

SGLT2 Inhibitors in Chronic Kidney Disease (CKD)

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What are SGLT2 inhibitors?

- SGLT2 (sodium-glucose cotransporter-2) inhibitors are a group of medications that were first used to lower blood sugar in people with type 2 diabetes. They were later found to protect both the heart and kidneys. These medications are now used to treat diabetes, chronic kidney disease (CKD), and other diseases.

SGLT2 inhibitors include:

Generic name	Brand name
Canagliflozin	Invokana [®]
Dapagliflozin	Forxiga [®]
Empagliflozin	Jardiance [®]

How do SGLT2 inhibitors work?

- SGLT2 inhibitors cause your kidneys to increase how much sugar and sodium (salt) is removed when you urinate (pee).

- These medications affect the small blood vessels that lead into the filtering units of your kidney. This lowers the pressure in the filtering units and helps lower how much protein is passed into your urine. This helps to slow down the loss of kidney function.
- Ask a member of your kidney health care team if SGLT2 inhibitors are right for you.

Why does someone with CKD need this medication?

- SGLT2 inhibitors slow the progression (getting worse over time) of CKD.
- They also help to lower the risk of heart disease, being admitted to the hospital for heart failure, and death.

How do I take an SGLT2 inhibitor?

- These medications are taken once a day by mouth. They can be taken with or without food.

What if I miss a dose?

- Take the missed dose as soon as you remember.
- If it is close to the time for your next dose, skip the missed dose. Take your next dose at the usual time.
- **Do not take a double dose.** This may raise your risk of side effects.

If you are having surgery and you need to fast (stop eating):

- If you need to fast before surgery, you may need to stop taking this medication. Ask a member of your health care team if you need to stop taking this medication.

What are the possible side effects?

- Most people taking SGLT2 inhibitors do not have side effects.

Possible side effects include:

- Dizziness because of lower blood pressure
- Needing to urinate (pee) often
- Feeling more thirsty
- Genital yeast infection: This side effect is more common in people who have diabetes.
 - › Symptoms for females: A smell from your vagina, itchiness, white or yellowish discharge from your vagina
 - › Symptoms for males: Discharge from your penis that smells bad, a rash or redness around your penis
- Urinary tract infection (UTI): This side effect is more common in people who have diabetes. Symptoms include:
 - › Needing to urinate often
 - › A burning feeling when you urinate
 - › Pain in your pelvic area
 - › Urine that is cloudy, has a smell, or has blood in it

- Diabetic ketoacidosis (DKA): This is rare. DKA is a buildup of acids (called ketones) in the blood of a person with diabetes. This often happens with high blood sugar. In some cases, blood sugar may be normal or only slightly higher. Check your ketones at home if you are able to.

There have been rare cases of DKA in people who **do not** have diabetes, so it is important to watch for these symptoms:

- › Nausea (feeling sick to your stomach)
- › Vomiting (throwing up)
- › Loss of appetite (not feeling hungry)
- › Stomach pain
- › Feeling very thirsty
- › Trouble breathing
- › Confusion
- › Slurred speech
- › Feeling unusually tired or sleepy

If you think you may have DKA, stop taking your SGLT2 inhibitor and go to the nearest Emergency Department right away.

Taking your medications when you are sick

- **Do not take your SGLT2 inhibitors if you are:**
 - › Vomiting
 - › Having diarrhea (loose, watery poop)
 - › Not able to drink enough fluids to stay hydrated
- **SGLT2 inhibitors are important, but they can hurt you if you do not have enough fluid in your body.**
 - › You can go back to taking your medications when you are feeling better.
 - › If you are not able to take your medications for more than **3 days**, call your primary health care provider (family doctor or nurse practitioner).
- Make sure you are drinking enough fluids.
 - › Talk with your renal dietitian or nurse to find out what the right amount of fluid is for you.
- If you have diabetes, check your blood sugar level more often.
 - › If you are using insulin, keep taking your basal insulin. Examples of basal insulin are: Lantus® (glargine), Basaglar®, Humulin® N, Novolin®ge NPH, and Levemir®.
 - › If your blood sugar level is too high or too low, call your primary health care provider.

How do I store this medication?

- Store it at room temperature (15 to 30 °C) in a dry place. **Do not** store it in the bathroom.
- Store it in a safe place, out of the reach of children and pets.

This pamphlet is for educational purposes only. It is not intended to replace the advice or professional judgment of a health care provider. The information may not apply to all situations. If you have any questions, please ask your health care provider.

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Call 811 or visit: <https://811.novascotia.ca>

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