Providence Guide to
Living Well With Diabetes

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

4th 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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About Diabetes

What Is Diabetes?

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

When you have Type 2 diabetes, your cell doors do not open like they should to let glucose in. (This is called insulin resistance.) When this happens, your pancreas tries to make more insulin to help get sugar into the cells.

1. The food you eat breaks down into many different nutrients, including glucose (sugar). Your liver can also make sugar.

2. Sugar enters the bloodstream.

3. Insulin enters the bloodstream from the pancreas.

4. Insulin attaches to the cell and opens (“unlocks”) the cell door for sugar to get in.

5. Sugar enters the cell and is used for energy.
Many people with Type 2 diabetes also have trouble making enough insulin. (This is called insulin deficiency.) People with Type 1 diabetes make very little or no insulin. All of these problems cause blood sugar to go too high. Extra sugar in your blood may harm your blood vessels and nerves.

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 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.

- **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.

- **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 important, sustained changes to an exercise or healthy eating routine can help you achieve diabetes remission.

According to *Diabetes Care* *, remission can take different forms:

- **Partial remission** is when a person has maintained a blood sugar level lower than that of a person with diabetes for at least one year without needing to use any diabetes medicine.

- **Complete remission** is when the blood glucose level returns to normal levels completely outside the range of diabetes or pre-diabetes and stays there for at least one year without any diabetes medicine.

- **Prolonged remission** is when complete remission lasts for at least five years. Doctors still consider diabetes to be in remission even if you maintain normal blood sugar for 20 years.

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.

**Fasting Blood Sugar Test**
- **DIABETES** 126 or above
- **PRE-DIABETES** 100–125
- **NO DIABETES** 99 or below

**Non-Fasting Blood Sugar Test**
- **DIABETES** 200 or above
- **PRE-DIABETES** 140–199
- **NO DIABETES** 139 or below

**Hemoglobin A1c Blood Test**
- **DIABETES** 6.5% or above
- **PRE-DIABETES** 5.7–6.4%
- **NO DIABETES** 5.6% or below

Which Plan Is Right for Me?

Because diabetes affects people differently, there are several options to help people with diabetes control their blood sugar, blood pressure, weight, and cholesterol. If you have Type 1 diabetes you will need to use plan #4. (Please see chart on page 5.) If you have Type 2 diabetes or pre-diabetes you may need to use any of the plans.
What Changes My Blood Sugar?

<table>
<thead>
<tr>
<th>STRESS</th>
<th>BLOOD SUGAR</th>
<th>FOOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strengths:</td>
<td></td>
<td>Strengths:</td>
</tr>
<tr>
<td>Challenges:</td>
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<td>Challenges:</td>
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<td>Strengths:</td>
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<td>Strengths:</td>
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<td>Challenges:</td>
<td></td>
<td>Challenges:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EXERCISE</th>
<th>BLOOD SUGAR</th>
<th>DIABETES MEDICINE</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>
Healthy Eating

Eating Patterns*

An eating pattern is the total of all types of foods and beverages you consume. An eating plan is a guide to help you plan when, what, and how much to eat every day.

There are a variety of eating patterns that are used for managing diabetes. Your diabetes care and education specialist can help you find an eating pattern and plan that works for you. Some eating patterns with potential health benefits include*:

- Mediterranean style
- Vegetarian
- Vegan
- Low fat
- Very low fat
- Low carbohydrate
- Very low carbohydrate
- Dietary Approaches to Stop Hypertension (DASH)


When Should I Eat?

The timing of eating can affect your blood sugar. Aim to eat within about 1 hour of waking up and at least every 5 hours while you are awake. Sometimes eating a balanced snack before bed can help keep your morning blood sugar within a safe range. Listen to your body, eat when you are hungry, and stop when you are full.
Talk to your diabetes care and education specialist if you need help with your meal schedule, especially if you work an overnight shift.

**TIP** Breakfast eaters tend to have less belly fat and obesity, lower blood pressure, and lower risk of diabetes. A high-protein breakfast will help reduce daytime hunger and is associated with less snacking in the evening.

**What Should I Eat?**

Healthy eating is very important 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

Healthy eating means choosing a variety of foods from each food group every day. The food groups include protein, healthy fat, and fiber.

1. **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.

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

3. **Fiber**
   - Non-starchy vegetables (lower in carbohydrates) are a healthy choice. Eat plenty of these. Aim for at least five servings per day.
— Grains, legumes, fruits, and starchy vegetables (higher in carbohydrates) 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.

Whenever possible, remember:

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

We find eating the following combination of foods in meals and snacks helps manage blood sugars:

protein + healthy fat + fiber

See suggested foods list on page 13.

Limit highly processed foods, which often include low quality carbohydrates, less healthy fat, and food additives. These are often found in packaged foods and beverages with more than a few ingredients.

Highly processed foods include sweets, chips, juice, sweetened yogurt, white rice, instant potatoes, and commercially fried foods. Items made with white flour (bread, pasta, crackers, cereal) are also highly processed.
A Whole Grain Continuum

Deciding how to make the best use of whole grain health benefits is simple if you use a tool called a “continuum.” For example, a whole grain continuum starts with unprocessed grains on one end and continues through a series of transitions to highly processed grains on the opposite end. The objective is to choose grains from the least processed end.

The first item on the continuum, intact whole grains, is the least processed and the best choice. The last item on the list—highly refined grain products—are the most processed.

<table>
<thead>
<tr>
<th>Grains</th>
<th>Definition</th>
<th>Foods</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Intact whole grains</strong></td>
<td>Unprocessed, whole grains with only the inedible hull or husk removed</td>
<td>Oat groats, hull-less barley, wheat and rye berries, brown rice, millet</td>
</tr>
<tr>
<td></td>
<td>Contains bran, germ, and endosperm, all original three parts of the kernel (intact)</td>
<td>Quinoa and buckwheat (which are actually seeds)</td>
</tr>
<tr>
<td></td>
<td>High nutrient content and slow absorption by the body</td>
<td></td>
</tr>
<tr>
<td><strong>Moderately processed grains</strong></td>
<td>Whole grains that have been chopped, crushed, or rolled</td>
<td>Steel-cut oats, Scottish oats, old-fashioned rolled oats, cracked wheat, cracked rye, whole grain cornmeal (polenta), bulgur</td>
</tr>
<tr>
<td></td>
<td>Wide variation in how absorbed by the body</td>
<td></td>
</tr>
<tr>
<td><strong>Whole grain flour</strong></td>
<td>Whole grain milled into tiny particles to make flour; still contains bran, germ, and endosperm Absorbed quickly by the body</td>
<td>Whole grain flour-based bread, pasta, crackers</td>
</tr>
<tr>
<td><strong>Highly refined whole grain products</strong></td>
<td>Highly processed, often with added sugars and fats Rapid absorption by body</td>
<td>Ready-to-eat breakfast cereals, granola, granola bars, puffed grains, most crackers, chips, bread</td>
</tr>
</tbody>
</table>

Adapted from Hassell, Miles, and Hassell, Mea. 2014. Good Food, Great Medicine, Fourth Edition.
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 fiber.
- Eat until you are satisfied but not too full.
- Try not to eat when you are not hungry.

For people who want a visual cue or enjoy counting, the plate method and carbohydrate counting are described here. If you are taking diabetes medicine, it may be recommended to follow a specific plan.

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 fat.** One quarter of your meal or snack should include some protein and healthy fat.
- **Get plenty of fiber.**
  - Consider the quality of foods higher in carbohydrates. Aim for high fiber, whole foods to 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. Pick two or more of your favorite veggies for a meal.
- **Try to use smaller plates or bowls instead of large ones.**
Non-Starchy Vegetables

- Artichokes
- Asparagus
- Bell peppers
- Bok choy
- Broccoli
- Brussels sprouts
- Cabbage
- 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

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

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

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).

<table>
<thead>
<tr>
<th>Meal/Snack</th>
<th>Carbohydrate Grams (based on low carbohydrate)*</th>
<th>My Carbohydrate Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakfast</td>
<td>30 to 60</td>
<td></td>
</tr>
<tr>
<td>Snack</td>
<td>15 to 20, if needed</td>
<td></td>
</tr>
<tr>
<td>Lunch</td>
<td>30 to 60</td>
<td></td>
</tr>
<tr>
<td>Snack</td>
<td>15 to 20, if needed</td>
<td></td>
</tr>
<tr>
<td>Dinner</td>
<td>30 to 60</td>
<td></td>
</tr>
<tr>
<td>Snack</td>
<td>15 to 20, if needed</td>
<td></td>
</tr>
</tbody>
</table>

* 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.
<table>
<thead>
<tr>
<th><strong>BREAKFAST — Ingredient Ideas</strong></th>
<th><strong>BREAKFAST — Recipe Ideas</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Protein</strong> (pick 1)</td>
<td><strong>#1</strong> 2 eggs scrambled with 1 T. olive oil, spinach, onion, and mushroom (1 cup veggies)</td>
</tr>
<tr>
<td>• 2 eggs (may add fat and fiber choices)</td>
<td>1 cup raspberries</td>
</tr>
<tr>
<td>• 1 hard-boiled egg and 2 T. nut butter</td>
<td>¼ cup cooked oats</td>
</tr>
<tr>
<td>• 1 egg with ¼ cup shredded cheese</td>
<td>Herbal tea</td>
</tr>
<tr>
<td>• ¼ cup walnuts, ⅛ cup seeds, and ½ cup milk</td>
<td><strong>#2</strong> 1 egg omelet with ¼ cup shredded cheddar cheese, bell pepper, spinach, and tomato (1 cup veggies)</td>
</tr>
<tr>
<td>• ½ cup cottage cheese</td>
<td>Top with 2 T. avocado</td>
</tr>
<tr>
<td>• 1 cup plain, Greek yogurt</td>
<td>½ cup black beans</td>
</tr>
<tr>
<td><strong>Healthy Fat</strong> (pick 1 to 2)</td>
<td>1 cup cubed cantaloupe</td>
</tr>
<tr>
<td>• 2 T. avocado</td>
<td>Water with slice of lemon</td>
</tr>
<tr>
<td>• 1 T. olive oil</td>
<td><strong>#3</strong> 1 cup plain, Greek yogurt</td>
</tr>
<tr>
<td>• 1 T. walnuts or almonds</td>
<td>1 T. sunflower seeds</td>
</tr>
<tr>
<td>• 2 tsp. nut butter</td>
<td>1 cup blackberries</td>
</tr>
<tr>
<td>• 1 T. sunflower or pumpkin seeds</td>
<td>8 oz. unsweetened coffee with a splash of half and half</td>
</tr>
<tr>
<td>• 2 T. half and half</td>
<td><strong>#4</strong> ½ cup cooked oat groats cereal with ¼ cup walnuts, ⅛ cup pumpkin seeds, and ½ cup milk, sprinkled with cinnamon on top</td>
</tr>
<tr>
<td><strong>Fiber</strong> (if carb counting pick 2 to 4 for 30 to 60 grams)</td>
<td>Tea</td>
</tr>
<tr>
<td>• ½ cup black beans</td>
<td><strong>#5</strong> 1 egg with ¼ cup shredded cheese</td>
</tr>
<tr>
<td>• ⅓ cup cooked oat groats</td>
<td>½ cup red potatoes with skin</td>
</tr>
<tr>
<td>• ¼ cup cooked wheat berries</td>
<td>1 cup sliced strawberries</td>
</tr>
<tr>
<td>• ¼ cup cooked oats (steel cut, Scottish)</td>
<td>8 oz. unsweetened coffee with a splash of half and half</td>
</tr>
<tr>
<td>• ½ cup fingerling or multi-colored potatoes with skin</td>
<td><strong>#6</strong> 1 hard-boiled egg</td>
</tr>
<tr>
<td>• 1 cup berries</td>
<td>½ cup steel cut oats cereal mixed with 2 T. peanut butter and topped with cinnamon and splash of milk</td>
</tr>
<tr>
<td>• 1 cup cubed melon or pineapple</td>
<td>Water infused with orange, lemon, and lime slices</td>
</tr>
<tr>
<td><strong>Non-Starchy Vegetables</strong> (choose as many as possible, at least one cup)</td>
<td><strong>#1</strong> 2 eggs scrambled with 1 T. olive oil, spinach, onion, and mushroom (1 cup veggies)</td>
</tr>
<tr>
<td>• Bell pepper</td>
<td>1 cup raspberries</td>
</tr>
<tr>
<td>• Garlic</td>
<td>¼ cup cooked oats</td>
</tr>
<tr>
<td>• Mushroom</td>
<td><strong>#2</strong> 1 egg omelet with ¼ cup shredded cheddar cheese, bell pepper, spinach, and tomato (1 cup veggies)</td>
</tr>
<tr>
<td>• Onion</td>
<td>Top with 2 T. avocado</td>
</tr>
<tr>
<td>• Spinach</td>
<td>½ cup black beans</td>
</tr>
<tr>
<td>• Tomato</td>
<td>1 cup cubed cantaloupe</td>
</tr>
<tr>
<td></td>
<td>Water with slice of lemon</td>
</tr>
<tr>
<td></td>
<td><strong>#3</strong> 1 cup plain, Greek yogurt</td>
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<td><strong>#4</strong> ½ cup cooked oat groats cereal with ¼ cup walnuts, ⅛ cup pumpkin seeds, and ½ cup milk, sprinkled with cinnamon on top</td>
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<td>1 cup sliced strawberries</td>
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<td>8 oz. unsweetened coffee with a splash of half and half</td>
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</tr>
<tr>
<td></td>
<td>Water infused with orange, lemon, and lime slices</td>
</tr>
</tbody>
</table>
### LUNCH — Ingredient Ideas

**Protein** (pick 1)
- 2 to 3 oz. tuna (may mix with fat and fiber choices)
- 2 to 3 oz. chicken or turkey
- 2 to 3 oz. beef, pork, lamb, venison, or bison
- 1 cup tofu or tempeh
- 2 eggs
- ½ cup cottage cheese or 1 oz. cheese
- ½ cup nuts and ½ cup seeds
- 1 cup plain, Greek yogurt

**Healthy Fat** (pick 1 to 2)
- 2 T. avocado
- 1 T. olive oil
- 1 T. walnuts or almonds
- 2 tsp. nut butter
- 1 T. sunflower or pumpkin seeds
- 1 T. salad dressing
- 10 olives
- 2 T. half and half

**Fiber** (if carb counting pick 2 to 4 for 30 to 60 grams)
- ½ cup white bean salad
- ½ cup pinto beans
- ½ cup bulgur salad
- ½ cup quinoa
- ½ cup hummus
- 1 cup barley soup
- 1 small apple or pear or 1 cup sliced pineapple
- 1 cup carrots
- ½ cup corn or peas

### LUNCH — Recipe Ideas

**#1** 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

**#2** Taco Salad made with 2 oz. seasoned ground beef, 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

**#3** 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

**#4** 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
### LUNCH — Ingredient Ideas

**Non-Starchy Vegetables** (choose as many as possible, at least one cup)
- Bell pepper
- Cauliflower
- Cucumber
- Garlic
- Lettuce
- Onion
- Spinach
- Broccoli
- Cilantro
- Dill pickle
- Green beans
- Mushroom
- Parsley
- Tomato

**Protein** (pick 1)
- 2 eggs
- 1 cup tofu or tempeh
- ½ cup cottage cheese
- 2 to 3 oz. tuna
- 2 to 3 oz. chicken or turkey
- 2 to 3 oz. beef, pork, lamb, venison, or bison
- 2 oz. meat with ¼ cup cheese
- ¼ cup nuts and ¼ cup seeds

**Healthy Fat** (pick 1 to 2)
- 2 T. avocado
- 1 T. olive oil or 10 olives
- 1 T. walnuts or almonds
- 2 tsp. nut butter
- 1 T. sunflower or pumpkin seeds

### LUNCH — Recipe Ideas

| #5 | 1 cup beef barley soup with vegetables  
| ½ cup cottage cheese  
| 1 cup sliced, fresh pineapple  
| ½ sliced bell pepper with ½ cup Greek yogurt dill dip  
| Water with slice of lime |

| #6 | 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 |

### DINNER — Ingredient Ideas

**Protein** (pick 1)
- 2 eggs
- 1 cup tofu or tempeh
- ½ cup cottage cheese
- 2 to 3 oz. tuna
- 2 to 3 oz. chicken or turkey
- 2 to 3 oz. beef, pork, lamb, venison, or bison
- 2 oz. meat with ¼ cup cheese
- ¼ cup nuts and ¼ cup seeds

**Healthy Fat** (pick 1 to 2)
- 2 T. avocado
- 1 T. olive oil or 10 olives
- 1 T. walnuts or almonds
- 2 tsp. nut butter
- 1 T. sunflower or pumpkin seeds

### DINNER — Recipe Ideas

| #1 | 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 ½ cup brown rice  
| Berry infused sparkling water |

| #2 | 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 |
## Dinner — Ingredient Ideas

**Fiber** (if carb counting pick 2 to 4 for 30 to 60 grams)
- 1/3 cup lentils
- 1/3 cup brown rice
- 1/2 cup sweet potato or yam (with skin)
- 1 cup raw or 1/2 cup cooked carrots
- 1 small piece or 1 cup fresh fruit
- 1/2 cup winter squash (such as acorn)
- 1/2 cup green peas or corn

**Non-Starchy Vegetables** (choose as many as possible, at least one cup)
- Asparagus
- Brussels sprouts
- Garlic
- Onion
- Pico de Gallo
- Tomatoes
- Bell pepper
- Cabbage
- Lettuce/Spinach
- Parsley
- Spaghetti squash
- Zucchini

## Dinner — Recipe Ideas

### #3
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

### #4
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

### #5
2 to 3 oz. grilled salmon with 1 T. olive oil and 1 slice lemon
1/2 cup lentils
At least 1 cup roasted Brussels sprouts
Herbal tea

### #6
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
<table>
<thead>
<tr>
<th>SNACK/DESSERT — Ingredient Ideas</th>
<th>SNACK/DESSERT — Recipe Ideas</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Protein</strong> (pick 1)</td>
<td></td>
</tr>
<tr>
<td>• ¼ cup cottage cheese</td>
<td>#1 1 cup fresh raspberries with ½ cup plain Greek yogurt</td>
</tr>
<tr>
<td>• 1 oz. sliced cheese</td>
<td></td>
</tr>
<tr>
<td>• ¼ cup nuts</td>
<td>#2 ¼ cup cottage cheese with 1 cup cubed cantaloupe</td>
</tr>
<tr>
<td>• 2 T. nut butter</td>
<td></td>
</tr>
<tr>
<td>• ¼ cup seeds</td>
<td>#3 ¼ cup hazelnuts and 1 oz. dark chocolate</td>
</tr>
<tr>
<td>• ½ cup plain Greek yogurt</td>
<td></td>
</tr>
<tr>
<td><strong>Healthy Fat</strong> (pick 1)</td>
<td></td>
</tr>
<tr>
<td>• 10 olives</td>
<td>#4 ½ cup hummus with 1 cup sliced turnips and pea pods</td>
</tr>
<tr>
<td>• 2 T. avocado</td>
<td></td>
</tr>
<tr>
<td>• 1 T. olive oil</td>
<td>#5 1 oz. cheese and 1 small apple</td>
</tr>
<tr>
<td>• 1 T. walnuts or almonds</td>
<td></td>
</tr>
<tr>
<td>• 2 tsp. nut butter</td>
<td>#6 2 T. peanut butter and 1 small pear</td>
</tr>
<tr>
<td>• 1 T. sunflower or pumpkin seeds</td>
<td></td>
</tr>
<tr>
<td><strong>Fiber</strong> (if carb counting choose 1 for 15 to 20 grams)</td>
<td>#7 1 Medjool date with ¼ cup almonds</td>
</tr>
<tr>
<td>• ½ cup hummus</td>
<td></td>
</tr>
<tr>
<td>• 1 cup berries</td>
<td></td>
</tr>
<tr>
<td>• 1 small apple or pear</td>
<td></td>
</tr>
<tr>
<td>• 1 cup cubed melon</td>
<td></td>
</tr>
<tr>
<td>• 1 oz. dark chocolate (70% cacao or higher)</td>
<td></td>
</tr>
<tr>
<td>• 1 Medjool date</td>
<td></td>
</tr>
<tr>
<td><strong>Non-Starchy Vegetables</strong> (choose as many as possible)</td>
<td></td>
</tr>
<tr>
<td>• Radishes</td>
<td></td>
</tr>
<tr>
<td>• Cauliflower</td>
<td></td>
</tr>
<tr>
<td>• Mushrooms</td>
<td></td>
</tr>
<tr>
<td>• Pea pods</td>
<td></td>
</tr>
<tr>
<td>• Bell peppers</td>
<td></td>
</tr>
<tr>
<td>• Turnips</td>
<td></td>
</tr>
</tbody>
</table>
My Meal Plan

Meal time: __________
Protein: _______________________
Healthy fat: _______________________
Fiber (vegetables): _______________________
Fiber (carbohydrates): _______________________

Snack time: __________
Protein: _______________________
Healthy fat: _______________________
Fiber (vegetables): _______________________
Fiber (carbohydrates): _______________________

Meal time: __________
Protein: _______________________
Healthy fat: _______________________
Fiber (vegetables): _______________________
Fiber (carbohydrates): _______________________

Snack time: __________
Protein: _______________________
Healthy fat: _______________________
Fiber (vegetables): _______________________
Fiber (carbohydrates): _______________________

Meal time: __________
Protein: _______________________
Healthy fat: _______________________
Fiber (vegetables): _______________________
Fiber (carbohydrates): _______________________

Snack time: __________
Protein: _______________________
Healthy fat: _______________________
Fiber (vegetables): _______________________
Fiber (carbohydrates): _______________________

Grams of carbohydrate
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 or work. You should be able to talk while being active, but not sing.
Consider walking, aerobics, yoga, resistance training, dancing, biking, and more. Before beginning a new activity, check with your provider to make sure it is safe for you.

What types of movement do you do on a regular basis? __________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

How might you be able to add more movement to your day? ____

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
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.

3+ TIMES A WEEK
Leisure Activities, Strength Training and Flexibility
Golf, bowl, or work in the yard. Lift weights, 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.
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.

How Does Stress Affect Me?

Your body has a stress response that starts within your brain. For example, say your house is on fire. This makes your brain switch into survival mode and you get ready to fight the fire or escape. The brain releases stress hormones. These hormones cause your heart rate and blood pressure to rise, and your liver to make sugar for energy. This has been called the fight or flight response. When the stressor has passed, your body switches back into the rest and digest state. Managing stress helps your body stay in the rest state and lowers your risk of illness.
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 two types of stress: physical and emotional. Here are some examples of both:

- **Physical stress** includes having a headache, a cold or the flu, chronic pain, surgery, or sleeping problems.
- **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. The following ideas for healthy coping may help you manage stress.
### 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
Diabetes Medicine

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

**Metformin**
- Lowers sugar output from liver

**Glipizide, Glimeperide, Glyburide**
- Helps the pancreas make insulin
  - Prandin and Starlix

**Glyset and Precose**
- Slows digestion of carbohydrates

**Actos**
- Makes cells throughout the body more sensitive to insulin

**Januvia, Onglyza, Tradjenta, Nesina**
- Helps the pancreas make more insulin and lower the sugar output from the liver

**Invokana, Farxiga, Jardiance, Steglatro**
- Decreases glucose reabsorption in kidneys

**Glipizide, Glimeperide, Glyburide**
- Helps the pancreas make insulin

**Prandin and Starlix**
- Helps the pancreas make insulin

**Liver**
- (where sugar is stored)

**Pancreas**
- (where insulin is made)

**Kidneys**
- (where sugar is filtered and reabsorbed)
## Medicines for Type 2 diabetes

<table>
<thead>
<tr>
<th>Type</th>
<th>Common names (brand names)</th>
<th>When to take</th>
<th>What to watch for</th>
<th>How it works</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BY MOUTH (oral)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Biguanides $</strong></td>
<td>Metformin (Glucophage)</td>
<td>Take 1 to 3 times a day with meals.</td>
<td>May cause gas, diarrhea, or stomach discomfort.</td>
<td>Lowsers sugar output from liver.</td>
</tr>
<tr>
<td></td>
<td>Riomet (liquid metformin)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Metformin ER-extended release (Glucophage XR)</td>
<td>Take once a day.</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Riomet ER (Glumetza)</td>
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<tr>
<td></td>
<td>(Fortamet)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sulfonylureas $</strong></td>
<td>Glipizide (Glucotrol)</td>
<td>Take once or twice a day.</td>
<td>May cause low blood sugar and weight gain.</td>
<td>Helps the pancreas release insulin.</td>
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<tr>
<td></td>
<td>(Glucotrol XL)</td>
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<tr>
<td></td>
<td>Glimepiride (Amaryl)</td>
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<tr>
<td></td>
<td>Glyburide (Micronase)</td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>(Diabeta)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Meglitinides $$</strong></td>
<td>Repaglinide (Prandin)</td>
<td>Take with meals or up to 30 minutes before your meal.</td>
<td>May cause low blood sugar and weight gain.</td>
<td>Helps the pancreas release insulin.</td>
</tr>
<tr>
<td></td>
<td>Nateglinide (Starlix)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Glucosidase Inhibitors $$</strong></td>
<td>Miglitol (Glyset)</td>
<td>Take with first bite of each main meal.</td>
<td>May cause gas or stomach upset. Must use glucose tabs to treat a low blood sugar.</td>
<td>Slows digestion and absorption of carbohydrate.</td>
</tr>
<tr>
<td></td>
<td>Acarbose (Precose)</td>
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<td></td>
</tr>
</tbody>
</table>

**Cost:**
$ lowest
$$
$$$ $$$
$$$$ highest
# Medicines for Type 2 diabetes (continued)

<table>
<thead>
<tr>
<th>Type</th>
<th>Common names (brand names)</th>
<th>When to take</th>
<th>What to watch for</th>
<th>How it works</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BY MOUTH (oral)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thiazolidinediones (TZDs) $$</td>
<td>Pioglitazone (Actos)</td>
<td>Take once or twice a day, with or without food.</td>
<td><strong>Black Box warning:</strong> TZDs may cause or worsen heart failure. Monitor for swelling and weight gain. Increased risk for certain types of fractures in women. Rare risk of bladder cancer.</td>
<td>Makes cells more sensitive to insulin.</td>
</tr>
<tr>
<td>DPP-4 Inhibitors $$$$</td>
<td>Sitagliptin (Januvia)</td>
<td>Take once a day, with or without food.</td>
<td>Generally well tolerated. Severe joint pain and flu-like symptoms. Rare risk of pancreatitis.</td>
<td>Helps the pancreas release insulin and lowers sugar output from the liver when blood sugar is high.</td>
</tr>
<tr>
<td></td>
<td>Saxagliptin (Onglyza)</td>
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<td></td>
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<tr>
<td></td>
<td>Linagliptin (Tradjenta)</td>
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<tr>
<td></td>
<td>Alogliptin (Nesina)</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>SGLT2 Inhibitors $$$$</td>
<td>Canagliflozin (Invokana)</td>
<td>Take once a day. Take within 2 hours of waking with food.</td>
<td>Increased risk of urinary tract and genital yeast infections. May cause low blood pressure or dehydration.</td>
<td>Helps kidneys get rid of extra sugar in the urine.</td>
</tr>
<tr>
<td></td>
<td>Dapagliflozin (Farxiga)</td>
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<tr>
<td></td>
<td>Empagliflozin (Jardiance)</td>
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<tr>
<td></td>
<td>Ertugliflozin (Steglatro)</td>
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</tr>
</tbody>
</table>
### Medicines for Type 2 diabetes (continued)

There are several combination diabetes pills that combine two types of diabetes medications into one tablet or pill.

<table>
<thead>
<tr>
<th>Type</th>
<th>Common names (brand names)</th>
<th>When to take</th>
<th>What to watch for</th>
<th>How it works</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GLP 1 oral or non-insulin injectable $$$$</strong></td>
<td>Exenatide (Byetta)</td>
<td>Injection given within 60 minutes before breakfast and dinner.</td>
<td>May cause nausea, vomiting, and weight loss. Rare risk of pancreatitis. May cause rare type of thyroid cancer.</td>
<td>Helps pancreas release more insulin, lowers sugar output from liver, slows movement of food through gut, and promotes feeling of fullness. (For Type 2 only.)</td>
</tr>
<tr>
<td></td>
<td>Exenatide XR-extended release (Bydureon)</td>
<td>Injection given once a week.</td>
<td>May cause fewer gastrointestinal side effects.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Liraglutide (Victoza)</td>
<td>Injection given once a day.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lixisenatide (Adlyxin)</td>
<td>Injection given once a day.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dulaglutide (Trulicity)</td>
<td>Injection given once a week.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Semaglutide (Ozempic)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Semaglutide (Rybelsus)</td>
<td>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.</td>
<td>May cause nausea, vomiting, abdominal pain, and weight loss. Rare risk of pancreatitis or type of thyroid cancer.</td>
<td>Helps pancreas release more insulin, lower sugar output from liver, slows movement of food through the gut, and promotes feeling of fullness.</td>
</tr>
</tbody>
</table>
### 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 or after 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.

---

#### INJECTABLES (not insulin)

<table>
<thead>
<tr>
<th>Type</th>
<th>Common names (brand names)</th>
<th>When to take</th>
<th>What to watch for</th>
<th>How it works</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amylin Mimetic $$$</td>
<td>Pramlintide (Symlin)</td>
<td>Inject immediately before main meals.</td>
<td>May cause nausea, weight loss, and severe low blood sugar. To prevent low blood sugar when starting pramlintide decrease insulin dose.</td>
<td>Slows movement of food through the gut and promotes feeling of fullness. (For Type 1 or Type 2 taking insulin.)</td>
</tr>
</tbody>
</table>
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%!

My last A1C was: ___________  Date of test: ___________
Blood Sugar Checks

Checking your blood sugar with a home glucose monitor will tell you:

- If your blood sugar is too high or too low
- When your food plan is working and when it is not working
- When your exercise plan is working and when it is not working
- When your diabetes medicine is working and when it is not working
- If your self care plan is working

Blood Sugar Target Levels

<table>
<thead>
<tr>
<th></th>
<th>No diabetes</th>
<th>If you have diabetes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>ADA* Targets</td>
</tr>
<tr>
<td>Before meals</td>
<td>Below 100</td>
<td>80 to 130</td>
</tr>
<tr>
<td>1 to 2 hours after meals</td>
<td>Below 140</td>
<td>Below 180</td>
</tr>
<tr>
<td>A1C</td>
<td>Below 5.7%</td>
<td>Below 7%</td>
</tr>
</tbody>
</table>

* American Diabetes Association (ADA), 2020.
When Should I Check My Blood Sugar?

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

**Check your blood sugar:**

**A few times a week** if
- Your blood sugar is usually in the target range and your A1C is at target (see chart on previous page listing blood sugar targets)
- You are not making changes to your lifestyle or diabetes medicine(s)

**At least one time per day** if:
- You are trying to understand why your blood sugar is too high or too low
- Your blood sugar is not usually in the target range
- Your A1C is not at goal
- You are making changes to your food choices, exercise plan, or diabetes medicine(s)

**Multiple times per day** if:
- You are taking two or more insulin shots each day
- You are on an insulin pump
- You are pregnant and have diabetes

Below are guidelines to help you decide **when to check your blood sugar and what you may learn from the results:**

1. Check first thing in the morning to see what your blood sugar has been doing overnight.
2. Check before and 1 to 2 hours after starting a meal if you are curious how that meal will change your blood sugar.
3. Check before and after you exercise to learn how exercise changes your blood sugar.
4. Check if you are feeling under the weather.
5. Check if you are feeling stressed to see if your blood sugar is higher than normal.
Pattern Management: What Do My Blood Sugar Numbers Mean?

When you look at your blood sugar records for patterns, think of yourself as a detective looking for clues. You will be trying to find out what affects your blood sugar. You will use a series of steps to investigate what your blood sugar numbers tell you.

Keep records of your blood sugar numbers (either written or electronic). Check your blood sugar for at least three days before looking for patterns.

A pattern is:

• Blood sugars above goal (at the same time of day) three times in seven days and/or

• One or more blood sugars below goal in a week

Do your best to figure out what might have made the blood sugar go too high or too low.

Tips for checking blood sugar

• Keep test strips in original container.
• Store test strips at room temperature.
• 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.
### Understanding blood sugar readings

<table>
<thead>
<tr>
<th>Causes LOW blood sugar</th>
<th>Keeps blood sugar WITHIN TARGET</th>
<th>Causes HIGH blood sugar</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Food</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Eating too little food (especially carbohydrate)</td>
<td>• Eating balanced meals and snacks</td>
<td>• Eating too much (especially carbohydrate)</td>
</tr>
<tr>
<td>• Going too long without eating</td>
<td>• Eating every 3 to 5 hours when you are awake</td>
<td>• Going more than 5 hours without eating (can cause your liver to make extra sugar for you)</td>
</tr>
<tr>
<td>• Drinking alcohol (especially on an empty stomach)</td>
<td>• Avoiding foods that quickly raise blood sugars (such as regular soda and candy)</td>
<td>• Eating meals and/or snacks too close together (closer than 3 hours)</td>
</tr>
<tr>
<td><strong>Stress</strong></td>
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<tr>
<td>• May affect your behaviors (such as eating less than normal or being more active)</td>
<td>• Using relaxation techniques to combat stress</td>
<td>• Being ill or having a cold</td>
</tr>
<tr>
<td></td>
<td>• Getting treatment for an illness or infection</td>
<td>• Infection</td>
</tr>
<tr>
<td></td>
<td>• Getting enough sleep</td>
<td>• Surgery or hospitalization</td>
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<tr>
<td></td>
<td></td>
<td>• Anxiety or stressful situations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Not getting enough sleep (such as with sleep apnea)</td>
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<tr>
<td><strong>Exercise</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Doing too much exercise (or more than planned) without eating enough food</td>
<td>• Getting at least 150 minutes of exercise each week</td>
<td>• Not getting enough activity and exercise</td>
</tr>
<tr>
<td></td>
<td>• Doing a combination of cardio, strength and stretching exercises</td>
<td>• Intense exercise can occasionally increase blood sugar (due to the stress hormones released with intense exercise)</td>
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<tr>
<td><strong>Diabetes Medicines</strong></td>
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</tr>
<tr>
<td>• Wrong dose (accidentally taking too much medicine)</td>
<td>• Taking all medicines as directed</td>
<td>• Wrong dose (missing a dose or taking less than prescribed)</td>
</tr>
<tr>
<td>• Getting prescribed too much diabetes medicine</td>
<td>• Having the correct dose prescribed</td>
<td>• Getting prescribed too little diabetes medicine</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Taking steroid medications (like Prednisone)</td>
</tr>
</tbody>
</table>
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

If you need financial assistance to purchase a sharps container, feel free to contact the Providence Community Resource Desk at 503-215-9488, visit https://oregon.providence.org/our-services/p/providence-community-health-division/community-resource-desk/#locations, or call:

503-215-9488 in Portland area
503-717-7176 Seaside
360-836-3341 SW Washington
541-732-7036 Southern Oregon
Problem Solving

What Should I Do When I Get Sick?

Living well with diabetes means taking care of yourself every day. Here are ways to take care of your diabetes even when you feel sick:

1. Check your blood sugar more often.
2. Continue to take your diabetes medicine.
3. Drink extra water and other drinks without sugar (for example broth or tea). Drink at least one cup every hour you’re awake.
4. Try to eat the same amount of carbohydrate you usually eat. Below are foods you might be able to eat when feeling under the weather:
   • Crackers
   • Bread/toast
   • Cooked cereal
   • Regular gelatin, ice cream, or pudding
   • Regular popsicle or regular soda (ginger ale, 7UP, etc., in small amounts)
   • Yogurt
   • Soup

5. Call your diabetes provider if:
   • Your blood sugar is higher than 400 and stays this high for more than 24 hours
   • You have thrown up or had diarrhea for more than six hours and it’s not getting better
   • You have been sick or have had a fever for a couple of days and you’re not getting better
   • You have chest pain or trouble breathing
   • You can’t think clearly
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 Cornerstones4Care.com
High blood sugar (Hyperglycemia)

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

For more information, visit Cornerstones4Care.com
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.

What Should I Do Before I Have Surgery or a Medical Procedure?

Surgeries and medical procedures can cause your blood sugar to go up. These tips can help you keep your blood sugar closer to normal:

- Ask your provider if you should stop taking your medicine or change the amount of medicine your take before a medical procedure.
- Bring your blood sugar meter and supplies to your appointment.

Traveling With Diabetes

Plan ahead to keep blood sugar levels managed when traveling.

- Take care of your feet.
  - Wear comfortable, well-fitting shoes and socks; avoid going barefoot
  - Exercise your feet and legs during a flight
• Pack extra diabetes medicine and supplies.
• Carry snacks and items to treat low blood sugar.
• Protect your medicine and supplies.
  — Keep with you and not with checked luggage or in a trunk
  — Keep in original packaging if flying
  — Avoid extreme temperatures
• Identify yourself as a person with diabetes.
  — Wear medical ID
  — Keep a list of medicines
  — Bring a note from your provider that says you have diabetes
    (include provider’s name and phone number)
  — Bring extra prescriptions in case you need more medicine
• Prepare for flights.
  — Before your trip go to TSA.gov to learn about current
    screening policies
  — Remember that pressurized air in a plane may make
    drawing insulin from a vial into a syringe more challenging
• Test often.
  — Blood sugar levels can vary due to different foods, activity
    levels, time zones, sleeping habits, and schedule of medicine
    doses
• Prepare for a health emergency.
  — Before traveling overseas, get a list of English-speaking
    providers through the International Association for Medical
    Assistance to Travelers at IAMAT.org
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.
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**

<table>
<thead>
<tr>
<th></th>
<th>Goals</th>
<th>How Often</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong></td>
<td>Hemoglobin A1c</td>
<td>less than 7% for most</td>
</tr>
<tr>
<td><strong>A</strong></td>
<td>Activity</td>
<td>150 minutes of physical activity per week</td>
</tr>
<tr>
<td><strong>B</strong></td>
<td>Blood pressure</td>
<td>less than 130 to 140/80 to 90mmHg</td>
</tr>
<tr>
<td><strong>B</strong></td>
<td>Blood sugar</td>
<td>For most: 130 or less before meals 180 or less 2 hours after meals</td>
</tr>
</tbody>
</table>
## ABCs of diabetes care (continued)

<table>
<thead>
<tr>
<th></th>
<th>Goals</th>
<th>How Often</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>C</strong></td>
<td><strong>Cholesterol</strong>&lt;br&gt;Total less than 200&lt;br&gt;LDL less than 70 to 100&lt;br&gt;HDL more than 40 to 50&lt;br&gt;Triglycerides less than 150</td>
<td>At least yearly</td>
</tr>
<tr>
<td><strong>D</strong></td>
<td><strong>Dental care</strong>&lt;br&gt;Brush and floss daily</td>
<td>Cleanings 2 to 4 times per year&lt;br&gt;Exams at least yearly</td>
</tr>
<tr>
<td><strong>D</strong></td>
<td><strong>Diabetes education</strong>&lt;br&gt;Support and education</td>
<td>1 to 4 times per year as needed</td>
</tr>
<tr>
<td><strong>E</strong></td>
<td><strong>Eye care</strong></td>
<td>Exam every 1 to 2 years</td>
</tr>
<tr>
<td><strong>F</strong></td>
<td><strong>Food</strong>&lt;br&gt;Eat real food and balanced meals and snacks</td>
<td>Every day</td>
</tr>
<tr>
<td><strong>F</strong></td>
<td><strong>Foot care</strong>&lt;br&gt;Wear supportive shoes and move regularly</td>
<td>Daily: Self checks&lt;br&gt;Every provider visit: Foot checks&lt;br&gt;Yearly: Foot exam</td>
</tr>
<tr>
<td><strong>K</strong></td>
<td><strong>Kidneys</strong></td>
<td>Annual urine test</td>
</tr>
<tr>
<td><strong>S</strong></td>
<td><strong>Sleep</strong>&lt;br&gt;7 to 8 hours</td>
<td>Every night</td>
</tr>
<tr>
<td><strong>S</strong></td>
<td><strong>Smoking</strong>&lt;br&gt;Stop smoking, vaping, or using tobacco</td>
<td></td>
</tr>
<tr>
<td><strong>S</strong></td>
<td><strong>Stress</strong>&lt;br&gt;Find ways to cope with stress</td>
<td>Every day</td>
</tr>
<tr>
<td><strong>V</strong></td>
<td><strong>Vaccines</strong>&lt;br&gt;Flu, pneumonia, COVID-19, shingles, etc.</td>
<td>At least yearly</td>
</tr>
<tr>
<td><strong>W</strong></td>
<td><strong>Weight</strong>&lt;br&gt;Aim for a healthy weight</td>
<td>Every provider visit</td>
</tr>
</tbody>
</table>
SECTION 9

Forms
<table>
<thead>
<tr>
<th>Blood sugar readings</th>
<th>Food consumed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Time:</strong> Blood sugar:</td>
<td><strong>BREAKFAST</strong></td>
</tr>
<tr>
<td><strong>Time:</strong> Blood sugar:</td>
<td><strong>LUNCH</strong></td>
</tr>
<tr>
<td><strong>Time:</strong> Blood sugar:</td>
<td><strong>DINNER</strong></td>
</tr>
<tr>
<td><strong>Physical activity/exercise</strong></td>
<td><strong>Emotions/stress</strong></td>
</tr>
<tr>
<td><strong>SNACK</strong></td>
<td><strong>SNACK</strong></td>
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<td><strong>SNACK</strong></td>
<td><strong>SNACK</strong></td>
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</tbody>
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<table>
<thead>
<tr>
<th><strong>Date:</strong></th>
<th><strong>Food consumed</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BREAKFAST</strong></td>
<td>Food / Amount / Carbs (grams)</td>
</tr>
<tr>
<td><strong>LUNCH</strong></td>
<td>Food / Amount / Carbs (grams)</td>
</tr>
<tr>
<td><strong>DINNER</strong></td>
<td>Food / Amount / Carbs (grams)</td>
</tr>
<tr>
<td><strong>SNACK</strong></td>
<td>Food / Amount / Carbs (grams)</td>
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<tr>
<td><strong>SNACK</strong></td>
<td>Food / Amount / Carbs (grams)</td>
</tr>
<tr>
<td><strong>SNACK</strong></td>
<td>Food / Amount / Carbs (grams)</td>
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</tbody>
</table>

**Food/Blood Sugar Record**
Name: 

When to check blood sugar: 

Other directions: 

<table>
<thead>
<tr>
<th>Date</th>
<th>Before Meal</th>
<th>After Meal</th>
<th>Before Meal</th>
<th>After Meal</th>
<th>Before Meal</th>
<th>After Meal</th>
<th>Before Bed</th>
<th>Comments</th>
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