from home

- Your child may now give insulin by themselves; however, the insulin doses and when to give are still your responsibility.
- When your child is away from home, correctly instructed adults must be there to supervise at all times.
- Give guidance to these adults about suitable foods and drinks.
- As your child is becoming more socially independent (and may be moving out into different social situations), it is advisable for them to carry some form of identification such as ID cards, jewellery or information on a smart phone, including an emergency contact number, stating that they have been diagnosed with diabetes and require insulin.
- If wearing a sensor parents may be able to see and monitor glucose levels remotely on another device.



## Emotional Well-being

Living with or caring for a child with diabetes can bring significant challenges for parents. Lack of sleep can also affect your ability to care for someone with diabetes. Clinical psychology support is available for you as a family. Local support groups or other families who may have had similar lived experience, who understand the circumstances may be able to offer practical help and support. Talking to someone and getting the right support may help with finding strategies that help you or your child. Help your child to develop resilience by talking through issues and working together.

- Siblings may feel jealous of the necessary increased attention given to the child with diabetes.
- Involve siblings in diabetes care and discussion.
- Avoid speaking negatively about diabetes in front of children.

### Children should:

- Be encouraged to talk about their feelings towards diabetes.
- Be encouraged to let an adult know if they receive unkind comments around diabetes.





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