

Providence Guide to

# Living Well with Diabetes

A guide to help you manage your  
diabetes and improve your health

*5th edition*



## **Medical Director: Elizabeth Stephens, MD**

A special thanks to Providence Diabetes Education, Providence Clinical Pharmacy, Providence Behavioral Health, and Providence Health Plan Case Management for their contributions to this book.

## **Your Diabetes Care Team**

Whether you have had diabetes for some time or were just diagnosed, your care team is here to support you and your family. Your diabetes care team may include your provider, dietitian, diabetes educator/diabetes care and education specialist, nurse, pharmacist, behaviorist, and case manager.

The purpose of Providence Diabetes Services is to empower people to prevent or manage diabetes by being informed and active participants in managing their health.

### **Disclaimers:**

Consult your doctor or primary health care provider before undertaking the changes in diet, activity, or other health behaviors suggested in Providence Guide to Living Well With Diabetes.

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**For more information, call 855-360-5456.**

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# SECTION 1

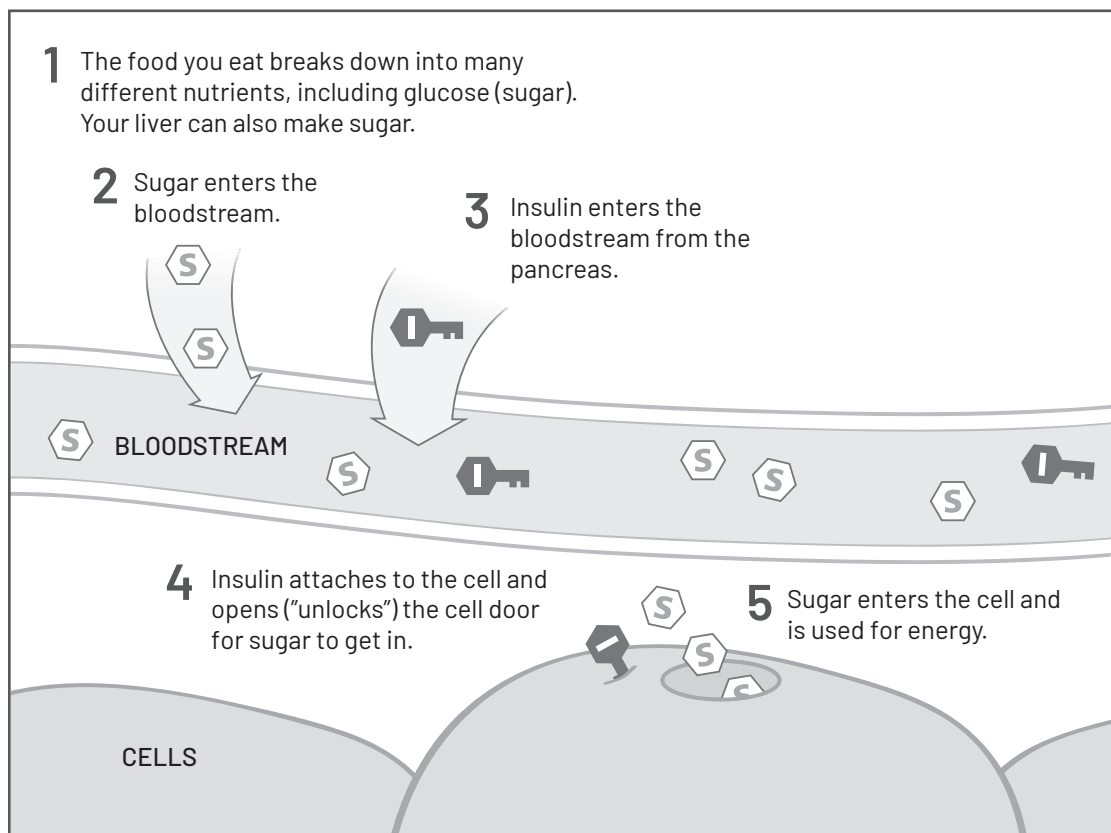
## About Diabetes

### What Is Diabetes?

**W**hen you have diabetes your body has trouble moving sugar (glucose) out of your blood and into your cells. Your body uses sugar for energy when it is inside your cells. Diabetes occurs because either your pancreas cannot make enough insulin, and/or your body cannot use your insulin properly (this is called insulin resistance). Insulin is a hormone that helps sugar get into every cell in the body.

Diabetes causes blood sugar levels to go too high. Extra sugar in your blood may harm your blood vessels, organs (such as kidneys) and nerves (both in your hands and feet and internally such as in your intestines).

See next page for more information about how the different types of diabetes affect your body



# Diabetes: What Type Do I Have?

There are different types of diabetes. In each type too much sugar builds up in your blood. This means not enough sugar gets into your cells to be used as energy.

- **Pre-diabetes:** Pre-diabetes means your blood sugar level is higher than normal (caused by insulin resistance). It is not high enough to be diagnosed as Type 2 diabetes. Without making lifestyle changes, pre-diabetes is likely to become Type 2 diabetes in 10 years or less.

You can turn things around by eating healthy foods, exercising most days, and maintaining a healthy weight. Practicing these healthy habits gives you a good chance of bringing your blood sugar level back to normal.

- **Type 2 diabetes:** More than 90% of people with diabetes have this type. With Type 2 diabetes, either your body makes too little insulin, it does not use your insulin properly, or both. Type 2 diabetes can develop at any age but most often occurs in people over the age of 45. Healthy eating, exercise, and stress management are key to treating Type 2 diabetes. Diabetes medicines (including insulin) are often used as well.
- **Type 1 diabetes:** Your body stops making insulin. Health issues quickly arise because sugar builds up so fast in your blood. Cells throughout your body are starved for energy (sugar). Type 1 diabetes is usually diagnosed in children and young adults. Less than 10% of people with diabetes have Type 1. Healthy eating, exercise, and stress management are also used to treat Type 1 diabetes.
- **Gestational diabetes:** Gestational diabetes is when a pregnant person has high blood sugar levels during pregnancy, but has never had diabetes before. In the United States, about 1 in 15 pregnant people will develop gestational diabetes. Gestational diabetes can be managed with healthy food choices, exercise, stress management, and diabetes medicine when needed.
- **Latent Autoimmune Diabetes in Adults (LADA):** LADA is a slow progressing form of autoimmune diabetes. Like Type 1 diabetes, LADA occurs because your pancreas stops making enough insulin. Unlike Type 1 diabetes, you often won't need insulin for several months or longer after diagnosis. People diagnosed with LADA are usually over 30 years of age.

# Diabetes Remission

Making sustainable lifestyle changes, such as exercising and eating healthy, can help you achieve diabetes remission.

Diabetes remission is defined as a return of Hemoglobin A1c to less than 6.5% that occurs following an intervention (or spontaneous) and that persists for at least 3 months without diabetes medication.

## **Note on diabetes remission:**

It's important to keep in mind diabetes is not "cured" if A1C reached 6.4% or less. Continued monitoring of A1C and adherence to lifestyle changes is needed in order to maintain remission status.\*

# Diabetes Risk Factors

## **Non-modifiable risk factors for Type 2 diabetes**

Risk factors that increase your risk for developing pre-diabetes and Type 2 diabetes that can't be changed are:

- Family history of Diabetes
- Age (most frequently after the age of 40)
- History of Gestational diabetes
- Race or ethnic background: Certain ethnicities are at a higher risk including: African-American, Asian-American, Latino/Hispanic-American, Native American or of Pacific-Islander descent.

## **Modifiable risk factors for Type 2 diabetes**

Risk factors that you can change to reduce your risk for diabetes or delay its development:

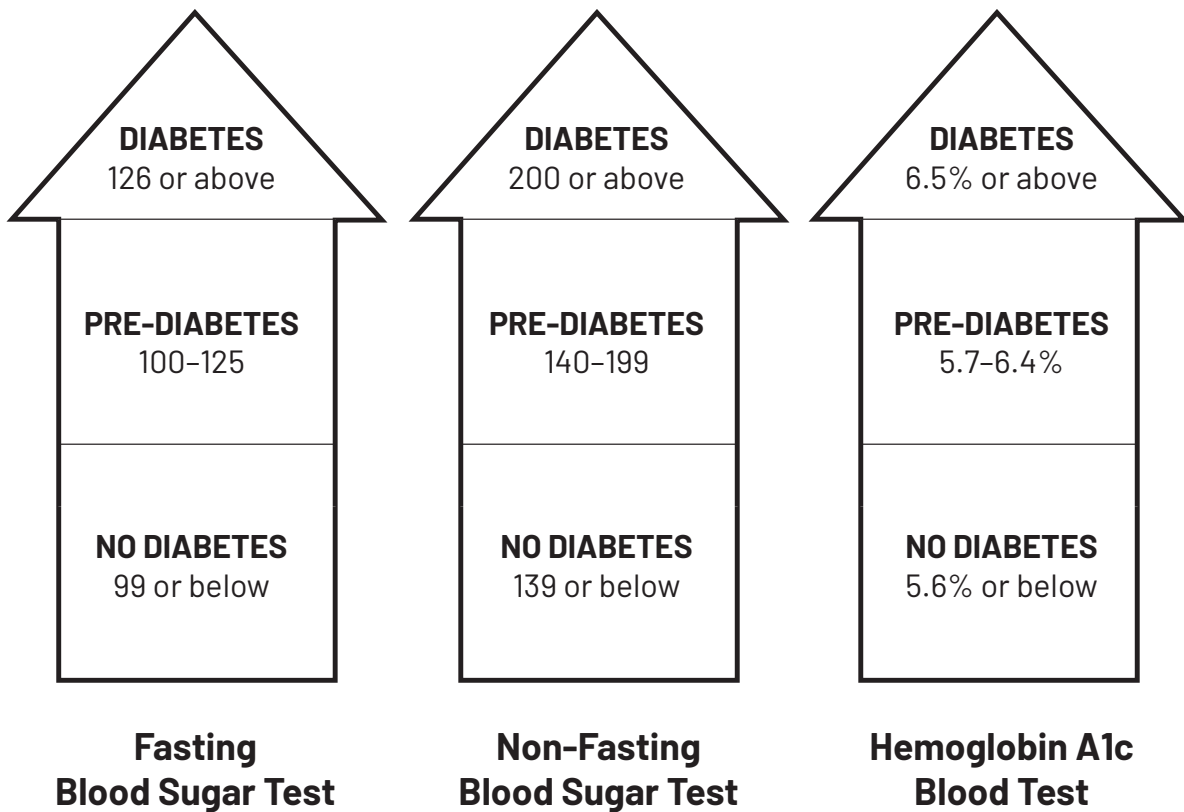
- Lack of Physical activity
- High Blood pressure
- Elevated Cholesterol (lipid) levels\*\*
- Smoking or other tobacco use
- Poor Diet
- Heavy Alcohol use
- Chronic poor sleep
- Weight: Being overweight or obese increases the risk of developing diabetes. Losing 5% to 10% of body weight can reduce your risk of developing diabetes.\*\*

\* Buse, John B., et al. 2009 "How Do We Define Cure of Diabetes?" Diabetes Care 32(11): 2133-35.

\*\* These factors can also have genetic components and can be related to family history












# How Do I Know If I Have Diabetes or Pre-diabetes?

Whether you feel different or not, it is important to learn how to take care of your diabetes. Here are the numbers your provider uses to determine who has diabetes.



# Which Plan Is Right for Me?

Diabetes affects people differently. There are several options to help people with diabetes control their blood sugar. If you have Type 1 diabetes you will need to use plan #4. If you have Type 2 diabetes or pre-diabetes plans may vary from # 1-4.

<b>#1</b>	 <b>Food Plan</b>	+	 <b>Activity Plan</b>	+	 <b>Stress Management</b>				
<b>#2</b>	 <b>Food Plan</b>	+	 <b>Activity Plan</b>	+	 <b>Stress Management</b>	+	 <b>Pills</b>		
<b>#3</b>	 <b>Food Plan</b>	+	 <b>Activity Plan</b>	+	 <b>Stress Management</b>	+	 <b>Pills</b>	+	 <b>Injectables (like insulin)</b>
<b>#4</b>	 <b>Food Plan</b>	+	 <b>Activity Plan</b>	+	 <b>Stress Management</b>	+	 <b>Injectables (like insulin)</b>		

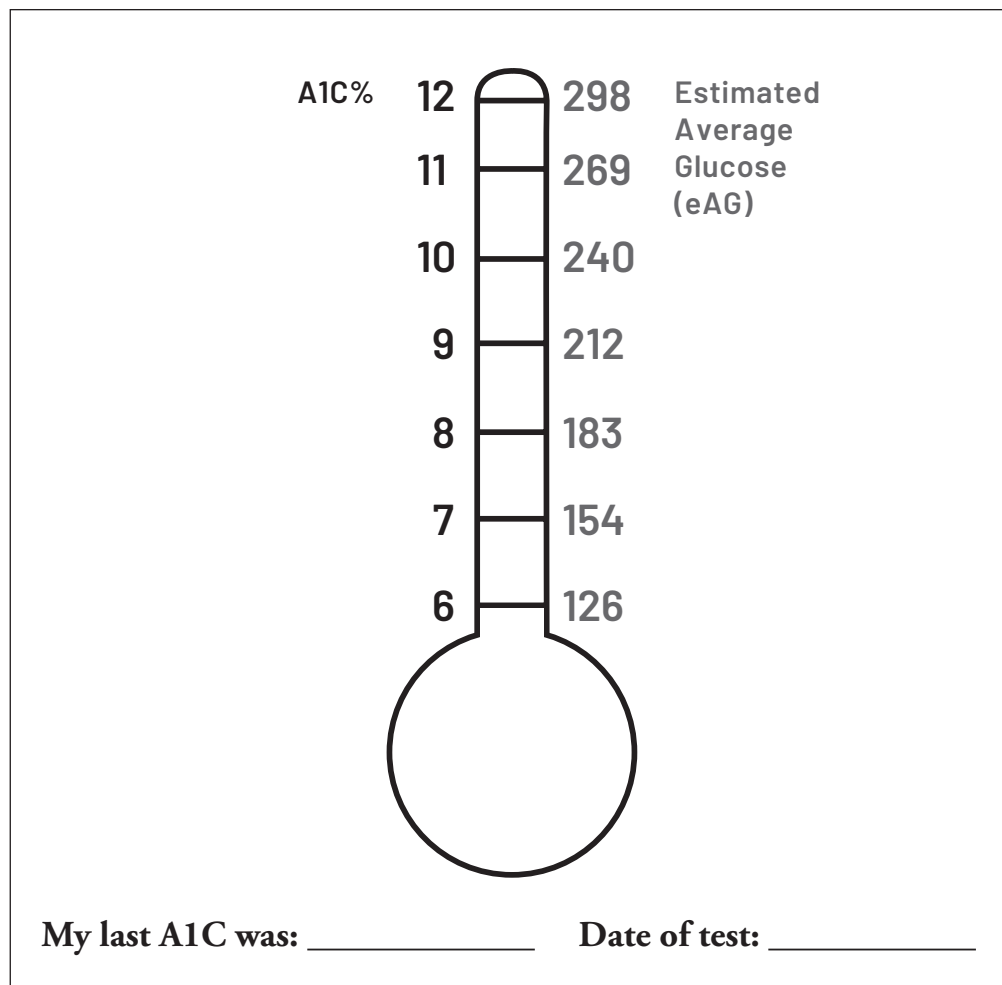
## SECTION 2

# Know Your Numbers

## Hemoglobin A1C Blood Test

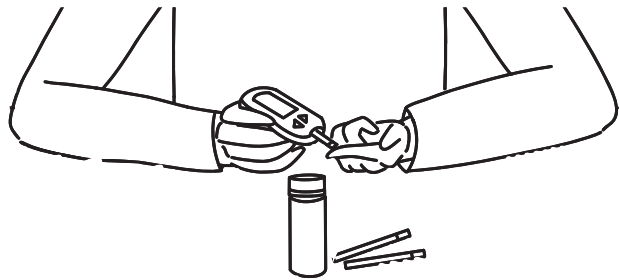
The Hemoglobin A1C blood test (A1C) shows how your diabetes treatment plan is working. The A1C estimates your average blood sugar over the past three months. For most people with diabetes, the A1C goal is 7%. Ask your provider if this A1C goal is right for you.

**For every 1% drop in your A1C level, you lower your risk of diabetes health problems by 25%.**



## What you need to check your blood sugar at home.

1. Blood sugar monitor – shows your blood sugar reading
2. Testing Strips – where you apply your blood sample
3. Lancets and lancing device – what you use to prick your finger



Continuous glucose monitors (CGM) are small sensors worn for 10-14 days for real-time blood sugar monitoring. A smart phone or other reader is used to review your blood glucose readings and trends. Talk to your doctor or diabetes educator about a prescription if you are interested.

### Tips for checking blood sugar

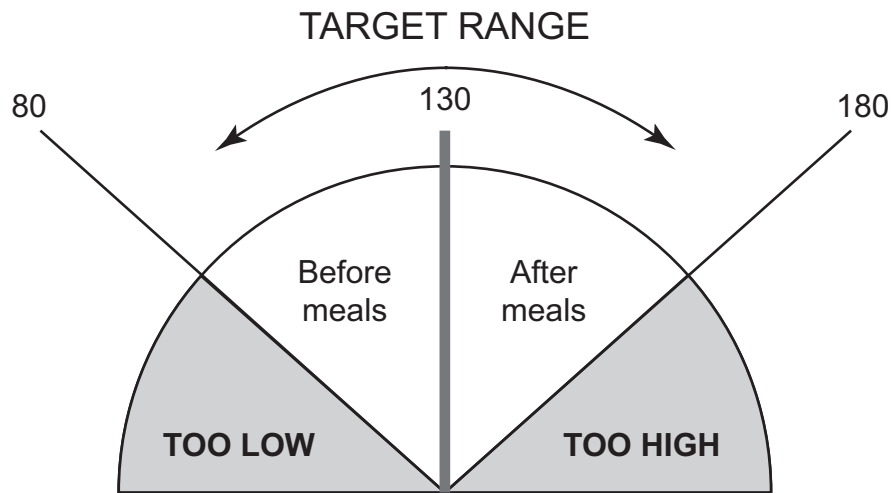
- Keep test strips in original container.
- Store test strips at room temperature.
- Only use lancets once. Do not reuse needles.
- Do not use expired test strips.
- Wash hands with soap and water before checking blood sugar. Hand sanitizer and lotion may change the results.
- Set your meter to the correct date and time so the memory is accurate.
- Keep track of your blood sugar numbers in a log book, notebook, phone app, or on your computer.
- Share blood sugar numbers with your diabetes team at each visit.

Questions about your glucose meter? Call the toll-free phone number on the back of your meter or in the owner's manual.

# Blood Sugar Target Levels

	No diabetes	If you have diabetes	
		ADA* Targets	My Targets
Before meals	Below 100	80 to 130	
1 to 2 hours after meals	Below 140	Below 180	
A1C	Below 5.7%	Below 7%	

\* American Diabetes Association (ADA), 2020.



## AGP report goals for CGMs:

70% Target Range: 70-180 mg/dL

25% High 180-250 mg/dL

5% Low below 70 mg/dL

5% Very High: Above 250 mg/dL

1% Very Low: Below 54 mg/dL

# When Should I Check My Blood Sugar?

Following are general guidelines that may be recommended to determine how often to check your blood sugar.

## Several times a week

- Your blood sugar is usually in the target range and your A1C is at target (see chart on previous page listed blood sugar targets).
- You are not making changes to your lifestyle or diabetes medicine(s).

## Once a day

- You are trying to understand why your blood sugar is too high or too low.
- Your blood sugar is usually in the target range.
- Your A1C is not at its goal.
- You are making changes to your food, exercise, or diabetes medicine(s).

## Several times a day

- You are trying to understand why your blood sugar is too high or too low.
- Your blood sugar is usually in the target range.
- Your A1C is not at its goal.
- You are making changes to your food, exercise, or diabetes medicine(s).

Following are general guidelines that may be recommended to determine how often to check your blood sugar.



### Sleep

To see what blood sugar is overnight check first thing in the morning.



### Meals

If you want to see how a meal affects blood sugar check before and 1 to 2 hours after.



### Exercise

To learn how exercising changes your blood sugars.



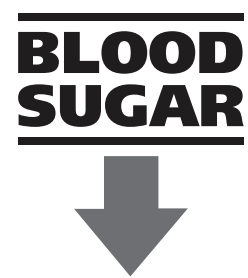
### Stress and Sickness

If you are curious to see if blood sugars are higher than normal.

## What Changes My Blood Sugar?



- Food, specifically carbohydrates
- Being Dehydrated
- Stress: Emotional or physical stress (such as surgery)
- Very Poor Sleep
- Certain medications, such as steroids



- Medications
- Exercise
- Balanced Diet
- Stress management
- Adequate Sleep

## Understanding blood sugar readings

<b>Causes LOW blood sugar</b>	<b>Keeps blood sugar WITHIN TARGET</b>	<b>Causes HIGH blood sugar</b>
<b>Food</b>		
<ul style="list-style-type: none"> <li>• Eating too little food (especially carbohydrates)</li> <li>• Going too long without eating</li> <li>• Drinking alcohol (especially on an empty stomach)</li> </ul>	<ul style="list-style-type: none"> <li>• Eating balanced meals and snacks</li> <li>• Eating every 3 to 5 hours when you are awake</li> <li>• Avoiding foods that quickly raise blood sugars (such as regular soda and candy)</li> </ul>	<ul style="list-style-type: none"> <li>• Eating too much (especially carbohydrates*)</li> <li>• Going more than 5 hours without eating (can cause your liver to make extra sugar for you)</li> <li>• Eating meals and/or snacks too close together (closer than 3 hours)</li> </ul>
<b>Stress</b>		
<ul style="list-style-type: none"> <li>• May affect your behaviors (such as eating less than normal or being more active)</li> </ul>	<ul style="list-style-type: none"> <li>• Using relaxation techniques to combat stress</li> <li>• Getting treatment for an illness or infection</li> <li>• Getting enough sleep</li> </ul>	<ul style="list-style-type: none"> <li>• Being ill or having a cold</li> <li>• Infection</li> <li>• Surgery or hospitalization</li> <li>• Anxiety or stressful situations</li> <li>• Not getting enough sleep (such as with sleep apnea)</li> </ul>
<b>Exercise</b>		
<ul style="list-style-type: none"> <li>• Doing too much exercise (or more than planned) without eating enough food</li> </ul>	<ul style="list-style-type: none"> <li>• Getting at least 150 minutes of exercise each week</li> <li>• Doing a combination of cardio, strength and stretching exercises</li> </ul>	<ul style="list-style-type: none"> <li>• Not getting enough activity and exercise</li> <li>• Intense exercise can occasionally increase blood sugar (due to the stress hormones released with intense exercise)</li> </ul>
<b>Diabetes Medicines</b>		
<ul style="list-style-type: none"> <li>• Wrong dose (accidentally taking too much medicine)</li> <li>• Getting prescribed too much diabetes medicine</li> </ul>	<ul style="list-style-type: none"> <li>• Taking all medicines as directed</li> <li>• Having the correct dose prescribed</li> </ul>	<ul style="list-style-type: none"> <li>• Wrong dose (missing a dose or taking less than prescribed)</li> <li>• Getting prescribed too little diabetes medicine</li> <li>• Taking steroid medications (like Prednisone)</li> </ul>

## Disposal of Sharps

All used sharps (lancets, syringes, and pen needles) must be disposed of properly. Because sharps can harm people and animals, it is illegal to throw sharps into the garbage. Put all used sharps into a special sharps container.

Used test strips can be thrown away in your garbage. You can buy and dispose of sharps containers in several ways. Check with any of the following for more information:

- Your local pharmacy
- Your garbage disposal company
- Your local recycling center
- Online mail-back programs
- Your county health department
- [safeneedledisposal.org](http://safeneedledisposal.org)

If you need financial assistance to purchase a sharps container, feel free to contact the Providence Community Resource Desk in your area, or visit <https://www.providence.org/locations/or/community-health-division/community-resource-desk>, or call:

503-737-7390 in Clackamas County

971-275-7157 in Multnomah County

971-322-3003 in Washington County

503-440-9118 in Clatsop County

541-601-6793 in Jackson County

503-737-7390 in Hood River County



## SECTION 3

# Healthy Coping



## Feelings About Diabetes

It's normal, when you are told you have diabetes, to feel many emotions. These feelings may come and go. You may feel more in control when you know more about diabetes and taking care of yourself.

- **Mixed feelings** – You may feel angry, frustrated, shocked, surprised, or relieved.
- **Denial** – You may be afraid and try to ignore it, hoping someone made a mistake. You minimize it because you don't feel you have health problems like other people you know with diabetes.
- **Acceptance** – You come to accept that you have diabetes. You start learning more about it.
- **Action** – You feel hopeful and empowered. You are motivated to make changes in how you live.

Aim for long term changes instead of quick fixes. A diabetes diagnosis can feel overwhelming and meaningful change takes time. To create long term changes try SMART goals.

SMART stands for Specific, Measurable, Achievable, Relevant, and Time-Bound. Work with your diabetes educator to create SMART goals specific to you.

SMART goal example: "I will walk for 30 minutes every morning" instead of "I will work out more".

## How Does Stress Affect Diabetes?

- When your body is under high levels of stress your brain switches to survival mode and gets ready to “fight or flight.”
- Stress hormones (such as cortisol) are released in the brain. These hormones raise heart rate and blood sugar (from your liver) for energy to “fight or flight” the situation you are in. This often results in spikes in blood sugar.
- Controlling stress levels can aid with reducing these spikes in blood sugar.

## Managing Stress

Stress can be caused by many things in your life and affects everyone in different ways. Dealing with diabetes can add additional stress to your life. There are three types of stress our body may experience: physical, emotional, lack of sleep. Here are some examples: Here are some examples:

**Physical stress** includes having a headache, a cold or the flu, chronic pain, or surgery.

**Emotional stress** includes stress related to family, work, school, or money.

Learning how to manage stress will improve your blood sugar, blood pressure, and cholesterol levels.



# Sleep and Diabetes

## How sleep affects blood sugars

People who get poor sleep (< 6 hours) or long sleep (> 9 hours) are at a higher risk for developing pre-diabetes and type 2 diabetes compared with people who get 7-8 hours.

Lack of sleep impacts blood sugar levels due to its effects on:

- increasing insulin resistance
- raising stress hormone called cortisol
- raising hunger hormones (Ghrelin)
- decreasing the release of hormones make us feel full. (leptin and GLP1)

Research has found people who sleep poorly are more likely to choose high-calorie foods that are high in processed carbs and sugar such as chips and sweets.

## How blood sugars affect sleep

- When an individual has high blood sugar, the kidney will filter out the extra sugar by urinating more frequently. This often results in waking up throughout the night to use the restroom.
- High blood sugar may also cause headaches, increased thirst, and tiredness that can interfere with falling asleep.
- By contrast, going too many hours without eating or certain diabetes medication can lead to having low blood sugar levels at night. You may have nightmares, break out into a sweat, or feel irritated or confused when you wake up.

## How much sleep is recommended?

7 hours of sleep per night. Children and teens may need more than this.

## Tips for better sleep:

- Have a consistent sleep schedule (even on weekends)
- Keep your bedroom dark, quiet, relaxing, and cool.
- Remove electronic devices such as TVs and smartphones from the bedroom.
- Get some physical activity during the day.
- Mentally unwind and relax before bedtime.
- Have a routine that gets you ready for bed, like taking a shower, reading, or writing in a journal.

## Things to avoid:

- Consuming caffeine in the afternoon and evening as it can affect your body for up to 8 hours.
- Alcohol in the evening. This can impact how you breathe when you sleep and can also affect your sleep quality.
- Large meals late at night. Eating “wakes up” our body and makes sleeping more difficult, and can also cause indigestion and higher blood sugar levels overnight.

# Ideas for Healthy Coping



## **Connect with others**

- Ask for help
- Visit with a friend
- Talk to your partner



## **Connect with your body**

- Breathe deeply
- Get a massage
- Get regular time for yourself



## **Take care of your emotional health**

- Smile and think positive thoughts
- Listen to music
- Get outside
- Keep a journal
- Pray or meditate
- Explore a hobby
- Meet with a behavioral health provider



## **Care for your body**

- Rest
- Laugh
- Get plenty of sleep
- Drink plenty of water
- Relax with a book
- Exercise safely and move your body

## SECTION 4

# Being Active

### Why Should I Exercise?

Physical activity helps your body keep blood sugar in control and your heart healthy. It does this by making your own insulin work better.

Regular exercise can lead to:

- Healthier heart, brain, and circulation
- Less anxiety, depression, and stress
- Better sleep
- Lower blood pressure
- Better blood sugar control
- Thinking more clearly and better concentration
- Lower LDL (bad) cholesterol and higher HDL (good) cholesterol
- Faster-healing wounds and sores
- Improved digestion
- A stronger immune system
- Weight loss or weight maintenance

### How Much Movement Do I Need?

Aim for 30 minutes of moderate-intensity exercise at least 5 days per week. This is more than your daily routine like household chores, running errands or work.

You should be able to talk while being active, but not sing. The American Diabetes Association recommends you spread out exercise throughout the week with no more than 2 days "off" between exercise days.

## Exercise Tips for Success:

- **Start slow:** Any exercise is better than none! If 150 minutes feels like a lot then start smaller – try starting with 20 minutes x 3 days a week and gradually increase your exercise time.
- **Split it up:** Finding time for exercise is often the biggest barrier for individuals. Try splitting up the 30 min goals into two 15 minute walks or three 10 minute walks on breaks during the work day.
- **Have a backup plan:** Come up with an alternative workout for days the weather is bad or things don't go as planned. Instead of cycling outside, you could walk laps at the local store or do 15 minutes of stair-climbing at home or work.
- **Make exercise fun:** Having an exercise plan you enjoy will help you stick with it. Find workouts that you make you happy – whether that's a dance class, a pickleball league or a walking club.
- **Plan your weekly exercise:** To find a time that works for you, think about when you have availability and when you're at your most energized.



**CUT  
DOWN ON  
sitting for  
more than 30  
minutes at a time**

Decrease time  
watching TV, talking  
on the phone, and  
playing on the computer.



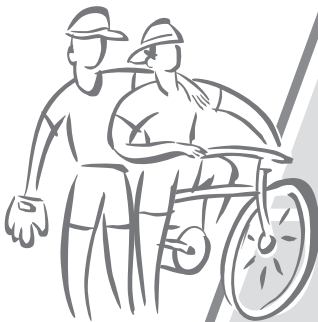
**2 TIMES A WEEK  
Strength Training**

Lift weights.



**3 TIMES A WEEK  
Leisure Activities and Flexibility**

Golf, bowl, or work in the yard.  
Stretch or do yoga or Tai Chi.



**3 to 5 TIMES A WEEK  
Aerobic Exercise/Recreational Activity**

Aim for 150 minutes of moderate exercise (or  
75 minutes of vigorous exercise). Walk, bike, skate,  
swim, dance, hike, play tennis, ski, or climb stairs.



**EVERY DAY**

**Take extra steps in the day**

Take the stairs instead of the elevator, mow the lawn, walk the  
dog, park your car farther away, sweep the floor, and walk  
around the house while on the phone instead of sitting still.



## SECTION 5

# Healthy Eating

### When Should I Eat?

Eat something within one hour of waking up.

Eat at least every five hours while you are awake.

#### **Tips:**

- Timing of eating can affect your blood sugars. The goal is to eat consistent meals and snacks during the day so your blood sugars and energy levels remain stable.
- The order in which you eat your foods might help with blood sugars. Studies have found that eating proteins and vegetables first and your carbohydrates last results in better after meal blood sugars.
- Breakfast eaters tend to have less belly fat and obesity, lower blood pressure, and a lower risk of diabetes. A high-protein breakfast may reduce daytime hunger and is associated with less evening snacking.



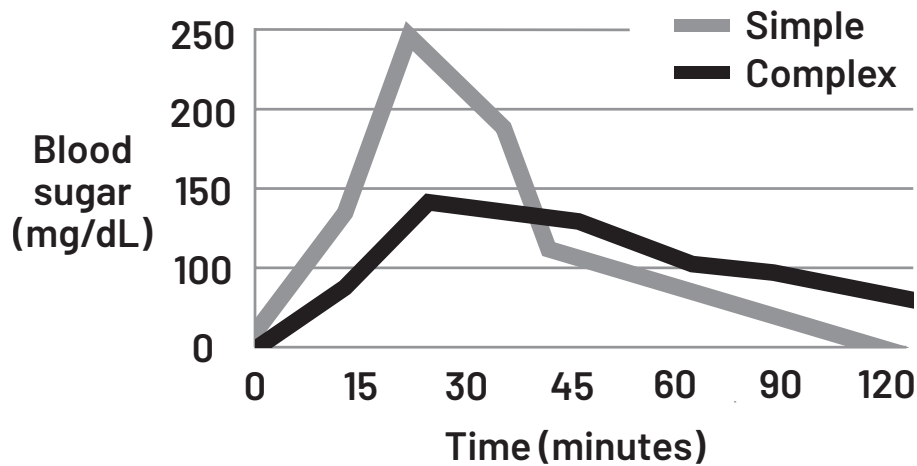
# What are Carbohydrates?

Carbohydrates (or carbs) are found in many foods. Carbs play an important role in our body, including providing energy to our cells and our brain. When you eat carbs, they are digested and broken down into a molecule called "glucose". (also known as blood sugar).

Carbohydrates are divided into two main types: Simple carbohydrates and Complex carbohydrates. Simple carbohydrates are digested fast and raise blood sugar quickly. Complex carbohydrates are higher in fiber and, as a result, are digested slower. This allows a more gradual release of sugar into the blood stream.

Foods that are carbohydrates (meaning they turn into glucose) include:

- Grains
- Fruits
- Beans and lentils
- Milk and certain dairy products
- Starchy vegetables
- Sugar and sweets



## What Should I Eat?

Healthy eating means choosing a variety of food that include protein, vegetables, high fiber grains, and healthy fats. Healthy eating is important for blood sugar control and will help you:

- Keep blood sugar within a safe range
- Keep your heart healthy
- Maintain a healthy weight
- Get nutrients to keep your body healthy
- Decrease or prevent problems like low blood sugar, constipation, heartburn, and excess hunger

**Protein helps keep your blood sugar level steady.** Many people have success with their blood sugar eating a breakfast higher in protein and lower in carbohydrate. Aim to eat protein with every meal and snack.

**Healthy fat does not turn to sugar in the blood and can make you feel full longer.** Healthy fat generally comes from plants, nuts, and fish. Less healthy fat generally comes from animals and deep-fried or highly processed foods.

### **Complex Carbohydrate (high in Fiber)**

This includes whole grains, legumes, fresh fruits, and starchy vegetables (higher in carbohydrates) that provide energy. Choosing high fiber carbohydrates will help with blood sugar control.

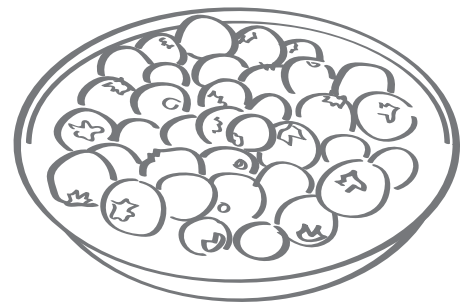
- Fiber helps you feel full longer, which can help calm cravings and prevent impulse snacking. High-fiber foods deliver more nutrients and higher quality carbohydrates than processed food.
- Fiber foods also help prevent constipation. Drink lots of water (eight or more glasses each day) when eating high fiber foods

### **Non starchy vegetable (high in Fiber)**

Non-starchy vegetables contain little to no carbohydrates. The goal is to eat at least five servings per day. One serving = 1 cup raw or ½ cup cooked.

Whenever possible, remember:

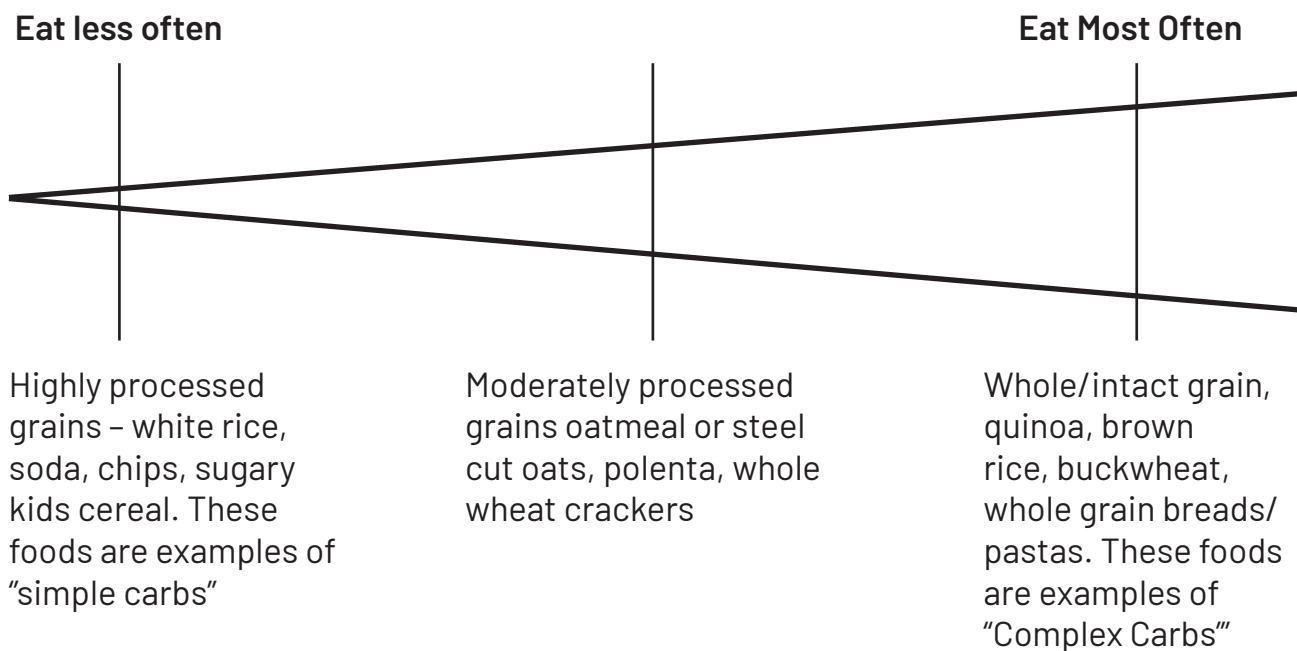
- Cook food at home.
- Eat whole foods.
- Limit or avoid highly processed foods.
- Pack your own lunch.



## Whole Grain Continuum

The whole grain continuum below shows whole and intact grains on one end to highly processed grains on the opposite end. The goal is to choose more whole or intact grains and limit highly processed grains.

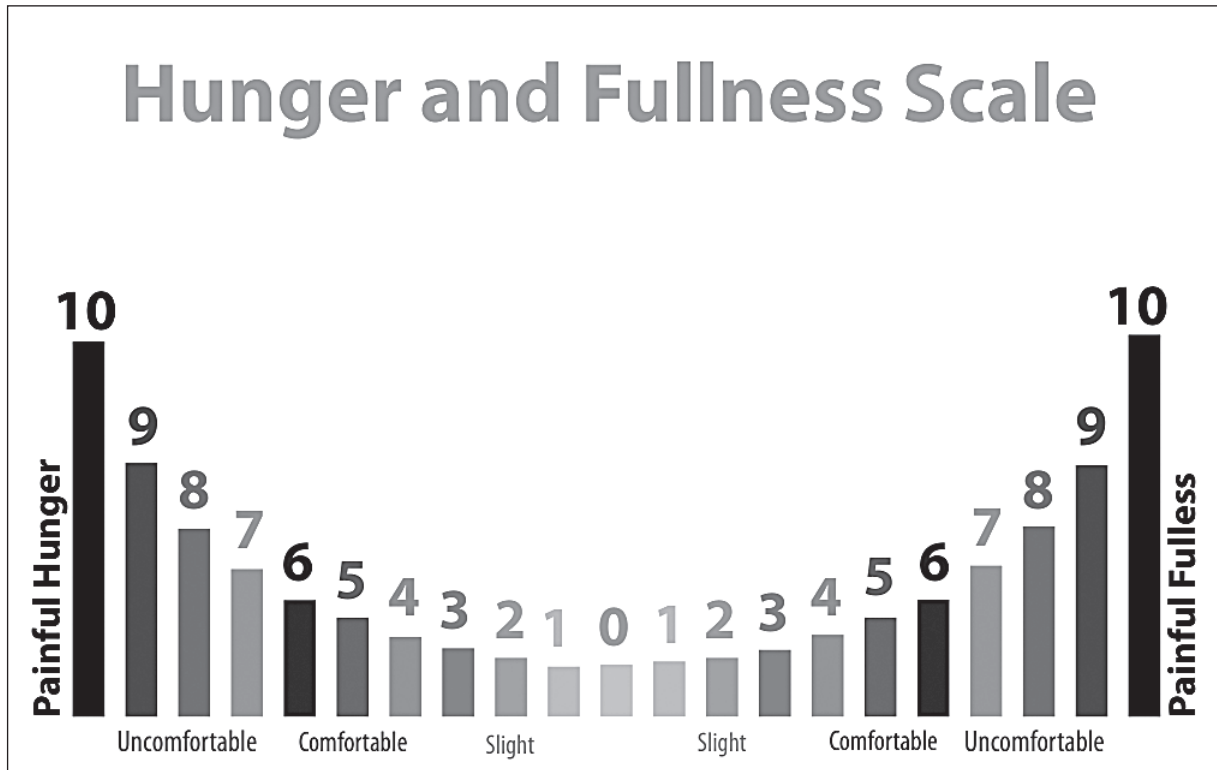
**Tip: Limit** highly processed grains (also known as simple carbohydrates) **as much as possible**. These foods are often packaged with many ingredients and food additives. Highly processed carbohydrates include white rice, sweets, chips, juice, and white flour foods (pasta, crackers, cereal).



### Tip:

- Look for foods made with whole grain or whole wheat flour in the ingredients.
- When reading food labels look for foods with 4 grams or more of dietary fiber, this is considered a good source of fiber.
- Avoid foods made with bleached flour, enriched flour, or foods with high amounts of added sugar

Limit added sugar in a day: added sugar is sugar that is not naturally found in a food, instead it was added by food companies – for example the sugar found in BBQ sauce is added but sugar in blueberries is natural. The recommendations are to consume no more than 25-30 grams of added sugar in a day. Or less 10% of your daily intake. (Example: if you eat 2000 calories you should have less than 20 grams of added sugar).



## How Much Should I Eat?

There are different ways to figure out how much to eat for balanced meals or snacks.

- Get a variety of foods in all of your meals and snacks.
- Include a mix of protein, healthy fat, and high fiber foods.
- Eat until you are satisfied but not too full.
- Try not to eat when you are not hungry.

**When to start eating:** It is best to eat when you are starting to feel hunger cues – this is often before your stomach is growling or you have hunger pangs (5-6 on the hunger scale).

**When to stop eating:** It is best to stop eating *before* feeling “stuffed”. A good sign to stop eating is when you feel “satisfied” and hunger cues are gone. This might mean food is still on our plate. (5-6 on hunger scale).

## What Should I Drink?

Make sure you drink plenty of fluids every day. Below is a suggested list of what to drink and what to limit.

### Drink:

- Water (eight or more glasses each day)
- Unsweetened coffee/tea (with a small amount of milk, half and half, or unsweetened milk alternative if you like)
- Unsweetened sparkling water
- Milk, in moderation

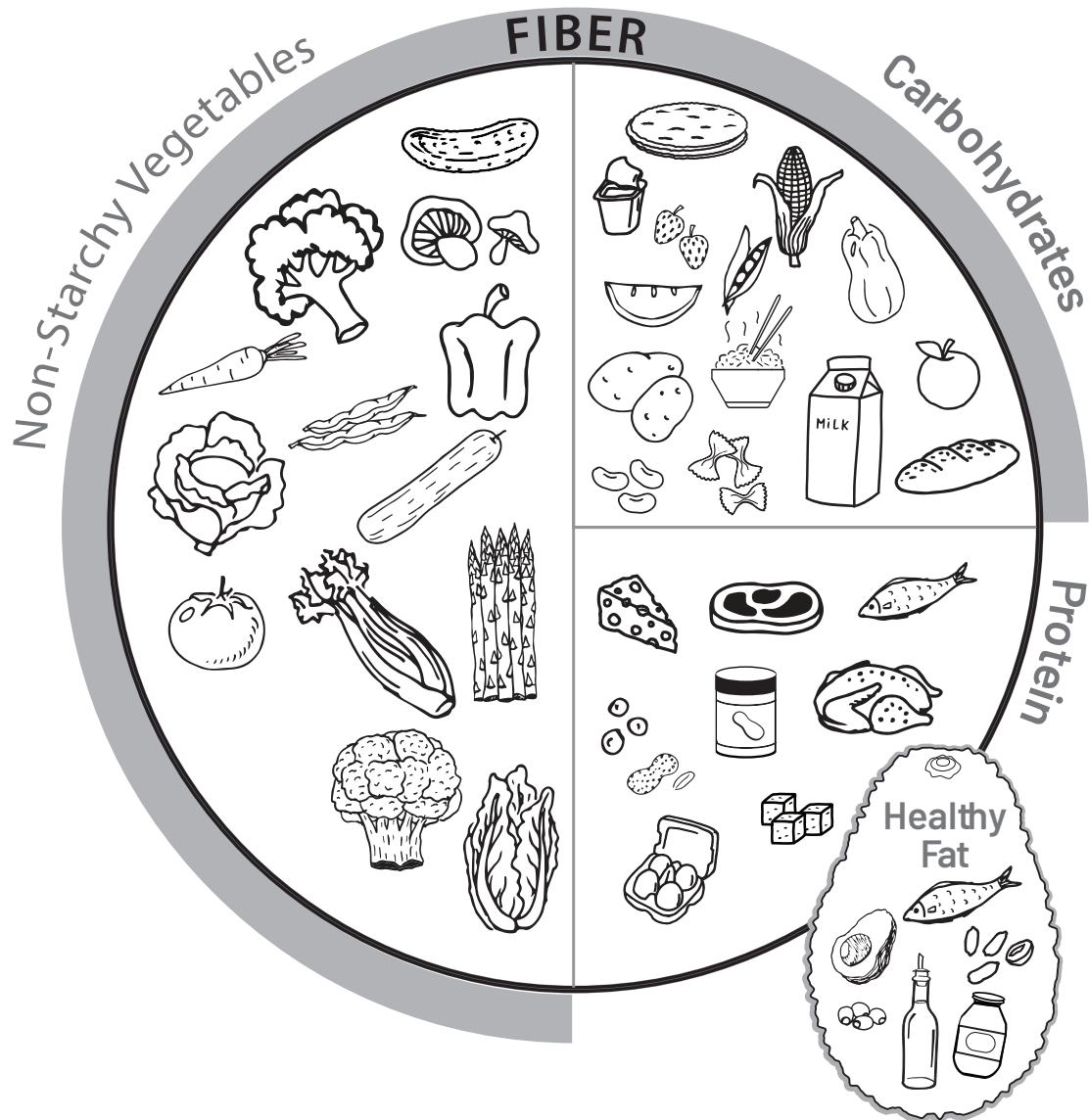
### Limit:

- Fruit juice (even fresh-squeezed, 100%, or natural juice)
- Regular or diet soda
- Any sweetened (sugar or artificial) beverages, including sweetened coffee drinks



# The Plate Method

The plate method breaks your eating dish down into quarters. This method helps you visualize portions of foods. It doesn't require any math and you can use it anywhere.



- Limit processed foods.
- Always include protein and healthy fats with your meals and snacks. Aim for one quarter of your plate.
- Get plenty of fiber.
  - Consider choosing high fiber or “complex” carbohydrates. These foods should make up another one-quarter of your meal or snack.
  - Aim for half of your meal or snack to be non-starchy vegetables. Use this as your base and plan the rest of your meal or snack around it.
- Try to use smaller plates or bowls instead of large ones.

**FIBER****Non-Starchy Vegetables**

Artichokes  
 Asparagus  
 Bell peppers  
 Bok choy  
 Broccoli  
 Brussels sprouts  
 Cabbage  
 Carrots  
 Cauliflower  
 Celery  
 Cucumber  
 Eggplant  
 Fermented vegetables  
 Garlic  
 Green beans  
 Greens/lettuce  
 Mushrooms  
 Onions  
 Pea pods  
 Radishes  
 Rutabagas  
 Spaghetti squash  
 Tomatoes  
 Turnips  
 Yellow squash and zucchini

**Protein**

Bone broth  
 Cheese or cottage cheese\*  
 Chicken  
 Eggs  
 Fish and seafood (especially oil-rich fish, such as tuna, salmon)\*  
 Meat (chicken, beef\*, turkey, pork\*, lamb\*, venison, bison)  
 Meat alternatives (tofu, tempeh, etc.)  
 Nuts\*  
 Nut butter\*  
 Seeds\*  
**Protein with carbohydrates:**  
 Kefir\*  
 Legumes (lentils, beans, chickpeas)  
 Milk\*  
 Yogurt\*  
 Some meat alternatives

\*Can be higher fat

\*\*<https://www.heart.org/en/healthy-living/healthy-eating/eat-smart/fats/healthy-cooking-oils>

**FIBER****Higher Fiber Carbohydrates****Fruit**

Apple  
 Blackberries  
 Blueberries  
 Melons  
 Oranges/Grapefruit  
 Pear  
 Raspberries  
 Rhubarb  
 Strawberries

**Grains, moderately processed**

Bulgur  
 Cracked wheat and rye  
 Foods made with whole grains  
 Old-fashioned rolled oats  
 Scottish or steel cut oats  
 Whole grain cornmeal (polenta)

**Grains, whole and intact**

Brown rice  
 Farro  
 Non-pearl barley "hulled"  
 Oat groats  
 Quinoa  
 Rye or wheat berries

**Legumes**

Beans (red, refried, black, pinto, garbanzo)  
 Lentils

**Starchy vegetables**

Corn  
 Peas  
 Beets  
 Potatoes (w/skin)  
 Sweet potatoes/yams  
 Winter squash (butternut, acorn, etc.)

**Healthy Fat**

Avocado, healthy oils (olive, avocado, canola, etc.\*\*), olives, nut butter, nuts, dressings made with healthy oils, seeds, fish and seafood (especially oil-rich fish, e.g., herring, tuna, salmon, mackerel).

## Carbohydrate Counting

You may decide to keep track of what you eat by counting carbohydrates. This plan still includes a variety of foods while following carbohydrates more closely. It can be helpful if you take diabetes medicine.

Ask your diabetes specialist or provider about the right amount of carbohydrates for you. Do not avoid carbohydrates altogether to lower blood sugars. It is still recommended to include protein, healthy fat, and fiber in meals and snacks.

Counting carbohydrates is not for everyone. If you find yourself eating more packaged foods or it increases stress it may not be right for you.

The My Food Plan handout or Nutrition Facts on a food package can help with carbohydrate counting. Make sure to look at the serving size for the most accurate information.

Using measuring cups or spoons can help until you can eyeball the correct portion sizes. Measure foods when they are ready to eat (for example, measure oats after they are cooked).

<b>Meal/Snack</b>	<b>Carbohydrate Grams (based on low carbohydrate)*</b>	<b>My Carbohydrate Goals</b>
Breakfast	30 to 60	
Snack	15 to 20, if needed	
Lunch	30 to 60	
Snack	15 to 20, if needed	
Dinner	30 to 60	
Snack	15 to 20, if needed	

\* Low carbohydrate defined as 26% to 45% of total calories from carbohydrate

“Nutrition Therapy for Adults With Diabetes and Prediabetes: A Consensus Report.”  
*Diabetes Care* (2019) 42: 731-754

## Help With Meal Planning

The following pages offer suggestions for including protein, healthy fat, and fiber in meals and snacks. The lists of ingredients are ideas of things to keep stocked in your kitchen. The recipe ideas are a framework of how to use the ingredients.

Check your kitchen for foods you already keep on hand and foods you enjoy. Modify these recipes for your pleasure.

### Weight Loss

If needed, lose a small amount of weight and keep it off. That's often the best medicine for people with pre-diabetes or Type 2 diabetes.

Research shows that losing 5 to 10% of weight provides the biggest health benefit. For example, if you weigh 200 pounds, losing just 10 to 20 pounds equals 5 to 10%. Even if you would like to lose more weight, just remember, the first 5 to 10% helps the most.



BREAKFAST – Ingredient Ideas	BREAKFAST – Recipe Ideas
<p><b>Protein</b> (pick 1)</p> <ul style="list-style-type: none"> <li>• 2 eggs (may add fat and fiber choices)</li> <li>• 1 hard-boiled egg and 2 T. nut butter</li> <li>• 1 egg with ¼ cup shredded cheese</li> <li>• ¼ cup walnuts, 1/8 cup seeds, and ½ cup milk</li> <li>• ½ cup cottage cheese</li> <li>• 1 cup plain, Greek yogurt</li> </ul> <p><b>Healthy Fat</b> (pick 1 to 2)</p> <ul style="list-style-type: none"> <li>• 2 T. avocado</li> <li>• 1 T. olive oil</li> <li>• 1 T. walnuts or almonds</li> <li>• 2 tsp. nut butter</li> <li>• 1 T. sunflower or pumpkin seeds</li> <li>• 2 T. half and half</li> </ul> <p><b>Fiber</b> (if carb counting pick 2 to 4 for 30 to 60 grams)</p> <ul style="list-style-type: none"> <li>• ½ cup black beans</li> <li>• 1/3 cup cooked oat groats</li> <li>• ¼ cup cooked wheat berries</li> <li>• ¼ cup cooked oats (steel cut, Scottish)</li> <li>• ½ cup fingerling or multi-colored potatoes with skin</li> <li>• 1 cup berries</li> <li>• 1 cup cubed melon or pineapple</li> </ul> <p><b>Non-Starchy Vegetables</b> (choose as many as possible, at least one cup)</p> <ul style="list-style-type: none"> <li>• Bell pepper</li> <li>• Carrots</li> <li>• Garlic</li> <li>• Mushroom</li> <li>• Onion</li> <li>• Spinach</li> <li>• Tomato</li> </ul>	<p><b>#1</b> 2 eggs scrambled with 1 T. olive oil, spinach, onion, and mushroom (1 cup veggies) 1 cup raspberries ¼ cup cooked oats Herbal tea</p> <p><b>#2</b> 1 egg omelet with ¼ cup shredded cheddar cheese, bell pepper, spinach, and tomato (1 cup veggies) Top with 2 T. avocado ½ cup black beans 1 cup cubed cantaloupe Water with slice of lemon</p> <p><b>#3</b> 1 cup plain, Greek yogurt 1 T. sunflower seeds 1 cup blackberries 8 oz. unsweetened coffee with a splash of half and half</p> <p><b>#4</b> 1/3 cup cooked oat groats cereal with ¼ cup walnuts, 1/8 cup pumpkin seeds, and ½ cup milk, sprinkled with cinnamon on top Tea</p> <p><b>#5</b> 1 egg with ¼ cup shredded cheese ½ cup red potatoes with skin 1 cup sliced strawberries 8 oz. unsweetened coffee with a splash of half and half</p> <p><b>#6</b> 1 hard-boiled egg ½ cup steel cut oats cereal mixed with 2 T. peanut butter and topped with cinnamon and splash of milk Water infused with orange, lemon, and lime slices</p>

LUNCH – Ingredient Ideas	LUNCH – Recipe Ideas
<p><b>Protein</b> (pick 1)</p> <ul style="list-style-type: none"> <li>• 2 to 3 oz. tuna (may mix with fat and fiber choices)</li> <li>• 2 to 3 oz. chicken or turkey</li> <li>• 2 to 3 oz. beef, pork, lamb, venison, or bison</li> <li>• 1 cup tofu or tempeh</li> <li>• 2 eggs</li> <li>• ½ cup cottage cheese or 1 oz. cheese</li> <li>• ¼ cup nuts and ¼ cup seeds</li> <li>• 1 cup plain, Greek yogurt</li> </ul> <p><b>Healthy Fat</b> (pick 1 to 2)</p> <ul style="list-style-type: none"> <li>• 2 T. avocado</li> <li>• 1 T. olive oil</li> <li>• 1 T. walnuts or almonds</li> <li>• 2 tsp. nut butter</li> <li>• 1 T. sunflower or pumpkin seeds</li> <li>• 1 T. salad dressing</li> <li>• 10 olives</li> <li>• 2 T. half and half</li> </ul> <p><b>Fiber</b> (if carb counting pick 2 to 4 for 30 to 60 grams)</p> <ul style="list-style-type: none"> <li>• ½ cup white bean salad</li> <li>• ½ cup pinto beans</li> <li>• ½ cup bulgur salad</li> <li>• ½ cup quinoa</li> <li>• ½ cup hummus</li> <li>• 1 cup barley soup</li> <li>• 1 small apple or pear or 1 cup sliced pineapple</li> <li>• 1 cup carrots</li> <li>• ½ cup corn or peas</li> </ul>	<p><b>#1</b> 2 to 3 oz. tuna mixed with 2 T. plain, Greek yogurt, ¼ cup diced green onion, and diced dill pickle, served on lettuce leaves ½ cup hummus with 1 cup carrot slices Iced tea with fresh berries</p> <p><b>#2</b> Taco Salad made with 2 oz ground beef or 3 oz of seasoned crumbled tofu, 1 oz. shredded cheese, ½ cup pinto beans, ½ cup diced onion and tomatoes, 5 sliced black olives, and 2 T. sliced avocado on at least a cup of lettuce Top with salsa Sparkling water</p> <p><b>#3</b> 2 to 3 oz. chicken breast or thighs, grilled with herbs and spices ½ cup bulgur salad (made with parsley, mint, red or green onion, tomatoes, lime juice, olive oil, and sea salt) 1 cup spinach salad with 1 sliced strawberry, sliced red onion, and 1 T. Italian dressing 8 oz. unsweetened iced coffee with a splash of half and half</p> <p><b>#4</b> Quinoa Bowl made with ½ cup cooked quinoa, 2 oz. diced chicken breast, ¼ cup diced tomato, ¼ cup onion, 1 T. cilantro, 2 T. sliced avocado, ¼ cup corn Top with 1 oz. feta cheese and dress with lime juice and olive oil Iced tea</p>

LUNCH – Ingredient Ideas	LUNCH – Recipe Ideas
<p><b>Non-Starchy Vegetables</b> (choose as many as possible, at least one cup)</p> <ul style="list-style-type: none"> <li>• Bell pepper</li> <li>• Carrots</li> <li>• Cilantro</li> <li>• Dill pickle</li> <li>• Green beans</li> <li>• Mushroom</li> <li>• Parsley</li> <li>• Tomato</li> <li>• Broccoli</li> <li>• Cauliflower</li> <li>• Cucumber</li> <li>• Garlic</li> <li>• Lettuce</li> <li>• Onion</li> <li>• Spinach</li> </ul>	<p><b>#5</b> 1 cup of vegetable soup  ½ cup of cottage cheese  ½ sliced bell pepper with hummus  ½ cup of fresh pineapple  Water with slice of lime</p> <p><b>#6</b> ½ cup white bean salad  2 to 3 oz. grilled pork loin (marinade likely to contain carbohydrates)  1 small apple  At least 1 cup roasted green beans  8 oz. unsweetened iced coffee with a splash of half and half</p>
DINNER – Ingredient Ideas	DINNER – Recipe Ideas
<p><b>Protein</b> (pick 1)</p> <ul style="list-style-type: none"> <li>• 2 eggs</li> <li>• 1 cup tofu or tempeh</li> <li>• ½ cup cottage cheese</li> <li>• 2 to 3 oz. tuna</li> <li>• 2 to 3 oz. chicken or turkey</li> <li>• 2 to 3 oz. beef, pork, lamb, venison, or bison</li> <li>• 2 oz. meat with ¼ cup cheese</li> <li>• ¼ cup nuts and ¼ cup seeds</li> </ul> <p><b>Healthy Fat</b> (pick 1 to 2)</p> <ul style="list-style-type: none"> <li>• 2 T. avocado</li> <li>• 1 T. olive oil or 10 olives</li> <li>• 1 T. walnuts or almonds</li> <li>• 2 tsp. nut butter</li> <li>• 1 T. sunflower or pumpkin seeds</li> </ul>	<p><b>#1</b> 1 cup diced tofu, stir fried with 1 T. olive oil, ½ cup sliced zucchini, ½ cup shredded cabbage, and ½ cup sliced carrots  Serve over 1/3 cup brown rice  Berry infused sparkling water</p> <p><b>#2</b> Drizzle half of spaghetti squash with olive oil, salt, and pepper and bake cut side down at 400 degrees for approximately 30 minutes or until fork tender.  Scrape squash strands and sauté with chopped onion and garlic; add 2 beaten eggs or 2 to 3 oz. grilled chicken, chopped parsley, and serve topped with Parmesan cheese and ½ cup spinach or any non-starchy vegetables.  Side of 1 cup fresh fruit, ½ cup steamed green peas, and at least ½ cup green salad with balsamic vinaigrette.  Iced tea with lemon</p>

DINNER – Ingredient Ideas	DINNER – Recipe Ideas
<p><b>Fiber</b> (if carb counting pick 2 to 4 for 30 to 60 grams)</p> <ul style="list-style-type: none"> <li>• 1/3 cup lentils</li> <li>• 1/3 cup brown rice</li> <li>• 1/2 cup sweet potato or yam (with skin)</li> <li>• 1 cup raw or 1/2 cup cooked carrots</li> <li>• 1 small piece or 1 cup fresh fruit</li> <li>• 1/2 cup winter squash (such as acorn)</li> <li>• 1/2 cup green peas or corn</li> </ul> <p><b>Non-Starchy Vegetables</b> (choose as many as possible, at least one cup)</p> <ul style="list-style-type: none"> <li>• Asparagus</li> <li>• Brussels sprouts</li> <li>• Cabbage</li> <li>• Lettuce/Spinach</li> <li>• Parsley</li> <li>• Spaghetti squash</li> <li>• Zucchini</li> <li>• Bell pepper</li> <li>• Carrots</li> <li>• Garlic</li> <li>• Onion</li> <li>• Pico de Gallo</li> <li>• Tomatoes</li> </ul>	<p><b>#3</b> 2 to 3 oz. grilled chicken with garlic and herbs (rosemary, thyme, etc.) 1 small baked sweet potato or yam, sprinkled with olive oil At least 1 cup roasted asparagus Ice water</p> <p><b>#4</b> Beef tacos on lettuce ‘shells’: 2 oz. seasoned ground beef, 1/3 cup shredded cheese, 1/3 cup diced tomatoes, 2 T. sliced avocado, 5 sliced black olives, and 1/3 cup Pico de Gallo served on 3 to 4 lettuce leaves 1/2 cup cooked corn 1 cup fresh strawberries Sparkling water</p> <p><b>#5</b> 2 to 3 oz. grilled salmon with 1 T. olive oil and 1 slice lemon 1/3 cup lentils At least 1 cup roasted Brussels sprouts Herbal tea</p> <p><b>#6</b> Grilled kabobs with 2 to 3 oz. pork, bell pepper, onion, and 1 cup pineapple At least 1 cup cabbage slaw salad (pork marinade or slaw dressing likely contains carbohydrates) 8 oz. unsweetened iced coffee with a splash of half and half</p>

SNACK/DESSERT – Ingredient Ideas	SNACK/DESSERT – Recipe Ideas
<p><b>Protein</b> (pick 1)</p> <ul style="list-style-type: none"> <li>• ¼ cup cottage cheese</li> <li>• 1 oz. sliced cheese</li> <li>• ¼ cup nuts</li> <li>• 2 T. nut butter</li> <li>• ¼ cup seeds</li> <li>• ½ cup plain Greek yogurt</li> </ul> <p><b>Healthy Fat</b> (pick 1)</p> <ul style="list-style-type: none"> <li>• 10 olives</li> <li>• 2 T. avocado</li> <li>• 1 T. olive oil</li> <li>• 1 T. walnuts or almonds</li> <li>• 2 tsp. nut butter</li> <li>• 1 T. sunflower or pumpkin seeds</li> </ul> <p><b>Fiber</b> (if carb counting choose 1 for 15 to 20 grams)</p> <ul style="list-style-type: none"> <li>• ½ cup hummus</li> <li>• 1 cup berries</li> <li>• 1 small apple or pear</li> <li>• 1 cup cubed melon</li> <li>• 1 oz. dark chocolate (70% cacao or higher)</li> <li>• 1 Medjool date</li> </ul> <p><b>Non-Starchy Vegetables</b> (choose as many as possible)</p> <ul style="list-style-type: none"> <li>• Carrots</li> <li>• Radishes</li> <li>• Cauliflower</li> <li>• Mushrooms</li> <li>• Pea pods</li> <li>• Bell peppers</li> <li>• Turnips</li> </ul>	<ul style="list-style-type: none"> <li><b>#1</b> 1 cup fresh raspberries with ½ cup plain Greek yogurt</li> <li><b>#2</b> ¼ cup cottage cheese with 1 cup cubed cantaloupe</li> <li><b>#3</b> ¼ cup hazelnuts and 1 oz. dark chocolate</li> <li><b>#4</b> ½ cup hummus with 1 cup sliced turnips and pea pods</li> <li><b>#5</b> 1 oz. cheese with 1 small pear</li> <li><b>#6</b> 2 T. peanut butter with 1 small apple</li> <li><b>#7</b> Medjool date with ¼ cup almonds</li> </ul> <div data-bbox="917 1480 1437 1921" data-label="Image"> </div>

# My Meal Plan

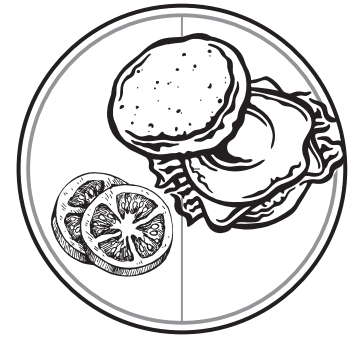
## BREAKFAST



Vegetable omelet with whole grain toast

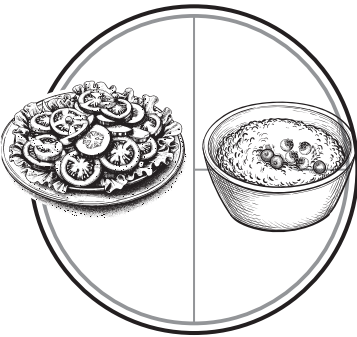


Bowl of oatmeal with walnuts and almonds

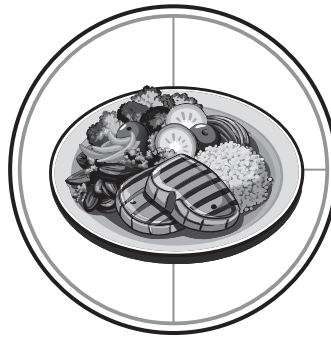


Tomatoes with whole wheat English muffin, cheese and egg

## LUNCH



Cucumber and tomato slices with bowl of cottage cheese and blueberries

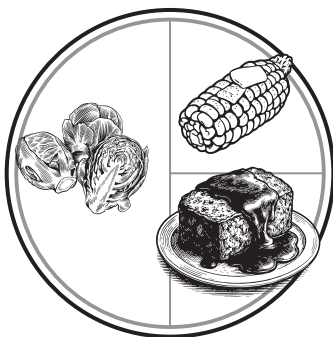


Zucchini, brown rice and chicken



Simple salad (example: tomatoes, carrots and olives), turkey and cheese sandwich on whole wheat bread

## DINNER



Brussels sprouts with corn and meatloaf



Asparagus with whole grain pasta and salmon



Salad, bean chili with cheese with side of avocado

## SNACKS



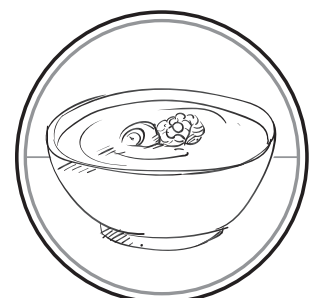
Greek yogurt with walnuts



Whole grain toast with peanut butter



Apples and cheese



Cottage cheese and blackberries

## Tips for Eating Out:

- Before you go out to eat consider reviewing the menu on the company's website. It's best to know what foods fit your health goals.
- Instead of fries try a side salad. Instead of soda consider water or unsweetened ice tea.
- Try having meat that is not breaded or having a lettuce wrap instead bread.
- Consider if you are planning on getting any drinks or sides as these all may increase the carbs at your meal.
- Find a few items for the restaurants you frequent and make a list of menu items that enjoy and fit into your health goals.

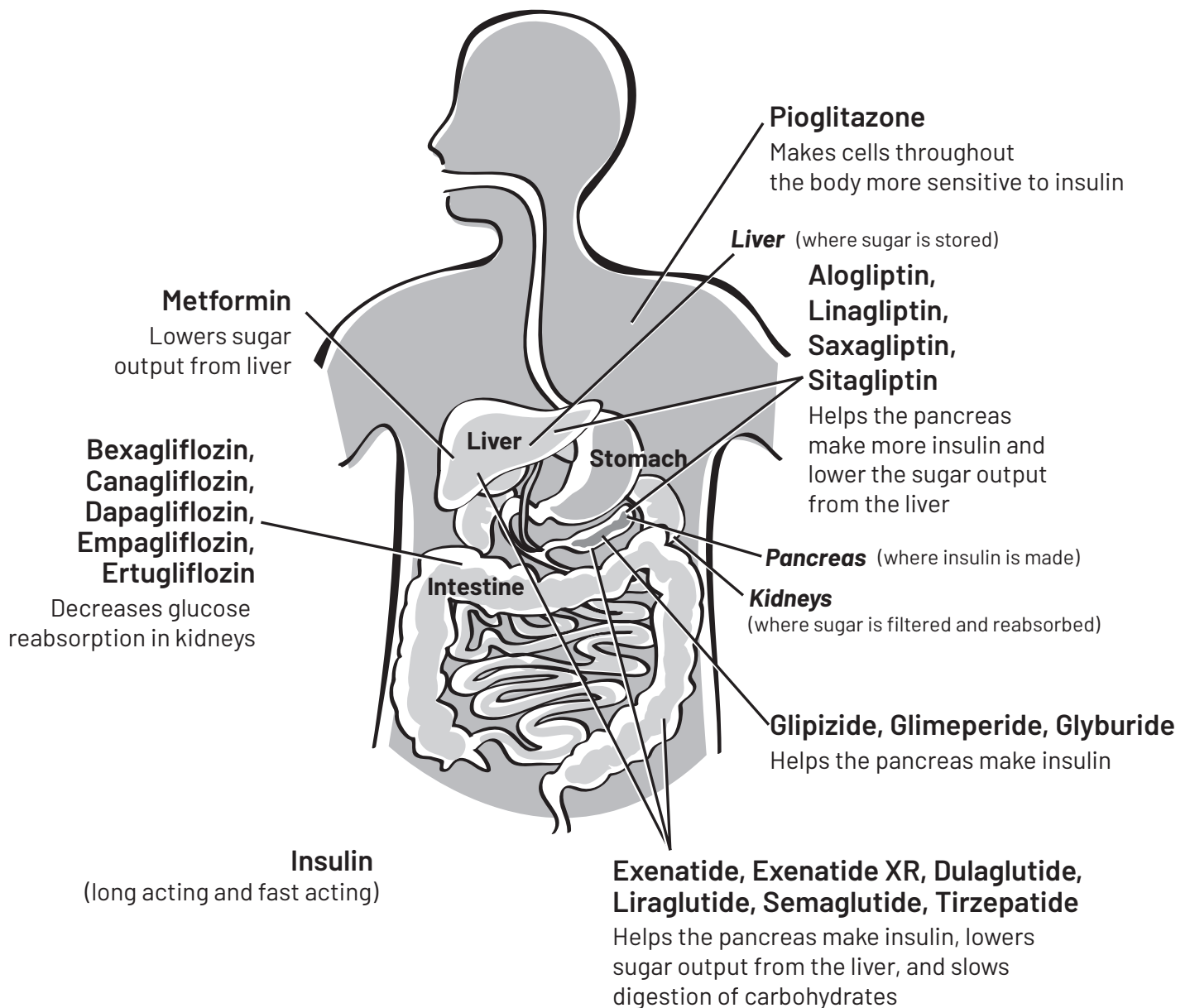


**Tip:** Going for a walk after a meal can lower blood sugar after you eat.

## SECTION 6

# Diabetes Medicine

Below are some examples of different types of diabetes medicines and where/how they work in the body.



## Medicines for Type 2 diabetes

Type	Common names (brand names)	When to take	What to watch for	How it works
<b>BY MOUTH (oral)</b>				
<b>Biguanides</b> \$	Metformin (Glucophage) Riomet (liquid metformin)	Take 1 to 3 times a day with meals.	May cause gas, diarrhea, or stomach discomfort.	Lowers sugar output from liver.
	Metformin ER-extended release (Glucophage XR) Riomet ER (Glumetza) (Fortamet)	Take 1 to 2 times a day.		
<b>Sulfonylureas</b> \$	Glipizide (Glucotrol) (Glucotrol XL)	Take 1 to 2 times a day, often 30 minutes before a meal.	May cause low blood sugar and weight gain.	Helps the pancreas release insulin.
	Glimepiride (Amaryl)			
	Glyburide (Micronase) (Diabeta)			

**Cost:**

\$ lowest

\$\$

\$\$\$

\$\$\$\$ highest

Medicines for Type 2 diabetes (continued)

Type	Common names (brand names)	When to take	What to watch for	How it works
<b>BY MOUTH (oral)</b>				
<b>Thiazolidinediones (TZDs)</b> \$\$	Pioglitazone (Actos)	Take once a day, with or without food.	<b>Black Box warning:</b> TZDs may cause or worsen heart failure. Monitor for swelling and weight gain. Increased risk for certain types of fractures in women. Rare risk of bladder cancer.	Makes cells more sensitive to insulin.
<b>DPP-4 Inhibitors</b> \$\$\$\$	Sitagliptin (Januvia)	Take once a day, with or without food.	Generally well tolerated. Rare risk of pancreatitis and heart failure.	Helps the pancreas release insulin and lowers sugar output from the liver when blood sugar is high.
	Linagliptin (Tradjenta)			
	Alogliptin			
<b>SGLT2 Inhibitors</b> \$\$\$\$	Saxagliptin (Onglyza)	Take once a day.	Increased risk of urinary tract and genital yeast infections. May cause low blood pressure or dehydration. Risk of DKA (diabetic ketoacidosis).	Helps kidneys get rid of extra sugar in the urine.
	Canagliflozin* (Invokana)			
	Dapagliflozin** (Farxiga)			
	Empagliflozin*** (Jardiance)			
	Ertugliflozin** (Steglatro)			
	Bexagliflozin (Brenzavvy)			

\* Benefit in reducing heart attacks and strokes

\*\* Benefit in reducing heart failure risk

\*\*\* Benefit in kidney disease

Medicines for Type 2 diabetes (continued)

Type	Common names (brand names)	When to take	What to watch for	How it works
<b>INJECTABLES (not insulin)</b>				
<b>GLP 1 oral or non-insulin injectable</b> \$\$\$\$	Exenatide XR-extended release (Bydureon)	Injection given once a week.	May cause nausea, vomiting, and weight loss. Rare risk of pancreatitis. May cause rare type of thyroid cancer.	Helps pancreas release more insulin, lowers sugar output from liver, slows movement of food through gut, and promotes feeling of fullness. Possible risk of worsening retinopathy or other eye disease.
	Exenatide (Byetta)	Injection 2 times a day.		
	Liraglutide* (Victoza)	Injection given once a day.		
	Dulaglutide* (Trulicity)	Injection given once a week.		
	Semaglutide*** (Ozempic)			
	Tirzepatide (Mounjaro)			
<b>BY MOUTH (oral)</b>				
	Semaglutide (Rybelsus)	Once daily when first wake up, on empty stomach with no more than ½ cup water. Wait at least 30 min before eating, drinking, or taking other medicine.	May cause nausea, vomiting, abdominal pain, and weight loss. Rare risk of pancreatitis or type of thyroid cancer.	Helps pancreas release more insulin, lower sugar output from liver, slows movement of food through the gut, and promotes feeling of fullness.

\*Benefit in reducing heart attacks and strokes

\*\*\*Benefit in kidney disease

**Medicines for Type 2 diabetes** *(continued)*

Type	Common names (brand names)	When to take	What to watch for	How it works
<b>INJECTABLES (not insulin)</b>				
<b>Amylin Mimetic</b> \$\$\$\$	Pramlintide (Symlin)	Inject immediately before main meals.	May cause nausea, weight loss, and severe low blood sugar. To prevent low blood sugar when starting pramlintide decrease insulin dose.	Slows movement of food through the gut and promotes feeling of fullness.  (For Type 1 or Type 2 taking insulin.)

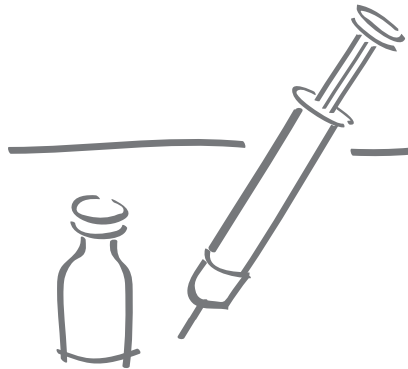
## Types of Insulin

**Background Long-Acting Insulin** (basal) helps control blood sugar throughout the day and night. You take it at the same time each day.

**Meal-Time Fast-Acting Insulin** (bolus) helps control blood sugar after eating meals. You take it right before you eat.

**Mixed Insulin** contains background and meal-time insulin and is taken before meals.

See *Providence Insulin Facts and How Tos* brochure for more insulin details.



## SECTION 7

# Problem Solving

## Alcohol and Diabetes

### Drinking safely with diabetes, What to keep in mind:

1. If you don't currently drink, do not start. Even moderate drinking increases health risks (such as heart disease, certain cancers and even death) compared to not drinking.
2. If you do drink and are taking diabetic medication, please talk with pharmacist about possible interactions
3. If you do drink, drink in moderation. (Moderate alcohol intake is considered up to 1 drink per day for women + up to 2 drinks per day for men.)
4. Watch out for excess carbohydrates in alcohol such as sweetened cocktails (such as a margarita) and carb-heavy drinks (beer) which can cause spikes in your blood sugar. Consider choosing lower sugar drinks, example light beers and dry wines.
5. Be careful of low blood sugars: Certain medications increase your risk of low blood sugars while drinking alcohol. Monitor your blood sugar closely if you're planning to drink. If your blood sugar drops, stop drinking and eat something to bring your glucose level up. Alcohol is never a safe way to lower blood sugars!
6. Never drink on an empty stomach.
7. Don't combine drinking with exercising
8. Consider Wearing diabetes medical identification which can be lifesaving in the event of hypoglycemia

### US Standard Drink Sizes



**12 ounces beer**  
5% ABV



**8 ounces malt liquor**  
7% ABV



**5 ounces wine**  
12% ABV



**1.5 ounces distilled spirits  
(gin, rum, vodka, or whiskey)**  
40% (80 proof) ABV

*Alcohol by volume (ABV) refers to the strength of the alcoholic beverage.*

# Low blood sugar (Hypoglycemia)

Cornerstones4Care™

## Causes

You might get low blood sugar (also called hypoglycemia) if you:

- Take certain medicines and eat too few carbohydrates, or skip or delay a meal
- Take too much insulin or diabetes pills (ask your diabetes care team if this applies to you)
- Are more active than usual

## Signs and Symptoms

Here's what may happen when your blood sugar is low:



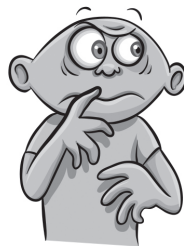
Shaky



Sweaty



Dizzy



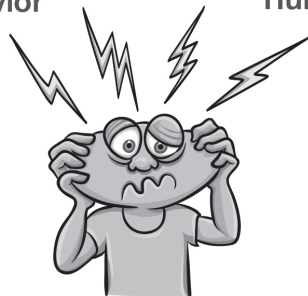
Sudden behavior change



Hungry



Weak or tired



Headache



Nervous or upset

If low blood sugar is not treated, it can become severe and cause you to pass out.  
If low blood sugar is a problem for you, talk to your doctor or diabetes care team.

What blood sugar number is too low? If your blood sugar is 70 or below, or if you have low blood sugar symptoms, follow the instructions on page 45 to bring your blood sugar up quickly.

## Low blood sugar (Hypoglycemia)

### What to do if you think you have low blood sugar

**Check** your blood sugar right away if you have any symptoms of low blood sugar. If you think your blood sugar is low but cannot check it at that time, treat anyway.



**Treat** by eating or drinking 15 grams of something high in sugar, such as:

- 4 ounces (½ cup) of regular fruit juice (like orange, apple, or grape juice)
- 4 ounces (½ cup) of regular soda pop (not diet)
- 3 or 4 glucose tablets
- 5 to 6 hard candies that you can chew quickly (such as mints)



**Wait** 15 minutes and then check your blood sugar again. If it is still low, eat or drink something high in sugar again. Once your blood sugar returns to normal, eat a meal or snack. This can help keep low blood sugar from coming back.



For more information, visit  
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# High blood sugar (Hyperglycemia)

Cornerstones4Care™

## Causes

High blood sugar (also called hyperglycemia) is when there is too much sugar in your blood. Over time, it can cause serious health problems. High blood sugar can happen if you:

- Skip a dose of insulin or diabetes pills
- Eat more than usual
- Are less active than usual
- Are under stress or sick

## What to do about high blood sugar

The best way to avoid high blood sugar is to follow your diabetes care plan. Call your diabetes care team if your blood sugar has been higher than your goal for 3 days and you don't know why.

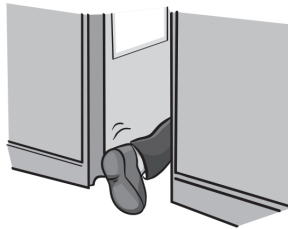
Of course, the best way to know if you have high blood sugar is to check your blood sugar regularly, as directed by your doctor.

## Signs & Symptoms

Here's what may happen when your blood sugar is high:



**Very thirsty**



**Needing to pass urine more than usual**



**Very hungry**



**Sleepy**



**Blurry vision**



**Infections or injuries heal more slowly than usual**

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## How to Bring Down a High Blood Sugar

- Drink plenty of water (at least one cup every 1 to 2 hours).
- Find ways to relax and lower your stress.
- Do some light exercise.
- If you forgot to take your diabetes medicine, check with your provider to see if you should take the missed pill or shot.
- Continue to eat every 3 to 5 hours.
- Avoid sugar-sweetened drinks or high carbohydrate foods.

**Reminder:** Call your diabetes provider if you have three blood sugar numbers above your target at the same time of day in one week.

# Diabetes Emergency Plan

Prepare a waterproof emergency kit with the following items:

- Notepad with list of
  - Medical conditions (including type of diabetes), allergies, etc.
  - Current medicines and doses
  - Contact information for healthcare providers and pharmacy
- Folder with copies of
  - Health insurance card
  - Living will
  - Healthcare power of attorney
  - Recent lab results
- If possible, a 30-day supply of all medicines
- Blood sugar testing supplies with extra batteries
- Cooler with room for 4 re-freezable gel packs
  - Add insulin when needed
- Empty plastic bottle or small sharps container
- Source of fast-acting carbohydrate to treat low blood sugar
- 2-day supply of nonperishable food (peanut butter or cheese crackers, meal replacement shakes or bars)
- At least 3-day supply of bottled water
- Pen or pencil to keep track of blood sugar readings in notepad
- First aid supplies (bandages, cotton swabs, antibiotic ointment or cream)

Other things to consider

- Always wear shoes and socks while awake and check feet daily.
- Pack extra comfortable clothing (including underwear and socks).
- Pack extra batteries and chargers for mobile devices.
- Choose a designated meeting place in case you are separated from family/friends and can't reach them by phone.



## SECTION 8

# Reducing Risks

Keeping your blood sugar, blood pressure, and cholesterol in good control will help you keep your body healthy. The most important areas of the body you and your provider should keep special watch over are your:

- Heart and blood vessels
- Eyes
- Kidneys
- Nerves
- Feet
- Sexual function
- Teeth and gums

### ABCs of diabetes care

		Goals	How Often
<b>A</b>	Hemoglobin A1c	less than 7% for most	Every 3 to 6 months
<b>A</b>	Activity	150 minutes of physical activity per week	Move your body every day
<b>B</b>	Blood pressure	less than 130 to 140/ 80 to 90mmHg	Every provider visit/ home monitoring as needed
<b>B</b>	Blood sugar	For most: 130 or less before meals 180 or less 2 hours after meals	Share with provider at every visit

**ABCs of diabetes care** *(continued)*

		<b>Goals</b>	<b>How Often</b>
<b>C</b>	Cholesterol	Total less than 200 LDL less than 70 to 100 HDL more than 40 to 50 Triglycerides less than 150	At least yearly
<b>D</b>	Dental care	Brush and floss daily	Cleanings 2 to 4 times per year Exams at least yearly
<b>D</b>	Diabetes education	Support and education	1 to 4 times per year as needed
<b>E</b>	Eye care		Exam every 1 to 2 years
<b>F</b>	Food	Eat real food and balanced meals and snacks	Every day
<b>F</b>	Foot care	Wear supportive shoes and move regularly	Daily: Self checks Every provider visit: Foot checks Yearly: Foot exam
<b>K</b>	Kidneys		Annual urine test
<b>S</b>	Sleep	7 to 8 hours	Every night
<b>S</b>	Smoking	Stop smoking, vaping, or using tobacco	
<b>S</b>	Stress	Find ways to cope with stress	Every day
<b>V</b>	Vaccines	Flu, pneumonia, COVID-19, shingles, etc.	At least yearly
<b>W</b>	Weight	Aim for a healthy weight	Every provider visit

# Forms

# Food/Blood Sugar Record

Date: \_\_\_\_\_

Blood sugar readings		Food consumed		
Time:	Blood sugar:	<b>BREAKFAST</b>	<b>LUNCH</b>	<b>DINNER</b>
Time:	Blood sugar:	<b>Time:</b>	<b>Time:</b>	<b>Time:</b>
Time:	Blood sugar:	Food / Amount / Carbs (grams)	Food / Amount / Carbs (grams)	Food / Amount / Carbs (grams)
Time:	Blood sugar:			
Time:	Blood sugar:			
<b>Physical activity/exercise</b>				
		<b>SNACK</b>	<b>SNACK</b>	<b>SNACK</b>
		<b>Time:</b>	<b>Time:</b>	<b>Time:</b>
<b>Emotions/stress</b>		Food / Amount / Carbs (grams)	Food / Amount / Carbs (grams)	Food / Amount / Carbs (grams)

Date: \_\_\_\_\_

Blood sugar readings		Food consumed		
Time:	Blood sugar:	<b>BREAKFAST</b>	<b>LUNCH</b>	<b>DINNER</b>
Time:	Blood sugar:	<b>Time:</b>	<b>Time:</b>	<b>Time:</b>
Time:	Blood sugar:	Food / Amount / Carbs (grams)	Food / Amount / Carbs (grams)	Food / Amount / Carbs (grams)
Time:	Blood sugar:			
Time:	Blood sugar:			
<b>Physical activity/exercise</b>				
		<b>SNACK</b>	<b>SNACK</b>	<b>SNACK</b>
		<b>Time:</b>	<b>Time:</b>	<b>Time:</b>
<b>Emotions/stress</b>		Food / Amount / Carbs (grams)	Food / Amount / Carbs (grams)	Food / Amount / Carbs (grams)



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**OUR MISSION**

As expressions of God's healing love, witnessed through the ministry of Jesus, we are steadfast in serving all, especially those who are poor and vulnerable.

**OUR VALUES**

Compassion, Dignity, Justice,  
Excellence, Integrity

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