

Help from others to treat severe hypoglycemia

If you have a severe hypoglycemic reaction and become unconscious or are unable to swallow, you will require *immediate* assistance from family and/or friends. They will need to:

- Contact Emergency (telephone 911); and, if possible
- Give glucagon by injection:
 - 0.5 mg for children less than 5 years of age;
 - 0.5 to 1 mg for children 5 to 10 years of age; and
 - 1 mg for everyone over the age of 10.

What is glucagon and how is it given?

Glucagon is a hormone made in your pancreas that quickly raises blood glucose. It can be purchased over-the-counter at a pharmacy. Glucagon may not work in the presence of alcohol or in those suffering from starvation, chronic hypoglycemia, advanced liver disease or adrenal insufficiency.

Glucagon is given as an injection, just like insulin, and should be administered by another person according to the instructions on the package. As glucagon could cause nausea and vomiting you should not be left alone and you should be placed lying on your left side. Once you regain consciousness and are able to swallow, have 15 g of fast-acting carbohydrate (see inside page for chart) followed by a snack containing 1 Carbohydrate choice (15 g carbohydrate) and 1 Meat & Alternatives choice (e.g. ½ sandwich or crackers and cheese).

Discuss the hypoglycemia event with your doctor or diabetes education team as soon as possible.

Be prepared!

Discuss glucagon with your doctor and diabetes educators. Have an up-to-date Emergency Glucagon Kit so that you are always prepared. Ensure your family and/or friends have been trained on how to administer glucagon.

Hypoglycemia and Chronic Kidney Disease

INFORMATION BOOKLET

What you need to know about hypoglycemia if you have diabetes and chronic kidney disease.

If you manage your diabetes with insulin and/or medication you are at risk of hypoglycemia, which is also known as low blood glucose. Hypoglycemia is serious and should not be ignored!

This pamphlet explains hypoglycemia and how to treat it. Here are some important tips:

- Know the symptoms, causes and how to prevent and treat hypoglycemia.
- Monitor your blood glucose using an accurate blood glucose meter (have a lab/meter check annually).
- Carry your blood glucose meter, testing supplies and fast-acting carbohydrate with you at all times.
- Wear medical identification.
- Discuss your diabetes management with your doctor or diabetes education team if you have frequent episodes of hypoglycemia (more than three in a week).
- Review the “Diabetes and Driving: Safety Guidelines” pamphlet if you take insulin and/or diabetes medication that may cause hypoglycemia.

Diabetes Education Centre

Orillia Adult Program: 705-325-7611

Gravenhurst Adult Program: 705-687-9515

Paediatric Program: 705-327-9152

What is hypoglycemia?

Hypoglycemia, also called low blood glucose or low blood sugar, occurs when blood glucose drops below normal levels. Hypoglycemia can happen suddenly. It can be treated quickly and easily by eating or drinking a fast-acting carbohydrate. However, hypoglycemia can also be severe and result in confusion, coma or seizure if not treated immediately.

What are symptoms of hypoglycemia?

Hypoglycemia symptoms may include: dizziness, shakiness, sweating, headaches, hunger, weakness, sleepiness, confusion, anxiety, nervousness, or nausea. You may also have vision changes, numbness and tingling, difficulty concentrating or speaking.

Others may notice that you are irritable, sweaty, pale, acting or speaking strange, or having a restless sleep.

What could cause hypoglycemia?

- Eating less than usual and/or delayed meals and snacks;
- More exercise than usual;
- Taking too much insulin or diabetes medication;
- Drinking alcohol;
- Recent weight loss; or
- Kidney or liver disease.

Severe hypoglycemia is more likely to occur if you:

- Have hypoglycemia unawareness;
- Have frequent episodes of hypoglycemia;
- Have had a recent significant reduction in your A1C (glycated hemoglobin);
- Have an A1C within the normal range (less than 6%);
- Have had a prior episode(s) of severe hypoglycemia;
- Have had diabetes for a long time;
- Have autonomic neuropathy;
- Are less than 18 years of age; or
- Are pregnant (hypoglycemia unawareness is common at this time).

How should I treat my hypoglycemia?

If your blood glucose (blood sugar) drops below 4 mmol/L, you need to treat it promptly to bring your blood glucose (BG) level back above 4 mmol/L. Follow these 4 steps to raise your BG promptly and prevent rebound hyperglycemia (high blood glucose).

1. Test your BG using your blood glucose meter.
2. If your BG is less than 4 mmol/L treat with fast-acting carbohydrate.

Fast-acting carbohydrate	BG 3 to 4 mmol/L 15 g fast-acting carbohydrate	BG less than 3 mmol/L 20 g fast-acting carbohydrate
Glucose tablets	15 g carbohydrate Check label to determine amount	20 g carbohydrate Check label to determine amount
Apple or cranberry juice, regular lemonade or pop	¾ cup (175 mL)	1 cup (250 mL)
Lifesavers (chew and swallow) or jelly beans	6	8
Skittles	15	20
Table sugar	3 tsp (15 mL)	4 tsp (20 mL)
Pasteurized honey (<i>do not use for children under 12 months</i>)	3 tsp (15 mL)	4 tsp (20 mL)

Note:

- Avoid cola (phosphorus) and orange juice (potassium).
 - If you need to limit your fluid intake use candy or glucose tablets instead of fluids. If you use juice or pop, include as part of your total fluid allowance for the day.
 - If you take Acarbose (Gluco Bay) use only glucose tablets or pasteurized honey.
3. Wait 15 minutes. Re-test your BG. If your BG is less than 4 mmol/L re-treat as described above. Although 15 minutes may feel like a very long time it is important *not to eat* food that contains complex carbohydrate, protein or fat (e.g. chocolate or snack bar) until your BG is above 4 mmol/L.
 4. Once your BG is above 4 mmol/L have your usual meal or snack. If your next meal is more than 1 hour away, or you are going to be active, eat a snack containing 1 Carbohydrate choice (15 g carbohydrate) and 1 Meat & Alternatives choice (e.g. ½ sandwich or crackers and cheese, or 1 snack bar).