

WHAT HAPPENS IF YOUR BLOOD SUGAR IS HIGH, OR LOW?

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OUTLINE:

- Understand what blood glucose (sugar) is
- Learn why it is important to check your blood sugar levels
- Learn what is considered a high blood sugar, causes and what to do if you have high blood sugar
- Learn what is considered a low blood sugar, causes and what to do if you have low blood sugar
- Keeping blood sugars in target range

WHAT IS BLOOD GLUCOSE (SUGAR)?

Blood glucose (sugar) is the amount of glucose in your blood at a given time.



Hypoglycemia
(low blood sugar)



Normal level



Hyperglycemia
(high blood sugar)

WHY CHECK YOUR BLOOD SUGAR LEVEL?

- Quick measurement of your blood sugar level at a given time (ie. High, Low or within goal range)
- Show you how your lifestyle and medication affect your blood sugar levels
- Can help someone living with diabetes and their team to make lifestyle and medication changes that will improve blood sugar levels



HIGH BLOOD SUGAR





WHAT IS HIGH BLOOD SUGAR?

When your fasting blood glucose is at or above 11 mmol/L

WHAT CAN CAUSE HIGH BLOOD SUGAR?

- Missed dose of diabetes medicine or insulin
- Eating more than usual
- Exercising less than you are used to doing
- You take medicines that raise your blood sugar as a side effect
- Stress or illness

SIGNS OF HIGH BLOOD SUGAR



Feeling Tired



Polyuria
(Excessive Urination)



Irritability




Polydipsia
(Increased Thirst)



Blurry Vision

WHAT TO DO IF I HAVE HIGH BLOOD SUGAR?

- Test blood sugar regularly
- Take your usual dose of diabetes medication
- If you have high blood sugars often, call or see your doctor to:
 - Adjust your meal plan
 - Adjust your physical activity
 - Adjust your medication and/or insulin
- Drink extra water or non-caffeinated, sugar free drinks to stay hydrated



What if I feel drowsy or disoriented, or if blood sugar continues to rise (above 20.0mmol/L)?

This is a high blood sugar emergency. Call 911 or your local nursing station.

LOW BLOOD SUGAR



WHAT IS LOW BLOOD SUGAR?

When the amount of blood glucose is below 4.0 mmol/L

WHAT CAUSES A LOW BLOOD SUGAR?

- More physical activity than usual
- Not eating on time
- Eating less than usual
- Taking too much medication
- The effects of drinking alcohol



SIGNS OF LOW BLOOD SUGAR



Sweating



Trembling



Palpitations



Anxiety



Hunger



Nausea



Headache



Tingling



Disturbed
sleep



Weird
dreams



Weakness/
dizziness



Difficulty
concentrating



Vision
changes



Drowsiness



Difficulty
speaking



Uncon-
sciousness

WHAT DO I DO IF I HAVE A LOW BLOOD SUGAR?

- If you have any signs of a low blood sugar, check your sugar immediately
- If you don't have your meter with you, treat the symptoms anyway to be safe
- Follow these steps on the next slide to treat:



ACTING ON A LOW BLOOD SUGAR

1. Recognize

- Recognize **symptoms** of low blood sugar

2. Confirm

- Confirm if symptoms are due to low blood sugar by testing your blood sugar.
- If **<4.0mmol/L**, treat the low blood sugar

3. Treat

- Treat by eating a **fast-acting sugar** (carbohydrate of 15g)

4. Retest

- Wait 15 minutes, then retest to make sure that blood sugar is **ABOVE 4.0mmol/L**.
- If blood sugar is **BELOW (<4.0 mmol/L)**, retreat)

5. Eat

- If blood sugar is **ABOVE 4.0mmol/L** AND next meal is in the hour, you can eat at that time
- If blood sugar is **ABOVE 4.0mmol/L** AND next meal is **LONGER** than 1 hours away eat a small snack with 15g carbohydrate and a protein source

15G OF CARBOHYDRATE



15 g of glucose
in the form of
glucose tablets



1 tablespoon
(15 mL)
of honey



1 tablespoon
(15 mL)
sugar in water



2/3 cup (150 mL)
of juice or
regular soft drink



15 g fast-acting sugar
(e.g. 6 Life Savers® or
2 rolls Rocket Candy)

TREATMENT OF SEVERE LOW BLOOD SUGAR IN UNCONSCIOUS PERSON

1. Treat with 1 mg of glucagon subcutaneously or intramuscularly



2. Call 911 or local nursing station



3. Discuss with diabetes health-care team



KEEPING BLOOD GLUCOSE IN TARGET RANGE

- Your target may not be the same as the examples in this blood sugar levels chart.
- Yours should be specific to you.
- Target ranges for blood sugar can vary. It depends on a person's age, medical condition and other risk factors.

	A1C**	Fasting blood glucose (sugar) / blood sugar before meals (mmol/L)	Blood sugar two hours after eating (mmol/L)
Target for most people with diabetes	7.0% or less	4.0 to 7.0	5.0 to 10.0 (5.0 – 8.0 if A1C** targets not being met)



KEEPING BLOOD GLUCOSE IN TARGET RANGE

You can do this by:



Healthy Eating



Taking Medication



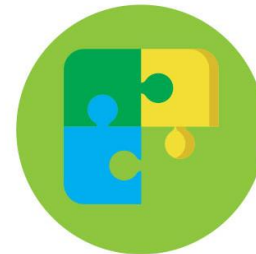
Being Active



Blood Glucose Monitoring



Emotional well-being



Solving problems of low or high blood glucose levels

THANK YOU!

QUESTIONS?

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