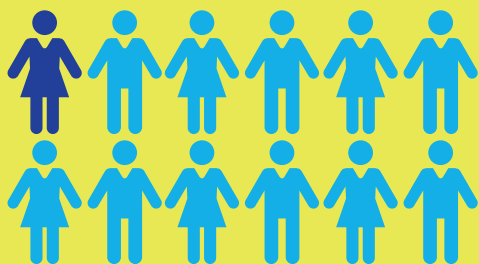
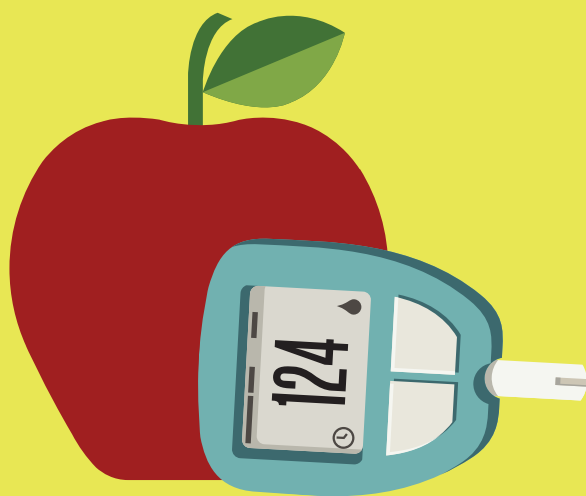


Diabetes

Wellness Guide



1 in 12 adults has diabetes



1 in 3 people with diabetes don't know they have it



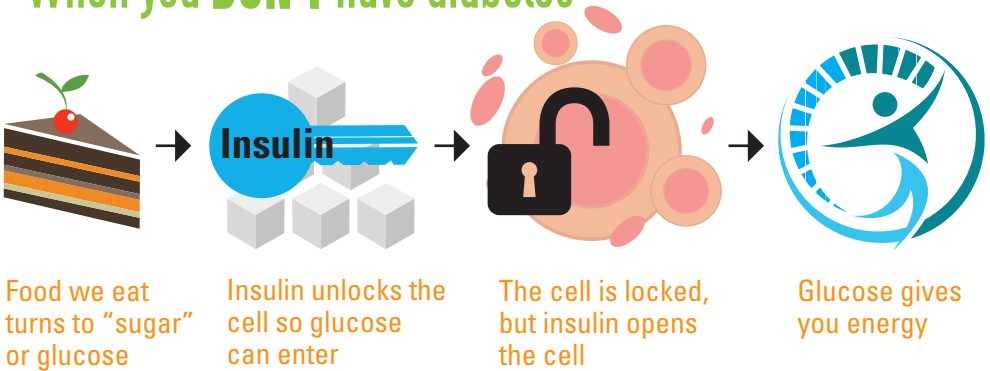
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It's good to be Blue.

What is diabetes?

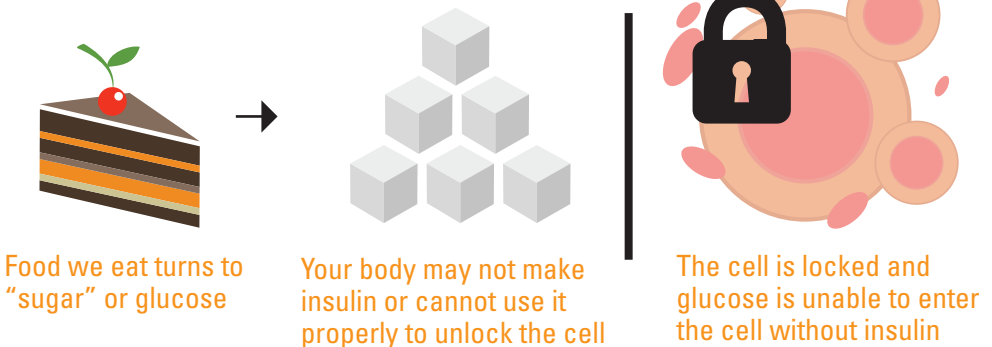
Some of the food we eat turns into glucose (sugar). This is not a bad thing because this is where we get our energy. Your body makes a hormone called insulin which is needed to turn glucose into energy. When insulin is not able to do its job, too much glucose is left unused in the blood stream which causes your blood sugar to be elevated. Some leftover sugar is stored in certain organs, such as the liver, which can also try to help stabilize your sugar when needed. Diabetes is a medical condition when you to have too much glucose, or sugar in your blood and your body is not properly using the sugar for energy.

When you DON'T have diabetes



If you have diabetes, your body may not make insulin or cannot use it properly to unlock the cell and the sugar gets trapped in the blood leaving our cells without energy.

When you DO have diabetes



Type 1 & Type 2

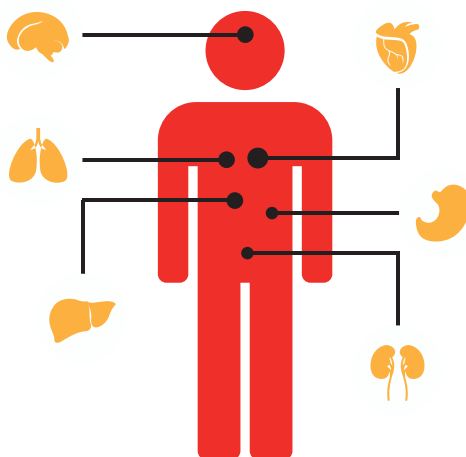
There are several types of diabetes, but the two most common are Type 1 and Type 2.

Type 1 diabetes is usually diagnosed in children and young adults and only occurs in about 5% of people with diabetes. With this type of diabetes, your body does not produce insulin. Therefore, in addition to diet and exercise, insulin therapy and other treatments are necessary for management.

Type 2 diabetes is the most common form of diabetes. In this type of diabetes, your body does not use insulin properly and develops insulin resistance. There are several treatment options for this condition, including diet and exercise, oral medications and insulin therapy.

How can diabetes affect me?

Too much glucose in your blood can hurt your body and cause damage to several organs, including heart, kidneys, eyes, nerves, and hands and feet. Uncontrolled diabetes can increase your risk for many health problems, but with the right treatment, you can lower your risk of complications.



How is diabetes treated?



Your doctor will work with you to develop an individualized treatment plan. Diabetes is usually treated with diet, exercise and medicine. Your doctor will also talk to you about how often you should check your blood glucose.

How is diabetes monitored?

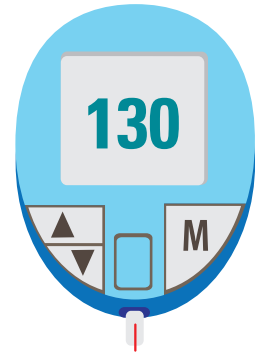
Checking your blood glucose at home:

Blood glucose monitoring allows you to check your diabetes control. Keeping a log of your blood glucose results is very important and should be shared with your doctor during your diabetes visits. This allows your doctor to monitor how your body is responding to your treatment plan.

Before a meal	80-130
1-2 hours after a meal	Less than 180

How do I check my blood glucose?

- Wash your hands.
- Insert a test strip into your meter.
- Use your lancing device on the **SIDE** of your fingertip to produce a drop of blood (other testing sites may be possible depending on your meter).
- Place the edge of the test strip to the drop of blood.
- Your blood glucose level will appear on your meter's display.
- Always refer to your user's manual for specific instructions.



What are ketones?

And why should I check them?

When your body does not have enough insulin, it produces a chemical known as a ketone. When ketones are present in your urine, it is a sign that your body is inappropriately using fat rather than glucose for energy.

Consider calling your doctor if:

- Your blood glucose is greater than 300
- You feel sick or tired all the time
- You are constantly thirsty, or have dry mouth
- You feel nauseous or are vomiting
- You have “fruity” smelling breath
- You feel confused or in a daze

**Talk to your
doctor about how
to check ketones.**

What is an A1c?

The A1c test is a blood test performed at your doctor's office during routine diabetes visits. It provides you with your average blood glucose control over the past 2 to 3 months. The level will help your doctor monitor how well your body is responding to your treatment plan.

**A1c
Goal**

Less than 7%
for people with diabetes

Eating like you should for a few days before an appointment will not "trick" the doctor. Continue with diet recommendations for the best results.

A1c	Average Blood Sugar	A1c	Average Blood Sugar
9%	243 mg/dL	6.5%	154 mg/dL
8.5%	225 mg/dL	6%	136 mg/dL
8%	207 mg/dL	5.5%	118 mg/dL
7.5%	190 mg/dL	5%	101 mg/dL
7%	172 mg/dL	4.5%	83 mg/dL

What other numbers should I monitor?

Blood Pressure (BP)

Your doctor will check your blood pressure at each office visit. Keeping your blood pressure below the recommended numbers will help decrease your risk of a heart attack, stroke and kidney disease.

BP

with hypertension
**Less than
140/90**
without hypertension
**Less than
120/80**

Cholesterol

Your doctor will check your cholesterol levels every six months to one year. Keeping the 'bad' cholesterol, or low-density lipoprotein (LDL) and triglycerides below the recommended numbers will help decrease your risk of developing heart disease.

LDL

**Less than
100**
Optimal - Less than 70

Triglycerides

Less than 150

How can I reduce my risk for other health problems?

In addition to attending regularly scheduled diabetes visits with your doctor, there are steps you can take to lower your risk of diabetes-related health problems.

Eye exams

Visiting your eye doctor once per year will help prevent retinopathy, or eye damage, caused by uncontrolled blood glucose levels.

Foot exams

Your doctor should perform a comprehensive foot exam once per year. It is also important to check your feet daily and keep them clean and dry. If redness or sores are found, report them to your doctor as soon as possible.

Take medications as prescribed

Taking diabetes medications as prescribed by your doctor will help control your blood glucose numbers and help you feel better. If you experience any side effects, notify your doctor immediately.

Dental exams

People with diabetes are more likely to develop gum disease and other dental problems, so it is important to practice proper oral hygiene such as brushing, flossing and visiting your dentist twice per year.

Be tobacco-free

Using tobacco puts you at a higher risk for developing other health problems such as heart disease, retinopathy and poor blood flow in your legs and feet. For information about quitting or Blue Cross & Blue Shield of Mississippi's Be Tobacco-free Program, visit bcbsms.com.

How should I change my diet?

When you have diabetes, it is important to follow a healthy eating plan. Aim to replace less healthy foods in your diet with healthier choices like fresh fruits and vegetables and whole grains.

Choose this

Wheat bread
Fresh fruit
Popcorn, low-fat
Beans & peas
Oatmeal

Instead of this

White bread
Fruit pie or fruit juice
Chips
French fries
Sugary cereal

Carbohydrates are foods that turn to sugar in your body. Eating too many of these foods can cause your blood sugar to be too high. Follow the Plate Method as shown on page 8 to help you choose the right amount of carbohydrates.

Below are examples of 1 carbohydrate serving:

- 1 slice of bread
- ½ hamburger or hot dog bun
- 1 apple, orange or pear
- ½ banana
- ½ cup fruit juice
- ½ cup beans, peas or potatoes
- ⅓ cup cooked pasta or rice
- ¼ large potato
- 1 cup milk
- 6 oz yogurt
- 2 small cookies
- 1 tbsp jelly or honey

If you are overweight and you have diabetes, losing weight can improve your blood sugar. Lower your daily intake by 500 to 750 calories to help you lose weight. Finding 500 calories can be as simple as eliminating one or two high-calorie choices.

Examples of 500 calories



1 slice of pie



1 large waffle
with syrup



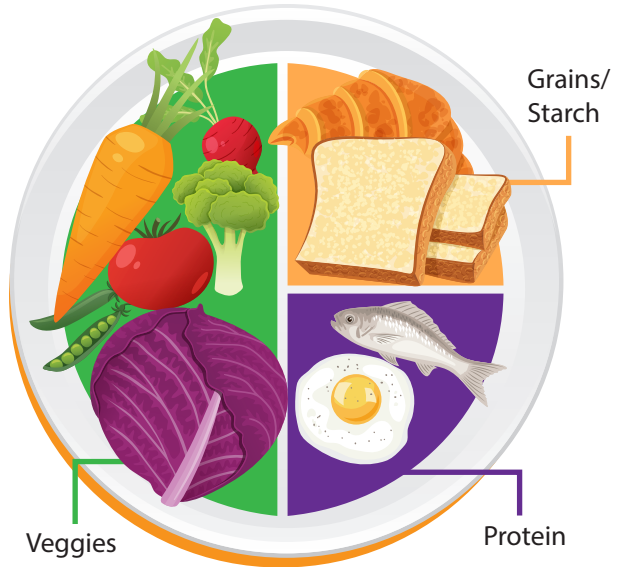
2 sodas (16 oz)



2 candy bars

The Plate Method

Fill half of a 9-inch plate with one cup of non-starchy vegetables; a quarter of the plate with high-protein foods; and a quarter of the plate with carbohydrate foods. Add a small serving of fruit and a serving of dairy.



It's also important for you to eat 3 meals per day and avoid skipping meals when you have diabetes. See the example below:

Meal	Menu	C=Carbohydrate Choice
Breakfast	1 cup cooked oatmeal (2C) ¾ cup blueberries (1C) 2 Tbsp almonds	
Snack (Optional)	1 cup raw carrots 2 Tbsp hummus	
Lunch	Grilled chicken wrap with 6 inch wheat tortilla (1C), chicken breast, lettuce, tomato, peppers, 1 tsp light mayonnaise and 1 tsp mustard 6 oz Greek yogurt (1C)	
Snack (Optional)	1 small apple (1C) 1 Tbsp peanut butter	
Dinner	4 oz baked fish ½ baked sweet potato (1C) ½ cup roasted broccoli Small side salad with 2 Tbsp oil and vinegar salad dressing	

Should I exercise?

Yes! Regular physical activity helps with managing conditions that lead to the progression of type 2 diabetes as well as reduces the risk of heart disease and other prevalent comorbidities for those with type 2 diabetes.

How does exercise help to manage type 2 diabetes?

- ▶ Helps with managing a healthy weight
- ▶ Reduces blood pressure, cholesterol and A1C which are all risk factors for those with type 2 diabetes
- ▶ Increases the body's sensitivity to insulin enabling glucose to be used up for energy.

The following physical activity guidelines are recommended for reducing type 2 diabetes:

Type	Time	Intensity Level	Examples
Aerobic Activity	at least 150 minute (spread throughout the week)	Moderate-intensity	Walking briskly Bicycling Power yoga Water aerobics Tennis General yard work Line dancing
Muscle Strengthening	2 or more days a week (involving all major muscle groups)	Moderate-intensity	Strength machines Free weights Bodyweight Resistance bands TRX

Incorporate stretching (flexibility exercises) on a routine basis in order to regain or maintain mobility and to safely perform exercises that require greater flexibility. Other components of physical activity include balance and speed which are typically worked through various aerobic, strength and flexibility exercises.

Health benefits begin with as little as 90 minutes a week of exercise. Health benefits increase as physical activity duration, frequency and intensity increases.

Light-intensity = effortless breathing and can easily hold a conversation

Moderate-intensity = heavier breathing but still able to talk

Vigorous-intensity = unable to hold a conversation

How do I start exercising?

Be sure to consult with your physician prior to starting a workout program. Always start slow and gradually build up your physical activity. Walking is highly recommended as a starting point since it can be done anywhere and does not require a gym membership.

Any special concerns with diabetes?

It is important to pay attention to the symptoms of high or low blood glucose when you have diabetes. Discuss any of these symptoms with your doctor.

Hypoglycemia “Low” Blood Glucose

Symptoms

Shakiness, dizziness, sweatiness, hunger, confusion

Treatment

- If glucose is below 70, eat or drink 15 grams of carbohydrates (½ cup juice, 3-4 glucose tablets, 2-3 hard candies)
- Wait 15 minutes and retest blood glucose
- If glucose is still below 70, repeat treatment
- Notify your doctor if your blood glucose remains below 70 after two treatments

Hyperglycemia “High” Blood Glucose

Symptoms

Extreme thirst, grouchy, moody, need to urinate often

Treatment

- Test your blood glucose to see how high it is
- Drink plenty of water
- Stick to your meal plan
- Talk with your doctor to see what you should do when your blood glucose gets too high
- Contact your doctor if your blood glucose is greater than 240 and ketones are present in your urine

Sample goals

- Eat three meals a day
- Replace sodas with water
- Walk at least 30 minutes a day
- Check and record my blood glucose levels
- Drink no more than 1-2 alcoholic beverages in a day



BlueCross BlueShield of Mississippi

It's good to be **Blue.**

Resources

American Diabetes Association- diabetes.org

Mayo Clinic- mayoclinic.org

Endocrine Society- endocrine.org