New Class of Diabetes Medication

In March the Food and Drug Administration (FDA) approved a new medicine to lower blood glucose. The new drug is canagliflozin (Invokana®). This medicine reduces blood glucose levels by causing the kidneys to remove glucose through the urine. Canagliflozin has been studied in patients with type 2 diabetes and it improved fasting blood sugars and A1C levels. It can be used as a single diabetes medicine or in combination with pioglitazone, sulfonylureas, metformin or insulin.

Canagliflozin is approved for use with diet and exercise to improve blood glucose control in adults with type 2 diabetes. Patients should not use it if they have type 1 diabetes, ketones in their urine or blood or severe kidney problems or if they are on dialysis.

Canagliflozin is available as 100mg (milligrams) or 300mg tablets. The recommended starting dose is 100mg taken before the first meal of the day. Patients with good kidney function can increase to 300mg daily if they need additional diabetes control.

Besides lowering blood glucose, canagliflozin may also produce weight loss and lower blood pressure. Hypoglycemia (very low blood sugar) is uncommon. The most common side effects included increased genital yeast infections, urinary tract infections, and the need to urinate more often. These side effects were mild to moderate. Patients may also be more likely to faint suddenly or feel dizzy, but this was more common during the first 12 weeks of use.

Canagliflozin will provide a new approach to the management of type 2 diabetes, but there are still some questions about it. In order to answer these questions, the FDA wants more studies on canagliflozin after it put on the market. Watching for cancer, pancreatitis and other adverse events will be ongoing. One study will assess the impact of canagliflozin on the heart and blood vessels. Another study will look at bone safety. Other studies will review use of canagliflozin in children.
Diabetes Distress

Diabetes is a life-long, demanding disease that can cause stress and even depression. This stress can happen for several different reasons.

Psychologists say that stress related to diabetes can be due to

- Your emotional reaction to diabetes;
- Your relationship with the health care provider managing your diabetes;
- The challenges of following the self-care regimen that is needed; or
- Not getting enough support from those around you.

If you recognize your source of stress, you are not alone. In fact, you would be pretty unusual if you did not find diabetes stressful at least part of the time. The problem is that stress can really get in the way of taking care of your diabetes. You may feel so distracted by feeling this way that you don’t have enough energy to eat healthy meals, be active, check your blood glucose or even take your medicine. In other words, you feel so overwhelmed that you neglect yourself and then your diabetes control suffers and you feel worse.

What should you do? First, talk with a health care provider that you trust. He or she may help you sort through your thoughts so you can find a way to reduce your stress. You may want to discuss:

- What is the most difficult thing about living with diabetes?
- What takes the most time and energy?
- What would it be like if you were handling your diabetes better?
- What will it be like in six months if you do not change your diabetes care?
- With whom do you need to talk in order to handle your diabetes better?
- What is a first step you can take to handle this situation better?
- How important is this change to your happiness and satisfaction?
- How confident do you feel that you can make this change?

Hopefully together you will begin to reduce your stress one step at a time. If you are really struggling, consider seeing a professional counselor to work more intensely on your stressors. This may really help if you have several of the following symptoms for at least two weeks:

- Feelings of sadness or anxiety;
- Decreased pleasure in things you once enjoyed;
- Constantly feeling tired;
- Changes in sleep patterns (sleeping much more or less);
- Changes in appetite and weight (either up or down);
- Feeling restless, irritable or unable to concentrate;
• Not being able to make decisions;
• Feelings of guilt, helplessness or worthlessness;
• Thoughts of death or suicide.

Back to the Basics: Prediabetes

You may have heard of “prediabetes,” but you may not know exactly what it is. If someone has prediabetes, their blood glucose levels are higher than normal, but not high enough to be diagnosed as Type 2 diabetes. Before people are diagnosed with diabetes, they usually have prediabetes for a while, although they may not know it.

Tests:

A doctor can use any one of three tests to diagnose prediabetes. They are the A1C test, the fasting plasma glucose test, or the oral glucose tolerance test. The fasting plasma glucose test and oral glucose tolerance test require an overnight fast before they are done.

The results of these tests will tell whether someone has prediabetes or not:

• A1C Test
  o Normal: less than 5.7%
  o Prediabetes: 5.7%-6.4%
  o Diabetes: 6.5% or above

• Fasting Plasma Glucose Test
  o Normal: less than 100
  o Prediabetes: 100-125
  o Diabetes: 126 or above

• Oral Glucose Tolerance Test
  o Normal - less than 140
  o Prediabetes: 140-199
  o Diabetes: 200 or above

Assessing Risk:

The American Diabetes Association has online a Diabetes Risk Test to determine risk for prediabetes and diabetes. Your family members and friends may want to take this test to see if they are at risk. Then they can decide whether they want to take the blood tests to find out for sure.

The Risk Test is online at: http://www.diabetes.org/diabetes-basics/prevention/diabetes-risk-test/

Certain people should be checked for prediabetes because they are at higher risk than others. These include -

• People 45 years of age or older who are overweight
• People younger than 45 years who are overweight and who also have one or more other risk factors such as
  o high blood pressure
  o low HDL cholesterol and
  o high triglycerides

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Diabetes Life Lines

• Not being able to make decisions;
• Feelings of guilt, helplessness or worthlessness;
• Thoughts of death or suicide.
Not only is the food important, but the lifestyle that goes along with the food matters. Portions are not large. People also take time to eat together with family and friends. In other words, they dine instead of just eating as fast as they can. This promotes a feeling of satisfaction with less food, since it may take nearly 20 minutes for your body to know your stomach is full.

Scientists believe that the diet works by reducing inflammation in the body and decreasing oxidative stress. They think it is the blend of the many nutrients in the whole, minimally processed foods working together that makes the difference—not just a single nutrient.

Also the people in Southern Europe that Dr. Keys studied were physically active throughout their day. This probably is also important for getting the full effect of the eating plan.

People with prediabetes do not always develop type 2 diabetes. Research has shown that by losing just 5-7 percent of their current weight and exercising 30 minutes a day five days a week, they can reduce their risk by 58%. While this much weight loss and exercise is the ideal, even small improvements may help.

**Sexual Dysfunction: Women Suffer, Too.**

Men worry about impotence related to diabetes, but women with diabetes can also have sexual problems. Sadly, little has been written about this issue, but more people are discussing it now.

Sexual problems in women with diabetes may be caused by poor blood glucose control, high blood pressure, hormone changes, certain medicines, and/or high blood cholesterol levels. It may also be due to depression or other emotional problems. A woman may also have incontinence due to her diabetes that may make her not want to be intimate. Some experts debate which sexual problems are linked to diabetes, but we are sure that poorly controlled diabetes increases risk for urinary tract infections, vaginal dryness and painful intercourse.

The Joslin Diabetes Clinic warns that when blood glucose is high, the tissues of the genitals can become dry and cracked. This can increase the risk that a sexually transmitted disease can be passed to a woman with diabetes. Therefore, using condoms and other forms of safe sex is essential.

A woman that wears an insulin pump may also find it hampers her spontaneity and makes her partner anxious about having sex.

So what can be done? First, talk to your health care provider about your concerns. Many women are embarrassed or just pass the problems off as being “part of getting older.” Then they miss out on getting help. Here are some methods that have helped others:

1) Improved blood glucose control through healthy eating, physical activity and changes in medicine. Some research shows that the Mediterranean Diet may help. (See the May 2013 issue of Diabetes Life Lines to learn more about this meal plan.)
2) Hormone replacement if estrogen levels are low
3) Changes in blood pressure medicines to help with sexual desire and performance
4) Changes in medication and eating habits to decrease cholesterol levels
5) Exercises to strengthen the muscles in the genital area to improve orgasms and reduce incontinence.
6) Education on how to handle an insulin pump during sexual activity
7) Counseling with a psychologist or social worker to reduce stress and depression.

The American Diabetes Association has a book called *Sex and Diabetes—For Him and For Her* by Janis Roszler and Donna Rice if you wish to learn more. Go to www.diabetes.org and click on the “Shop” link to order.
Recipe Corner

Summer Fresh Parfait

½ cup fresh strawberries, sliced  1 (4-serving size) package strawberry sugar-free gelatin
½ cup fresh blueberries ½ cup ice cold water plus enough ice cubes to equal
¾ cup boiling water 1 ¼ cup total
¾ cup thawed light whipped topping

1. Mix the fruit together and distribute among 6 dessert glasses.
2. In a medium bowl, stir the boiling water into the gelatin. Continue to stir until dissolved. Add the ice cold water. Stir until slightly thickened. Remove any leftover ice cubes.
3. Measure out ¾ cup of the gelatin. Distribute evenly among the dessert glasses over the fruit.
4. Refrigerate one hour or until set, but not firm.
5. Whisk whipped topping into the remaining gelatin until smooth. Spoon this evenly onto the top of each parfait. Refrigerate for one hour more or until firm.

6 servings

Calories: 37  Carbohydrate: 6 grams  Protein: 1 gram
Fat: 1 gram  Saturated Fat: 1 gram  Cholesterol: 0 milligrams
Sodium: 37 milligrams  Fiber: Less than 1 gram

Exchange: ½ fruit

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Cooperative Extension
Dear Friend,

Diabetes Life Lines is a bi-monthly publication sent to you by your local county Extension agent.

It is written by an Extension Nutrition and Health Specialist and other health professionals from the University of Georgia. This newsletter brings you the latest information on diabetes self-management, healthy recipes and news about important diabetes-related events.

If you would like more information, please contact your local county Extension Office.

Yours truly,

County Extension Agent

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