

# Living with Diabetes



Harvard Pilgrim  
HealthCare



# You Are Not Alone!

Diabetes continues to grow each year at an alarming rate in the United States. According to the Centers for Disease Control and Prevention (CDC), nearly 30 million Americans have diabetes. If you have diabetes, the good news is that with good care and blood glucose control you can still enjoy delicious food, participate in a wide variety of activities and reduce your risk for diabetes complications.

## What is Diabetes?

Diabetes is a condition that occurs when your blood glucose (sugar) is too high. Glucose is your main source of energy and comes from the food you eat. Insulin, a hormone made by the pancreas, helps glucose move from the blood and into the cells of your body to be used for energy. When you have diabetes, your body doesn't make enough or any insulin, or doesn't use insulin well. This causes glucose to build up in your blood. Over time, having too much glucose in your blood can cause health problems such as eye, kidney, nerve and heart disease.

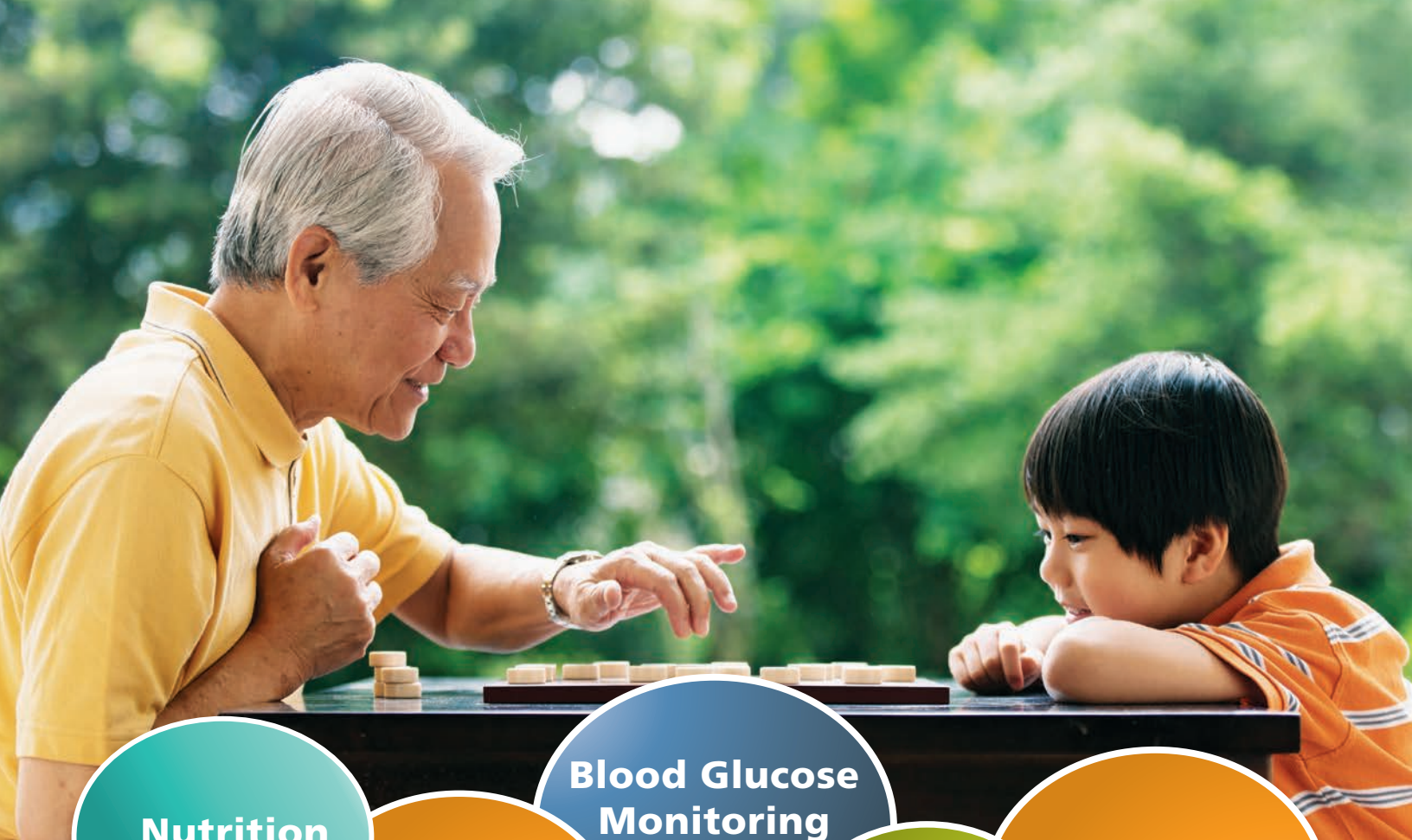
## Types of Diabetes

There are a few different types of diabetes but the most common forms of the disease are type 1 and type 2 diabetes.

In **type 1 diabetes** (also known as insulin-dependent diabetes), the body does not make insulin. When you have type 1 diabetes, you will need insulin in the form of injections or a continuous pump to lower blood glucose levels. The injected insulin will move glucose out of the blood and into the cells, lowering blood glucose levels.

**Type 2 diabetes** is the most common form of diabetes. If you have type 2 diabetes, (also known as insulin-resistant diabetes) your body does not use insulin properly. This is called insulin resistance. Along with diet and exercise, your health care provider may prescribe one or more diabetes medicines. The medicine(s) can help your body make more insulin, less glucose and/or use insulin more effectively. Over time people with type 2 may lose the ability to make their own insulin. If this happens, you may also need to inject insulin to keep your blood glucose in control.





**Nutrition**

**Physical  
Activity**

**Blood Glucose  
Monitoring**

**Medicine**

**Support**

## Diabetes Care

The main goal for good diabetes care is to bring your blood glucose to a target level to avoid other health problems such as eye, kidney, nerve and heart disease. All of the following activities are aimed at helping you reach that goal:

- Choosing what, how much and when to eat
- Being physically active
- Checking your blood glucose levels
- Taking medicine(s) as prescribed
- Quitting smoking, if you smoke
- Going to your medical appointments
- Following your treatment plan
- Losing weight, if you are overweight
- Getting support



# Nutrition

If you have diabetes, your health care provider will likely recommend that you see a dietitian or nutritionist to help you develop a healthy eating plan. The plan will help you:

- Control your blood glucose
- Manage your weight
- Reduce risk factors (such as high blood pressure and high cholesterol) for heart disease

There are a few different approaches to creating a healthy eating plan. With a dietitian or nutritionist's help, you may find one or a combination works best for you.

Understanding how different foods affect your blood glucose is important and will be part of your daily routine. Here are a few foods that will be part of your eating plan.

## Carbohydrate

There are three main types of carbohydrate in food: starch, sugar and fiber. Here are a few food groups and examples of where you can find carbohydrate:

- Dairy — milk, yogurt and ice cream
- Fruit — whole fruit and fruit juice
- Grains — bread, rice, crackers, pasta and cereal
- Legumes — beans and soy
- Starchy vegetables — potatoes, corn and peas
- Sugary sweets — *Limit these!* Soda, candy, cookies and other desserts

In your body, carbohydrate quickly breaks down into glucose and can affect your blood glucose level more than any other nutrient. Here are some tips to help control your blood glucose level:

- Eat about the same amount of carbohydrate each day at regular times of the day. This is especially important if you are on insulin or certain diabetes medicines.
- How much carbohydrate you eat is very individual. It is suggested to start with 45-60 grams of carbohydrate at each main meal. You may need more or less carbohydrate at meals depending on how active you are, medicines you take and how well your diabetes is controlled. Talk to your health care provider or nutritionist to determine the right amount for you.
- Check out food labels to see how much total carbohydrate is in the foods you eat.

## Non-Starchy Vegetables

Eat more! You don't often hear that when you have diabetes, but non-starchy vegetables are one food group where you can satisfy your appetite. Vegetables are full of vitamins, minerals and fiber and are low in calories and carbohydrate. So fill half your dinner plate with non-starchy vegetables like asparagus, Brussels sprouts, broccoli, carrots, eggplant, squash or salad greens, just to name a few.

## Fruit

Wondering if you can eat fruit? Yes! Fruits are loaded with vitamins, minerals and fiber just like vegetables, but remember fruit contains carbohydrate so you need to count it as part of your meal plan. For example, a small whole fruit has about 15 grams of carbohydrate. Having a piece of fresh fruit or fruit salad for dessert is a great way to satisfy your sweet tooth and get the extra nutrition you're looking for.

# Food Labels

Food labels can help you make better decisions about what and how much you can eat.

The infographic features a central Nutrition Facts label with five callout bubbles pointing to specific items:

- Orange bubble:** Start by looking at the Serving Size. If you will be eating a larger serving, then you need to double or triple the information on the label.
- Dark blue bubble:** Look for foods that have 0g of *Trans* Fat and are low in Saturated Fat, meaning 1g or less per serving.
- Light green bubble:** Aim for less than 2,300mg per day of Sodium.
- Teal bubble:** Look at Total Carbohydrate to see how much carbohydrate is in the foods you eat.
- Yellow-green bubble:** Points to the Total Carbohydrate line on the label.

Serving Size 1 cup (228g)	
Servings Per Container 2	
<b>Amount Per Serving</b>	
<b>Calories 110</b>	<b>Calories from Fat 18</b>
<b>% Daily Value*</b>	
<b>Total Fat 3g</b>	<b>5%</b>
Saturated Fat 0g	<b>0%</b>
<i>Trans</i> Fat 0g	
<b>Cholesterol 30mg</b>	<b>10%</b>
<b>Sodium 235mg</b>	<b>10%</b>
<b>Total Carbohydrate 31g</b>	<b>10%</b>
Dietary Fiber 0g	<b>0%</b>
Sugars 5g	
<b>Protein 5g</b>	
Vitamin A	<b>4%</b>
Vitamin C	<b>2%</b>
Calcium	<b>20%</b>
Iron	<b>4%</b>
* Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs.	
Calories:	2,000 2,500
Total Fat	Less than: 65g 80g
Sat Fat	Less than: 20g 25g
Cholesterol	Less than: 300mg 300mg
Sodium	Less than: 2,400mg 2,400mg
Total Carbohydrate	300g 375g
Dietary Fiber	25g 30g

# Physical Activity

Being active is important for everyone, but it is especially important if you have diabetes. Any type of physical activity helps lower your blood glucose, so do something you enjoy such as dancing, gardening, running, yoga, barre or tai chi.

Other benefits of physical activity include:

- Improving your blood pressure and cholesterol
- Having more energy
- Relieving stress
- Keeping your joints flexible, increasing your strength and improving your balance
- Lowering your risk for heart disease and stroke

Examples of different types of physical activity include:

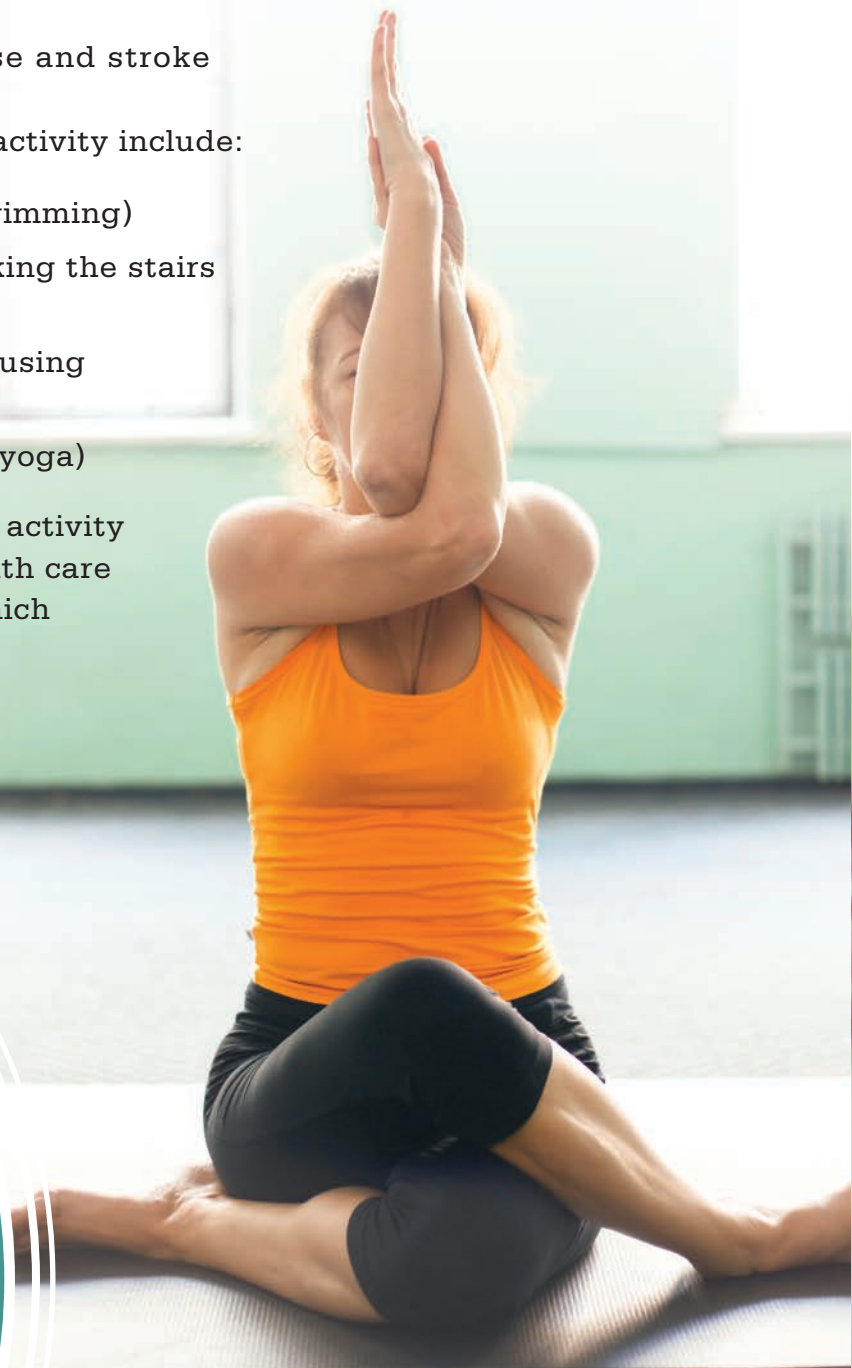
- Aerobic activity (walking, biking, swimming)
- Being active throughout the day (taking the stairs instead of an elevator)
- Strength training (lifting weights or using resistance bands)
- Flexibility exercises (stretching and yoga)

Try to get at least 30 minutes of aerobic activity at least 5 days a week. Talk to your health care provider if you have questions about which activities are right for you.

**Physical activity will lower your blood glucose.**

Check your blood glucose before and after exercise.

Bring a snack such as a small piece of fruit, or ½ cup (4 oz.) of fruit juice in case your blood glucose gets too low.



# Blood Glucose Monitoring

Home testing is an important part of your treatment plan because it is the best way to see how diet, exercise, medicine, stress or an illness affect your blood glucose throughout the day.

Your health care provider will tell you how often you should be testing your blood glucose. In general, you should test between 1 to 4 times a day depending on your blood glucose control, health status and the type of diabetes you have. If you have an illness, are changing your treatment plan or are injecting insulin you may have to test more often.

## What if my blood glucose gets too low?

Hypoglycemia (low blood glucose) can occur if you use insulin or if you are on certain diabetes medicines like glyburide. Signs include shakiness, dizziness, sweating, hunger or pale skin.

To treat hypoglycemia, use the “15/15” rule. Eat at least 15 grams of sugar or carbohydrate such as 1/2 cup of regular soda or fruit juice, 1 tablespoon of honey or 3 glucose tablets. After eating, wait 15 minutes and check blood glucose again. If you are still low, repeat.

## What are my target blood glucose levels?

Blood glucose goals vary from person to person based on many factors such as age and health status. Ask your doctor, nurse or diabetes educator what your individual targets should be and write them down.

### My target blood glucose levels:

\_\_\_\_\_ Fasting  
\_\_\_\_\_ Before meals  
\_\_\_\_\_ After eating  
\_\_\_\_\_ At bedtime





# Plan Ahead for Sick Days

When you have diabetes and get sick with a cold, nausea, vomiting or diarrhea your blood glucose levels may rise higher than usual and may be hard to control while your body tries to fight the illness. Create a sick day plan with your health care provider. Knowing what to do when you are sick may stop a minor illness from becoming more serious.

Here are a few things to remember. If you get sick remember to:

- ✓ Continue to take or inject your diabetes medicine as instructed
- ✓ Check with your doctor or pharmacist before taking over-the-counter cold, cough or flu medicine. They may affect your blood glucose level
- ✓ Check your blood glucose more often and check your urine for the presence of ketones (especially if you have type 1 diabetes)
- ✓ Drink plenty of fluids such as water
- ✓ Stick to your normal meal plan. If this is not possible, try eating foods that are easy on your stomach (see below). Aim for 50 grams of carbohydrate every 3 to 4 hours
- ✓ Call your health care provider if you can't keep down solid foods or liquids, have vomiting or diarrhea for more than 6 hours, have rapid breathing, shortness of breath or signs of dehydration (little to no urine, dry sticky mouth, cracked lips)



## Sick Day Foods or Liquids:

The following contain about 10 to 15 grams of carbohydrate in the amounts shown below:

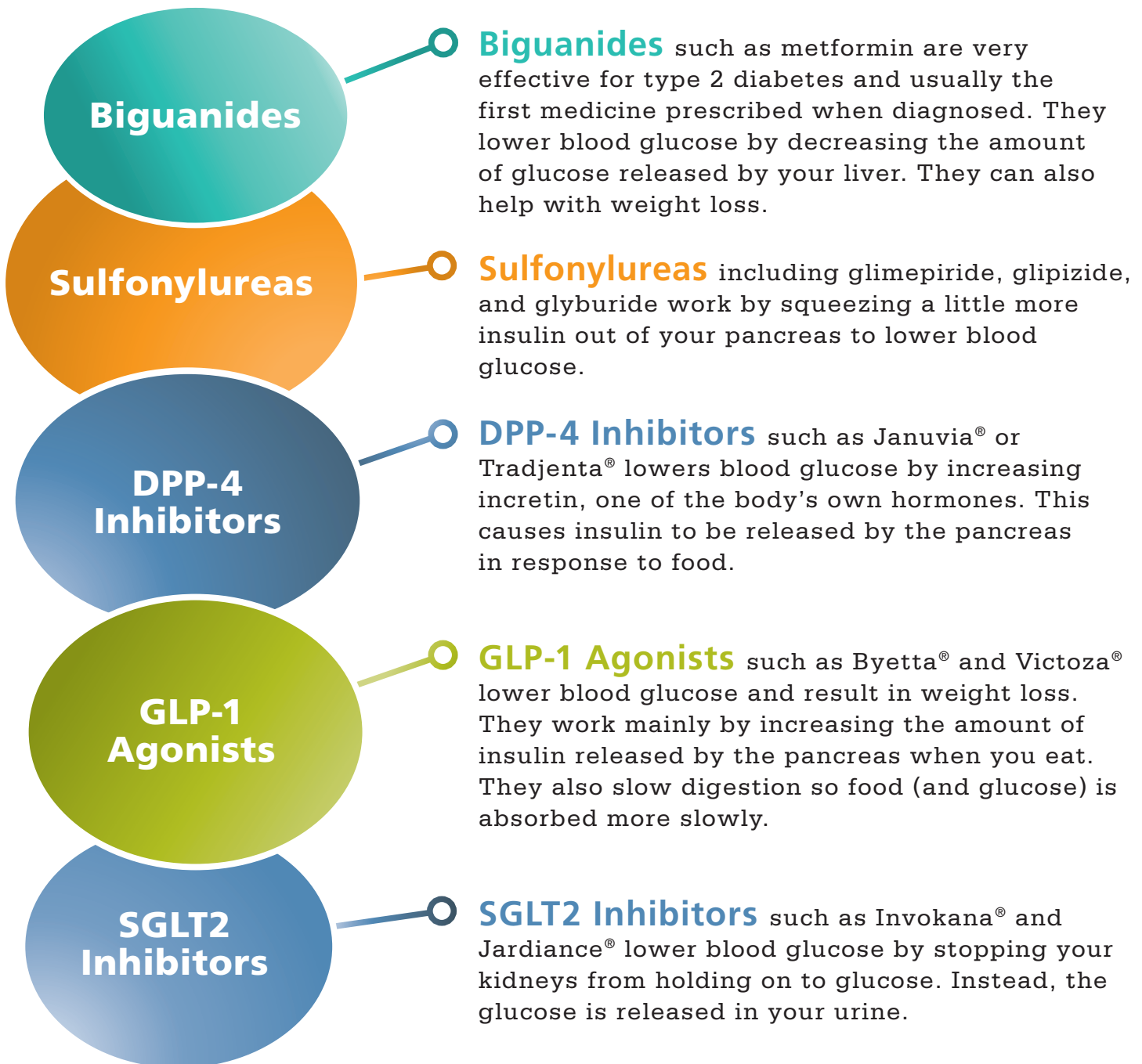
- 1 slice of dry toast
- 6 saltines
- ½ cup of unsweetened applesauce
- 1 cup of clear soup
- ½ cup of regular soda or fruit juice



# Medicine

If you have **type 1 diabetes**, your pancreas is no longer capable of making insulin. You will need insulin through multiple daily injections or an insulin pump.

If you have **type 2 diabetes**, there are many different medicines and each work differently to lower blood glucose. Below are some examples. It is important to follow your treatment plan even if that means taking more than one medicine to control your diabetes.



Your health care provider may prescribe other medicines such as aspirin, cholesterol lowering medicine and/or blood pressure lowering medicines every day to protect your heart. Some blood pressure medicines such as lisinopril or losartan can protect your kidneys.

# Treatment Plan

Your care and treatment plan should include the following to monitor your diabetes control and prevent other serious health problems (diabetes complications).

- A1C**  
(every 3-6 months)
- Blood Pressure**  
(every office visit)
- Weight (or BMI)**  
(every office visit)
- LDL (bad cholesterol)**  
(every 1-5 years)
- HDL (good cholesterol)**  
(every 1-5 years)
- Triglycerides**  
(every 1-5 years)
- Urine Albumin**  
(yearly)
- Comprehensive Foot Exam**  
(yearly)
- Dilated Eye Exam**  
(every 1-2 years)
- Dental Exam**  
(every 6 months)
- Flu Shot**  
(yearly)
- Pneumonia Vaccine**  
(check with your health care provider)
- Hepatitis B Vaccine**  
(check with your health care provider)



**Did you know?**  
To help prevent heart disease you may be given a "statin" cholesterol medicine such as atorvastatin even if you don't have high cholesterol.



# Do You Know Your Diabetes ABC's?

## Having diabetes puts you at risk for high blood pressure and heart disease

### A1C:

The A1C test is an average of your blood glucose level over the past 2 to 3 months. For most people an A1C value of less than 7% is recommended. This goal may change based on age and health status. Find your diabetes zone below.

### Blood Pressure:

The American Diabetes Association recommends a blood pressure goal less than 140/90\* mmHg. High blood pressure may increase your chances of heart and kidney disease. If you have high blood pressure you should monitor your blood pressure at home.

### Cholesterol:

Too much LDL "bad" cholesterol or triglycerides and/or not enough HDL "good" cholesterol in the blood can put you at risk for heart disease. It's important to know the levels of cholesterol in your blood so that you and your health care provider can determine the best way to lower your risk.

## What is your diabetes zone?

GREEN ZONE

### A1C less than 7%

Estimated average blood glucose less than 154 mg/dL

### You're doing well! Continue to:

- Take your medicines as prescribed.
- Test your blood glucose regularly.
- Eat healthy foods, watch your portions and stay active.

An A1C less than 7% is important to prevent problems from diabetes like eye, kidney, nerve and heart disease.

YELLOW ZONE

### A1C between 7% and 9%

Estimated average blood glucose between 154 and 212 mg/dL

### Depending on your age and health status there may be more you can do to control your blood glucose, for example:

- Talk to your health care provider to see if you need to change your medicines or add new medicines.
- Check your blood glucose more often.
- Eat healthy foods, watch your portions and get active.

RED ZONE

### A1C above 9%

Estimated average blood glucose above 212 mg/dL

### Speak with your health care provider. There may be more you can do to control your diabetes.

Blood glucose that stays high may increase your chance of future health problems with your eyes, nerves, heart, circulation and kidneys. You may need to:

- Talk to your health care provider to see if you need to change your medicines or add insulin.
- Check your blood glucose more often.
- Eat healthy foods, watch your portions and get active.

\*Lower blood pressure goals (<130/80 or <120/80) may be recommended based on health status and other conditions (i.e. heart disease).

# For information and support:

- Call our nurse care managers at 866-750-2068, Monday – Friday, 8 a.m. – 5 p.m. (TTY service: 711).
- If you are having difficulty coping with your diabetes diagnosis call Optum/ United Behavioral Health at 888-777-4742, Monday – Friday, 8 a.m. – 7 p.m. (TTY service: 711).\*
- Visit the American Diabetes Association (ADA) at [diabetes.org](http://diabetes.org) to:
  - Get more information about diabetes.
  - Get recipes, food tips and meal plans from My Food Advisor® Recipes for Healthy Living, a free resource from the ADA. Sign up at [diabetes.org/mfa-recipes](http://diabetes.org/mfa-recipes).
  - Join the ADA's online Support Community and participate in discussions with others who have diabetes.
- If you smoke, get help with quitting. Smoking may increase your chance of diabetes complications and other health problems. For free telephone counseling call 800-QUIT NOW (800-784-8669) or visit [smokefree.gov](http://smokefree.gov) for other quit smoking programs.

Medicare Advantage Harvard Pilgrim Stride<sup>SM</sup> (HMO) members: Harvard Pilgrim is an HMO plan with a Medicare contract. Enrollment in Stride<sup>SM</sup> (HMO) depends on contract renewal.

\*Some employers may not offer behavioral health coverage through Harvard Pilgrim.

