How Can I Make My Heart Healthier and Control My Sugar Better at the Same Time?



WebMD Education

Lowering Your Blood Sugar Can Help Make Your Heart Healthier

Having diabetes can increase your chances (risk) for getting heart disease. A person who has diabetes and heart disease is at higher risk for having a heart attack, stroke, death from heart problems, or developing heart failure, a different kind of heart disease.

Lowering your blood sugar so that it is at a healthy level (between 80 mg/dL and 130 mg/dL, fasting and between meals) and keeping your blood pressure and cholesterol in healthy ranges can help lower your risk for heart disease.

Which Medicines for Diabetes Can Also Protect My Heart?

There are 2 kinds of medicines for people with type 2 diabetes that can help make your heart healthier while improving your blood sugar.

- GLP-1 RAs (glucagon-like peptide-1 receptor agonists) are medicines that work in many parts of the body, like the pancreas and liver, to lower blood sugar and keep it at a healthy level, mostly after meals. They also work in the stomach to slow down digestion and in the brain to decrease appetite. GLP-1 RAs come as a shot or pill.
- SGLT2 (sodium-glucose cotransporter-2) inhibitors are medicines that work in the kidneys to remove extra sugar in the blood through the urine. SGLT2 inhibitors come as pills.

These medicines are very different from each other. Talk to your doctor to find out your risk for heart disease and which medicine is right for you based on your diabetes goals.

How Do These Medicines Help Manage My Blood Sugar?

Taking a GLP-1 RA or an SGLT2 inhibitor can help you manage blood sugar levels by:

- Improving hemoglobin A1c (HbA1c) [The average of your blood sugar level over 2 to 3 months]
- Keeping blood sugar at a healthy level
- Improving how much insulin your body makes or how it responds to insulin (a hormone that helps your body keep blood sugar at a healthy level)
- Reducing the risk for having blood sugar levels that are too low (hypoglycemia)

When your blood sugar stays at a healthy level, your heart gets healthier.



Some GLP-1 RAs and SGLT2 inhibitors also have heart benefits

How Do GLP-1 RAs and SGLT2 Inhibitors Protect My Heart?

Heart Benefits of GLP-1 RAs

Some GLP-1 RAs have been shown to be safe in adults with type 2 diabetes and known heart disease. One example is semaglutide (Rybelsus[®]).

Additionally, there are 3 GLP-1 RAs that are approved by the FDA to reduce the risk of major heart events such as heart attack, stroke, or death in adults with type 2 diabetes and known heart disease:

Dulaglutide (Trulicity®)
 Liraglutide (Victoza®)
 Semaglutide (Ozempic®)

Heart Benefits of SGLT2 Inhibitors

Some SGLT2 inhibitors have been shown to be safe in adults with type 2 diabetes and known heart disease. One example is ertugliflozin (Steglatro[™]).

Additionally, there are 3 SGLT2 inhibitors that are approved by the FDA, and they each help your heart in different ways:

- Canagliflozin (Invokana[®]) is approved by the FDA to reduce the risk of major heart events such as heart attack, stroke, or death in adults with type 2 diabetes and known heart disease.
- Empagliflozin (Jardiance[®]) is approved by the FDA to reduce the risk of death from heart problems in adults with type 2 diabetes and known heart disease.
- Dapagliflozin (Farxiga[®]) is approved by the FDA to lower the chances of having to go to the hospital for heart failure for adults with type 2 diabetes and known heart disease or who have multiple risk factors for heart disease.

GLP-1 RAs and SGLT2 inhibitors should be taken as prescribed by your doctor along with practicing a heart-healthy lifestyle that includes eating healthy foods and regular activity.

Are There Side Effects?

GLP-1 RAs and SGLT2 inhibitors are generally well tolerated, but some people with type 2 diabetes may experience mild side effects. Serious side effects can happen, but they are not common.

GLP-1 RAs	SGLT2 Inhibitors
 Mild side effects: Stomach issues: nausea, diarrhea, vomiting, constipation, heartburn Low blood sugar (if you are taking a GLP-1 RA with certain other diabetes medicines): feeling dizzy, shaky, or like your heart is racing, having blurry vision, feeling confused Pain in your abdomen Headache 	 Mild side effects: An infection in your urinary tract or genitals Having to go to the bathroom more often Feeling thirsty Joint pain Stomach issues: constipation or nausea
 Call your doctor if you have any serious side effects: Severe pain from your abdomen to your back that does not go away, with or without vomiting Trouble swallowing or hoarseness in your throat Nausea, vomiting, fever, yellowing of the eyes or skin, pain in your abdomen Blurry vision, seeing spots Feeling dehydrated from vomiting and diarrhea, or not urinating, feeling dizzy or weak, having fast breathing, or a fast heartbeat 	 Call your doctor if you have any serious side effects: Feeling weak, tired, thirsty, or confused; have fruity-scented breath New pain or tenderness, or sores or ulcers in your legs Not urinating

When you practice a heart-healthy lifestyle and take medicines to lower your blood sugar, you're actually making your heart healthier.

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