



Pupils with Health Issues

Diabetes



Diabetes



Classroom-based tips (focus on instructional methods)

1. **Be vigilant in order to recognise symptoms of hypoglycemia** (shakiness, nervousness or anxiety, sweating, chills, or clamminess, irritability or impatience, dizziness and difficulty concentrating, hunger or nausea, blurred vision, weakness or fatigue, anger, stubbornness, or sadness) and hyperglycemia (lethargy, thirst, frequent urination).
2. **Ensure that the pupil knows how to measure blood glucose and use their medication, or knows the staff member to go to for help.**
3. **Bear in mind that diabetes can affect learning**, and if not properly managed, a pupil can have difficulties with attention, memory, processing speed, planning and organising and perceptual skills. Therefore, use clear instructions for planned activities, allow enough time for diabetic pupils to complete tasks, and diversify your teaching methods to include different types of stimuli.
4. **Do not focus your attention on pupils with diabetes as it makes them stand out among their peers**, affecting their stress levels and psychosocial behavior. Instead, choose more subtle ways of including them in classroom activities and engaging their attention.
5. **Include pupils with diabetes in all school activities after taking appropriate safety measures**, for example use of the emergency kit for hypoglycemia in physical education classes.

[References: Diabetes UK: <https://www.diabetes.org.uk/Guide-to-diabetes/Your-child-and-diabetes/Schools/School-staff/>

Vermont Department of Health. Recommendations for the Management of Diabetes at school. Available at: healthvermont.gov/prevent/diabetes/SchoolDiabetesManual.pdf



School-based practical tips (focus on instructional methods)

Class Divisions / Arrangements

Arrange for the child's access to and safe storage of food, insulin and supplies. Ensure that the pupil has a clean, private space with adequate time for blood glucose monitoring and insulin administration, and safe disposal of sharps and test strips.

Educational Visits / Field Trips / Camps / School Exchanges / Trips Abroad

Talk about diabetes to the Teachers Association and offer training (CPD) on special health issues. Assign school staff to provide care on field trips and at all school-sponsored activities.

Food: Canteen / Visits / Camps / Trips

Ensure the school canteen or cafeteria stocks healthy snacks and snacks appropriate for diabetics.

Other (Health Measures)

1. **Enable pupils with diabetes to check their blood sugar at school.** When a pupil with diabetes has low blood sugar (hypoglycemia), he or she must be given access to emergency glucose (or snacks prescribed by their doctor) to treat the low blood sugar. When a pupil with diabetes has high blood sugar (hyperglycemia), he or she must be allowed free access to water and the bathroom.
2. **Prepare, in collaboration with the child's parents and doctors, an individualised Health Care Plan** which will include how diabetes care will be managed in the school setting. This should include measures on how to recognise and treat hypoglycemia or hyperglycemia, what to do in an emergency, contact persons and designated staff member (preferably trained in the absence of a school nurse) that the pupil can go to for help related to his/her diabetes care.
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Parents / Parents' Associations

1. **Talk about diabetes to the Teachers Association and offer training (CPD) on special health issues.** Assign school staff to provide care on field trips and at all school-sponsored activities.
2. **Arrange a meeting between the parents and the pupil's teachers to talk about class rules, signs of hypoglycemia and hyperglycemia, exercise and other related concerns.**

[Reference: American Association of Diabetes Educators (2016) Management of Children with Diabetes in the School Setting: <https://www.diabeteseducator.org/docs/default-source/practice/practice-resources/position-statements/management-of-children-with-diabetes-in-the-school-setting.pdf?sfvrsn=0>]

Safety

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with diabetes has high blood sugar (hyperglycemia), he or she must be allowed free access to water and the bathroom.

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- 3. Arrange for the child's access to and safe storage of food, insulin and supplies.** Ensure that the pupil has a clean, private space with adequate time for blood glucose monitoring and insulin administration, and safe disposal of sharps and test strips.

School Breaks

Keep in mind that pupils who experience high or low blood glucose levels may not be able to participate in exams so that alternative arrangements are made. Also, pupils who inject insulin before lunch might need a little extra time before lunch to accommodate their injection.

Pupil Support

- 1. Enable pupils with diabetes to check their blood sugar at school.** When a pupil with diabetes has low blood sugar (hypoglycemia), he or she must be given access to emergency glucose (or snacks prescribed by their doctor) to treat the low blood sugar. When a pupil with diabetes has high blood sugar (hyperglycemia), he or she must be allowed free access to water and the bathroom.
- 2. Prepare, in collaboration with the child's parents and doctors, an individualised Health Care Plan** which will include how diabetes care will be managed in the school setting. This should include measures on how to recognise and treat hypoglycemia or hyperglycemia, what to do in an emergency, contact persons and designated staff member (preferably trained in the absence of a school nurse) that the pupil can go to for help related to his/her diabetes care.
- 3. Arrange for the child's access to and safe storage of food, insulin and supplies.** Ensure that the pupil has a clean, private space with adequate time for blood glucose monitoring and insulin administration, and safe disposal of sharps and test strips.
- 4. Make sure that pupils with psychosocial issues are referred to a counselor or school psychologist.**
- 5. Keep in mind that pupils who experience high or low blood glucose levels may not be able to participate in exams so that alternative arrangements are made.** Also, pupils who inject insulin before lunch might need a little extra time before lunch to accommodate their injection.

Teacher Professional Development

Talk about diabetes to the Teachers Association and offer training (CPD) on special health issues. Assign school staff to provide care on field trips and at all school-sponsored activities.

Timetabling

Keep in mind that pupils who experience high or low blood glucose levels may not be able to participate in exams so that alternative arrangements are made. Also, pupils who inject insulin before lunch might need a little extra time before lunch to accommodate their injection.

Supportive literature

1. Definition

Diabetes is a chronic disease in which blood glucose (sugar) levels are above normal. Type 1 diabetes or juvenile diabetes is a disease of the immune system. In people with type 1 diabetes, the immune system attacks the insulin-producing cells of the pancreas and destroys them. Because the pancreas can no longer produce insulin, people with type 1 diabetes must take insulin daily to live. Type 1 diabetes occurs most often in children and young adults. Although there is no cure, diabetes can be managed with insulin injections, blood sugar monitoring, proper diet and exercise (CDC). Children with diabetes face two serious problems:

- Hypoglycemia, or low blood sugar, occurs when the blood sugar level is too low, due to too much insulin, too little food, or too much exercise. Children with low blood sugar sometimes behave erratically or act sleepy, and are often very hungry and shaky. Low blood sugar must be treated immediately by giving the child foods with simple sugars, such as fruit juice. If you suspect that a pupil has low blood sugar, do not leave the pupil unattended because s/he can lose consciousness (Henderson, 2005).
- Hyperglycemia, or high blood sugar, occurs when the blood sugar level is too high, due to too little insulin or too much food. Children with high blood sugar can become lethargic and sleepy, and are often very thirsty and need to go to the bathroom frequently. High blood sugar is treated by giving additional insulin and sugar-free drinks, such as water. Pupils with diabetes must be given free access to water and the bathroom (Henderson, 2005). Prolonged hyperglycemia due to insufficient insulin can lead to a very serious condition called diabetic ketoacidosis, which can lead to coma and death.

2. Psychosocial issues of pupils with diabetes

Diabetes is a complex chronic disease that affects every facet of life. The fact that pupils with diabetes have to regularly perform their blood sugar monitoring and their insulin injections can set them apart and make them feel different to their peers. This can lead to considerable distress, especially if pupils are left out from activities such as excursions or sleepovers, and their self-image can suffer. This can make them feel angry or resentful or become depressed. Furthermore, some pupils can be accepting and open to discussing their condition, while others attempt to hide it. Sometimes, pupils cannot comply with the regimen but feel pressured to please their family and health care providers and report fictitious blood glucose levels. Conversely, sometime they use their diabetes to assert their independence and control and do not comply with their diabetes care plan.

Diabetes may compromise independence, because the parents/guardians are concerned about their child's ability to perform self-care tasks and take responsibility for their diabetes. This parental concern can lead to increasing struggles with dependence, oppositional behavior, and rebellion (ADA).

3. Diabetes and learning

Diabetes can affect learning, and if not properly managed pupils can have difficulties with attention, memory, processing speed, planning and organising and perceptual skills, and might not achieve their full academic potential. The challenges of properly managing diabetes may also impact on a child's life. Some pupils with diabetes may have frequent absences due to hospital appointments or feeling unwell because of their diabetes (Diabetes UK).

Websites and EU Reports

American Diabetes Association: www.diabetes.org

Center for Diseases Control and Prevention: www.cdc.gov

Diabetes UK: www.diabetes.org.uk

Vermont Department of Health. Recommendations for the Management of Diabetes at school. Available at: healthvermont.gov/prevent/diabetes/SchoolDiabetesManual.pdf

American Association of Diabetes Educators (2016) Management of Children with Diabetes in the School Setting. Available at:

<https://www.diabeteseducator.org/docs/default-source/practice/practice-resources/position-statements/management-of-children-with-diabetes-in-the-school-setting.pdf?sfvrsn=0>

References

Henderson, G. (2005). Standards of care for students with type 1 diabetes: Ensuring safety, health and inclusion in school. *Paediatrics & Child Health*, 10(1), 25–27.