

DIABETES

Diabetes

Diabetes is a disease resulting from a lack of insulin action. Insulin, produced in the pancreas, is a hormone that is needed to transport glucose from the blood into the cells.

There are two major types of diabetes

- Type 1 diabetes occurs when the pancreas is unable to produce insulin
- Type 2 diabetes occurs when the pancreas does not produce enough insulin or when the body does not effectively use insulin that is produced

Management of diabetes

The treatment of diabetes can be viewed as a balancing act. Food increases the amount of glucose in the blood. Insulin and exercise decrease the amount of glucose in the blood by allowing the glucose to be used by the body's cells. Timing of insulin injections, blood glucose monitoring, meals/snacks and exercise are important to maintain balance in blood glucose.

Food

The community program does not need to know the details of the child's meal plan but the following principles should be followed:

- Eating the same amount of food (carbohydrate content) each day
- Eating meals and snacks at the same time each day
- No trading or disposing of food

Exercise

Regular exercise is important for all children. For children with diabetes, exercise can help to maintain blood glucose. For children who participate in vigorous physical activity, good planning is essential to ensure their blood glucose levels are maintained. The major risk of unplanned vigorous activity is hypoglycemia (low blood glucose). This can be prevented by eating extra food. The parent/guardian should be notified of special events so they can ensure the child has extra food to compensate or so that they can reduce insulin if desired. Sports or other physical activities that take place during meal time also require extra planning.

Insulin

Children with Type 1 diabetes require insulin injections several times a day. Children with type 2 diabetes may require insulin or oral medication to assist the body in making or using insulin more effectively. Most insulin injections are administered at home. Community program personnel are not responsible for giving insulin.

When child is ill

Common childhood illness

When a child with diabetes becomes ill with usual childhood sicknesses, their blood glucose is likely to change. The parent/guardian should be notified immediately so that appropriate action is taken.

Child is unable to retain food/fluids

If the child vomits or is unable to retain food/fluids, contact the parent/guardian immediately. If unable to reach the parent/guardian or alternate emergency contact, call 911/EMS. Vomiting and inability to retain food and fluids are serious situations since food is required to balance the insulin.

Hypoglycemia

Hypoglycemia occurs when the blood glucose has dropped below 4 mmol/L. It is an emergency situation and can happen within minutes of a child appearing healthy and normal.

Hypoglycemia can be caused by not eating enough food, not eating on time and missing or delaying a meal.

Symptoms

- Cold, clammy or sweaty skin
- Shakiness; lack of coordination
- Irritable, hostile, poor behavior
- Tired
- Sudden moodiness or behavior change
- Difficulty concentrating, confusion
- Staggering gait
- Child may complain of
 - nervousness
 - excessive hunger
 - headache
 - blurred vision
 - dizziness
 - abdominal pain or nausea
- Fainting, unconsciousness

Responding to hypoglycemia

1. Check blood glucose, if monitor is available and time permits.
2. If blood glucose is less than 4 mmol/L and/or child is showing signs of hypoglycemia, have child eat a fast acting sugar (15 grams of carbohydrates).
3. Wait 10-15 minutes and check blood glucose again (if monitor is available). If blood glucose is less than 4 mmol/L and/or child is still showing signs of hypoglycemia, have child eat second fast acting sugar (15 grams of carbohydrates).
4. Wait 10-15 minutes and check blood glucose again (if monitor is available). If blood glucose is less than 4 mmol/L and/or child is still showing signs of hypoglycemia, call parent/guardian.
5. If unable to contact parent/guardian or alternate emergency contact, call 911/EMS.

IF IN DOUBT, TREAT! DO NOT LEAVE THE CHILD ALONE for at least 30 minutes.

Severe hypoglycemia

If the child's blood glucose levels drop very low, the child can progress to a more severe state including seizures and/or unconsciousness.

1. Call 911/EMS.
2. Place child in a side lying position.
3. Notify parent/guardian.
4. Stay with the child until emergency personnel or parent/guardian arrive.

DO NOT leave the child alone.

DO NOT give food or drink if the child is unconscious, having a seizure or unable to swallow.

Hyperglycemia

Hyperglycemia occurs when blood glucose is higher than the child's target range.

Hyperglycemia is usually not an emergency situation and does not require immediate treatment. Chronic, consistent hyperglycemia can be a cause for concern as it can slowly damage blood vessels in the body and cause complications such as heart disease, blindness, kidney disease, impotence and amputation.

Hyperglycemia often develops as a result of one or more the following:

- too little insulin;

- too much food;
- less than the usual amount of activity; or
- illness or stress.

Symptoms of hyperglycemia include increased thirst, tiredness and urinating more often.

Responding to hyperglycemia

1. Have child's blood glucose level checked if blood glucose monitor is available.
2. Inform parent/guardian if child's blood glucose level is above desired range (as indicated in child's health care plan).

Allow the child free access to water or other sugar-free fluids and a restroom.