

ADJUSTING TO LIFE WITH TYPE 2 DIABETES OR PREDIABETES

WHAT IT MEANS

WHAT IS TYPE 2 DIABETES?

Diabetes means that your blood glucose (also called blood sugar) levels are elevated. This is also called hyperglycemia.

NONDIABETES
≤ 100 mg/dL

PREDIABETES
101 - 125 mg/dL

DIABETES
≥ 126 mg/dL

WHAT IS PREDIABETES?

With prediabetes, blood sugar levels are elevated, but not high enough to be diagnosed as diabetes. This condition puts you at a higher risk for developing type 2 diabetes and cardiovascular disease.

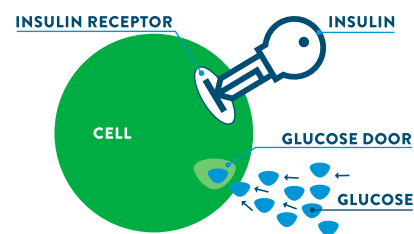
INCREASED
GLUCOSE
ALSO CALLED HYPERGLYCEMIA

A LITTLE MORE SCIENTIFIC EXPLANATION

The **digestive tract** breaks down carbohydrates from the food you eat into glucose. With the help of **insulin**, a hormone produced in the **pancreas**, cells throughout the body absorb glucose and use it for energy.

If you have diabetes, your body doesn't use insulin properly. That's called insulin resistance. When this occurs, blood sugar levels are elevated. Over time, the pancreas can't make enough insulin to regulate your blood glucose. Too much glucose in the bloodstream can lead to **heart** disease, **kidney** disease, **nerve** damage, and **loss of vision**.

For patients with diabetes, there aren't enough "keys" (insulin) to allow glucose into the cell, forcing the glucose to remain in the bloodstream.



— IMPORTANCE OF INSULIN —



PROPER DIET AND EXERCISE HELP PEOPLE WITH DIABETES LEAD HEALTHY LIVES.

WHAT ARE MY GOALS FOR BLOOD SUGAR MONITORING?

The American Diabetes Association suggests the blood sugar targets shown to the right for most nonpregnant adults with diabetes. Work with your medical care team to determine a goal that is right for you.

BLOOD SUGAR LEVELS

BEFORE MEALS

AFTER MEALS

80-130 mg/dL

<180 mg/dL

— **A1C LEVEL: LESS THAN 7%** —



MONITOR BLOOD SUGAR LEVELS

SHORT-TERM

KEEPING TRACK OF DIABETES.

TWO WAYS

CHECK HEMOGLOBIN A1C

LONG-TERM



To check your blood sugar on a daily basis, you may have to rely on a meter or a continuous glucose monitor. Common times to check blood sugar are before a meal or two hours after a meal. Talk with your medical care team about how often and when you should check your blood glucose and what your target numbers should be.

Your physician can help you track your diabetes long-term by ordering a hemoglobin A1C test, which indicates your average blood sugar level over the past three months. As a person with diabetes, your A1C goal will likely be <7%.

DIABETES CAN SEND YOU WARNING SIGNS—LISTEN TO YOUR BODY

WHAT
IT
MEANS

LOW BLOOD SUGAR

Hypoglycemia, also called low blood sugar, occurs when the level of glucose in your blood drops well below your fasting level. For many people with diabetes, that means a level of 70 milligrams per deciliter (mg/dL) or less.

SYMPTOMS

LESS
THAN
70
mg/dL

- Shaky or jittery
- Sweaty
- Hungry
- Headache
- Blurred vision
- Tired or weak
- Dizzy or lightheaded
- Confused or disoriented
- Irritable or nervous
- Fast heart beat

CAUSES

- Skipped or delayed meals
- Too much diabetes medication
- Diabetes medication taken too often
- More physical activity than usual
- Drinking alcohol
- Medication side effects

HOW TO MANAGE



When blood sugar drops below 70 mg/dL, there are simple ways to bring it back into a safer range. Immediately eat one of the items below. Each one has about 15 g of carbohydrates.

- ½ cup (4 oz) of fruit juice or regular (not diet) soft drink
- 8 oz of milk
- 5 to 7 pieces of hard candy
- 1 tbsp of sugar or honey

After 15 minutes, check your level again. If it's still below 70 mg/dL, eat another one of the items listed. This should be repeated until your level is above 70 mg/dL.

HIGH BLOOD SUGAR

Hyperglycemia, or high blood sugar, occurs when the level of glucose in your blood is too high, usually 180 mg/dL or higher.

SYMPTOMS

MORE
THAN
180
mg/dL

- Thirsty
- Tired or weak
- Headache
- Urinating often
- Blurred vision

CAUSES

- Large meals
- Not enough diabetes medication or insulin
- Low physical activity
- Not drinking enough liquids, like water
- Medication side effects
- Illness or injury
- Stress

HOW TO MANAGE

High blood sugar is influenced by diet, physical activity, and medication. If your blood sugar is frequently high, work with your healthcare team to adjust your current regimen.



CHECK WITH YOUR MEDICAL CARE TEAM ABOUT WHAT LEVELS ARE TOO LOW OR TOO HIGH FOR YOU.

SEVERE LOW BLOOD SUGAR



SYMPTOMS

- Unable to eat or drink
- Seizures or convulsions (jerky movements)
- Unconscious

HOW TO MANAGE

SEEK IMMEDIATE HELP. Severe hypoglycemia is extremely dangerous and may require a glucagon injection. Glucagon is a hormone produced in the pancreas that helps raise your blood sugar level. Talk with your healthcare team about when and how to use a glucagon emergency kit. If you have hypoglycemia often or have had severe hypoglycemia, you should wear a medical alert bracelet or pendant. Getting prompt care may help prevent the serious problems that hypoglycemia can cause.

WITH DIABETES, WHAT, WHEN, AND HOW MUCH YOU EAT CAN ALL MAKE A DIFFERENCE

WHAT TO EAT

DAILY GUIDELINES

Based on 2,000 calories a day

FOCUS ON WHOLE FRUITS



Avoid fruits in sauces or syrup
Choose from whole fruits that are fresh, frozen, or canned.

If you choose dried fruits, remember that ½ cup dried fruit = 1 cup whole fruit.

EAT MORE VEGGIES



Vary your vegetables
Choose a variety of colorful fresh, frozen, and canned vegetables.

SELECT LEAN PROTEIN



Vary your proteins
Include seafood, beans and peas, unsalted nuts and seeds, soy products, eggs, and lean meats and poultry.

EAT WHOLE GRAINS



Make half your grains whole grains
Find whole grain foods by reading the nutrition facts label and ingredients list.

CHOOSE LOW-FAT DAIRY



Choose low-fat or fat-free milk or yogurt
Fat-free milk, yogurt, and soy beverages (soy milk) can help you cut back on saturated fats.

We all love food. Having diabetes doesn't mean you can't continue to enjoy your favorites. With some basic information and a little bit of planning you can manage diabetes without too much interruption to your daily life.



WHAT CAN I EAT?

You can eat a variety of healthy foods from each of the 5 food groups.



myplate.gov

HOW MUCH SHOULD I EAT FROM EACH FOOD GROUP DAILY?

The amount of food you need from each food group depends on factors such as your age and amount of physical activity. Your healthcare professional should be able to recommend what's right for you. General recommendations based on a 2,000-calorie diet are shown to the left.



DO SOME FOODS IMPACT MY BLOOD SUGAR MORE THAN OTHERS?

Carbohydrates (carbs) provide your body and brain with energy. It's important to include carbs in your diet. Of all the things that you eat, carbs impact your blood sugar levels the most. Some carbs release glucose into the blood rapidly (high glycemic index), while others have little or no effect on blood glucose (low glycemic index). Therefore, high-glycemic-index carbs will cause blood sugar to spike quickly, while low-glycemic-index carbs and fiber will result in a small rise in blood sugar, without the spike. So you will want to carefully monitor the types and serving sizes of these foods. Here are some foods that contain carbs:

- Grains (breads, crackers, rice, hot and cold cereals, tortillas, noodles)
- Starchy vegetables (potatoes, peas, corn, beans, lentils)
- Fruit and 100% fruit juice
- Milk and plain yogurt
- Sweets and desserts



EXAMPLES OF FOODS THAT CAN CAUSE BLOOD SUGAR TO SPIKE

Any foods made with refined flours (breads, pastas, cereals) or with added sugars (muffins, cakes, cookies, soda, fruit juice). Also, chips, white potatoes, and white rice.

WITH DIABETES, WHAT, WHEN, AND HOW MUCH YOU EAT CAN ALL MAKE A DIFFERENCE

HOW TO PLAN



WHEN SHOULD I EAT?

The best way to manage your blood sugar is to eat small, frequent meals at the same time every day. Start your day off right by eating breakfast. Then space meals about 4 to 5 hours apart with a healthy snack in between. Healthy snacks between meals can help you avoid hypoglycemia. Never skip meals!

 MEAL 1	 SNACK	 MEAL 2	 SNACK	 MEAL 3	 SNACK
7AM - 8AM	10AM - 11AM	12PM - 1PM	3PM - 4PM	5PM - 6PM	Pre-bedtime



WHAT IS A SERVING SIZE?

1 CUP COOKED PASTA =



1 baseball

½ CUP FRUITS OR VEGGIES =



½ baseball

1 OUNCE LEAN MEAT =



1 pack of dental floss

1 OUNCE CHEESE =



3 dice

SERVING SIZE EXAMPLES



FRUIT

1 cup =

- 1 small apple
- 1 large banana
- 8 large strawberries
- 1 cup 100% fruit juice
- ½ cup dried fruit



VEGETABLES

1 cup =

- 2 cups raw spinach
- 1 cup cooked green beans
- 1 cup raw green peppers
- 1 cup mashed potatoes



PROTEIN

1 ounce =

- 1 egg
- 1 oz cooked beef or chicken
- ¼ cup cooked beans
- 1 tbsp peanut butter
- 12 almonds



GRAINS

1 ounce-equivalent =

- 1 regular slice bread
- ½ cup cooked rice
- 1 small (6-inch) flour tortilla
- ½ cup cooked pasta



At least half of your grains should be whole grains.



DAIRY

1 cup =

- 1 cup plain yogurt
- 1 cup skim milk
- ½ cup shredded cheese
- 1 cup soy milk
- 1 cup frozen yogurt

Your medical care team can help you determine your specific nutrition needs.