Low Blood Sugar Levels (Hypoglycemia) in Children

What is low blood sugar (hypoglycemia)?

Low blood sugar (hypoglycemia) is when blood sugar is **below 4.0mmol/L.**

Most children with diabetes experience a low blood sugar level at some time. It is important to treat **mild/moderate hypoglycemia** quickly to stop it from becoming severe.

Medical Emergency

If your child is showing signs of loss of consciousness or seizures/convulsion, call 911 for Emergency assistance.



Please also see Mini-Dose Glucagon and Glucagon for treatment of severe hypoglycemia, seizures, and for confusion.

What causes a low blood sugar level?

- Missing meals or snacks or going too long without eating
- Eating less carbohydrate than usual
- Taking more insulin than needed
- Extra activity or unplanned exercise
- Drinking alcohol

What are the signs and symptoms of a low blood sugar level?

Mild Hypoglycemia	Moderate Hypoglycemia
 Shakiness 	 Lack of energy
 Nervousness 	 Lack of concentration
 Pounding heart 	 Confusion
 Cold, clammy sweatiness 	 Mood changes/irritability
Hunger	Blurred vision
Paleness	 Poor sleep/ restlessness/nightmares

How do I know when my child is having a low blood sugar level?

Your child will likely show the following signs & symptoms:

- Temper tantrums
- General irritability
- Paleness
- Lack of interest in playing



For some young children, a low blood sugar level may be difficult to detect.

Parents/caregivers must assist younger children or any child who is confused or unable to treat themselves. Not all hypoglycemia symptoms will happen. Your child may have other or no symptoms.

Older children can usually recognize when they are having a low blood sugar level and treat themselves.

If your child is experiencing any of these symptoms, **test blood sugar immediately**.



If the result is less than 4.0 mmol/L, treatment is needed right away.

If left untreated, symptoms could become severe.

How do I treat a mild/moderate or just low blood sugar level?

1. Stop any activity and give fast acting sugar according to the child's weight:

Weight	Less than 33 lbs (15 kg)	33 to 66 lbs (15 to 30 kg)	More than 66 lbs (30 kg)
Amount of fast acting sugar needed	5 grams	10 grams	15 grams
Examples	 50 mL (¼ cup) juice or regular pop 1 Dex4® tablet 1 teaspoon sugar or honey 	 100 mL (½ cup) juice or regular pop 2-3 Dex4® tablets 2 teaspoon sugar or honey 	 150 mL (¾ cup) juice or regular pop 4 Dex4® tablets 1 tablespoon sugar or honey

- 2. Sit down and rest for 15-20 minutes. Recheck your child's blood sugar level. If blood sugar is still less than 4.0 mmol/L, repeat step 1.
- 3. If blood sugar level is over 4.0 mmo/L and your next meal or snack is within an hour, have your regularly scheduled meal or snack with normal insulin dose.

If next meal or snack is more than an hour away, have a snack with a serving of carbohydrate and protein such as:

- 6 to7 crackers with cheese
- 1 slice of bread with 1 tablespoon peanut butter, meat or cheese
- 100 gram yogurt cup with berries
- Granola bar





- Always make sure your child is carrying fast acting sugar, keep supplies at school, in their backpack, in the car, etc.
- Do not ignore mild symptoms or delay treatment
- Teach family, friends and teachers how to recognize and treat low blood sugar levels. Teach children to ask for and accept help if experiencing symptoms
- If low blood sugar levels happen often, contact your diabetes health team
- Make sure your child is wearing diabetes identification (such as MedicAlert®)
- If your child is using a CGM, a finger poke should be done to confirm low blood sugar, and to confirm blood sugar is above 4.0 mmol/L after treating a low blood sugar level.

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