

Diabetes: What You Need to Know

Discharge review before you leave the hospital

We want to be sure that we explained your diabetes instructions well, so that you know how to manage your diabetes when you leave the hospital! Please read this handout and ask your nurse if you have any questions.



Please read this handout and talk with your nurse if you have any questions about managing your diabetes.

Testing Your Blood Sugar

How often you need to test your blood sugar depends on many things.

- The best times to test my blood sugar level with my meter are:

- My blood sugar goal is between _____ and _____

Your Non-insulin Medicines for Diabetes

It is very important that you know the names of your diabetes medicines, your doses, and when to take them.








Name of your non-insulin diabetes medicine(s)	Dose	Is this a new medicine or a change in dose?

- Do not stop taking the medicines when you have taken all of the pills in the bottle. You will need to order refills.
- Talk with your diabetes provider to get refills **before** you run out.
- Call your clinic if you think you may be having side effects. Some of these side effects may be nausea or low blood sugar.

Long-acting Insulin

There are many different types and brands of insulin. We want to help you remember exactly which insulin you will use when you go home.

- Look at the pictures of the different types of **long-acting insulin** below. **Circle** the picture of the one you will take when you go home.
- Put a big **“X”** on the pictures of insulin types that were not prescribed to you.
- Fill in the units and time(s) you will take your long-acting insulin.

<p>Lantus (glargine) vial or grey Lantus SoloStar pen with lavender on the label</p> <ul style="list-style-type: none"> • I will take _____ units at these time(s): _____  <p><i>Lantus SoloStar pen</i></p>	 <p><i>Lantus vial</i></p>	
<p>Levemir (detemir) vial or blue Levemir FlexPen with green on the label</p> <ul style="list-style-type: none"> • I will take _____ units at these time(s): _____  <p><i>Levemir FlexPen</i></p>	 <p><i>Levemir vial</i></p>	
<p>Novolin or Humulin N (NPH) vial or Humulin N grey and white pen</p> <ul style="list-style-type: none"> • I will take _____ units at these times: _____  <p><i>Humulin N pen</i></p>	 <p><i>Novolin vial</i></p>	 <p><i>Humulin N (NPH) vial</i></p>





- You will need to have a prescription for either insulin syringes or insulin pen needles. This will depend on whether you use the vials or the prefilled pens.
- **Remember to safely dispose of your sharps.**

Mealtime Insulin

Some people with diabetes need to take both long-acting and mealtime insulin. If you are taking insulin before some or all of your meals:




- Look at the pictures of different types of **mealtime insulin** below. **Circle** the picture of the one you will take when you go home.
- Put a big **“X”** through the pictures of insulin types that were not prescribed to you.
- Fill in the units of mealtime insulin you will take before meals.

<p>Humalog (lispro) vial or blue Humalog KwikPen with maroon on the label</p> <ul style="list-style-type: none"> • I will take _____ units right before meals  <p><i>Humalog KwikPen</i></p>	 <p><i>Humalog vial</i></p>
<p>Novolog (aspart) vial or dark blue Novolog FlexPen with orange on the label</p> <ul style="list-style-type: none"> • I will take _____ units right before meals  <p><i>Novolog FlexPen</i></p>	 <p><i>Novolog vial</i></p>

<p>Novolin R vial or Humulin R (regular) vial</p> <ul style="list-style-type: none"> I will take _____ units 30 minutes before meals 	 <p>Novolin R vial</p>	 <p>Humulin R vial</p>
<p>Apidra (glulisine) vial or pale blue Apidra SoloStar pen with lime green on the label</p> <ul style="list-style-type: none"> I will take _____ units right before meals  <p>Apidra SoloStar pen</p>		 <p>Apidra vial</p>

- You will need to have a prescription for either insulin syringes or insulin pen needles.
- Remember to safely dispose of your sharps.**

Common Mixed Long-acting and Mealtime Insulin

<p>Novolin or Humulin 70/30 vial or Humulin 70/30 grey and white pen</p> <ul style="list-style-type: none"> I will take _____ units at these time(s): _____  <p>Humulin 70/30 pen</p>	 <p>Novolin 70/30 vial</p>	 <p>Humulin 70/30 vial</p>
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Novolog 70/30 Mix vial or pen with dark blue pen and dark blue label

- I will take _____ units at these time(s):



Novolog 70/30 Mix pen



Novolog 70/30 Mix vial

- You will need to have a prescription for either insulin syringes or insulin pen needles.
- **Remember to safely dispose of your sharps.**

What to Do if Your Blood Sugar Is Too Low

Insulin and oral medications for diabetes work very well to lower blood sugar. Because of this, it is possible that your blood sugar could drop **too** low. This is called **hypoglycemia**. We want to be sure that you know what to do if this happens.

Below are some important questions about blood sugar. When you know the answers to these questions, you can know that you will take the right steps to correct a low blood sugar reaction.

1. How might you feel if your blood sugar is too low?

2. If your blood sugar number is lower than 70, what will you do?

3. **Very rarely**, your blood sugar may stay too low even though you have taken extra sugar or juice and eaten a snack or meal. When should you call your diabetes provider?

4. When should you (or your family member) call 9-1-1?

Soon After You Have Been Discharged

Be sure you do these things after you go home from the hospital:

- Make an appointment to see your care provider within 1 to 2 weeks. Call UW Medical Contact Center at 206-520-5000 or your clinic for an appointment.
- To learn more about diabetes, ask your provider to recommend diabetes classes or appointments with diabetes educators.
- **If you have questions after you go home, be sure to call your clinic or discharge nurse.**

Frequently Asked Questions About Diabetes

What is diabetes?

When you eat, your body changes the food into a sugar called *glucose*. Your body uses this glucose for energy. But to use glucose as energy, your body needs insulin.

If you have diabetes, your body either does not make enough insulin or does not use it well. This means that the glucose stays in the blood, causing *high blood sugar* (also called *high blood glucose*). Too much glucose in the blood can cause serious health problems.

Is there a cure for diabetes?

Diabetes is serious and there is no cure. But having diabetes does **not** mean your life is over. Many people with diabetes live a long and healthy life. Now that you know you have diabetes, it is your job to take care of yourself.

Your health care team will help you. They will talk with you about a diet, activity, blood sugar testing, and medicine plan that you can follow to keep your blood sugar in a normal range.

What are the treatments for diabetes?

The main goal of treatment for diabetes is to keep your blood sugar (or glucose) in a normal range. To do this, we advise that you:

- Control how many carbohydrate foods you eat (foods that increase your blood sugar)
- Become more physically active.
- Take your diabetes medicines as prescribed by your health care provider.
- Test your blood sugar levels at home.

What is the best way to test blood sugar?

Testing with a blood glucose meter will help you manage your diabetes. Testing will also help your health care team see if they need to adjust your medicines to match what your body needs.

The brand of meter you may receive depends on which brand your insurance covers. It takes time and effort to test your blood, but people who test usually have the best blood sugar control.

- You will need:
 - **Test strips** that are made to work with your brand of meter.
 - **Lancing supplies** (to get a small drop of blood from your finger)
- Ask your health care provider how often and when to test your blood glucose. When you are recovering from illness, the best time(s) to test is usually before 1 or more meal(s) or at bedtime.
- Always bring your meter and your diabetes log to your health care provider visits.
- You should plan to keep your blood glucose meter kit with you when you are away from home.

Important Tips About Blood Sugar Testing

- Wash your hands with soap and water before you test.
- Use the instructions included with your glucose meter.
- Know what your numbers mean and what your goal blood sugar is. Ask your health care team for more information if you are unsure.
- Store test strips only in their original container at room temperature.
- Test strips are costly, so use them carefully. Most insurance plans limit how many they will pay for each month.

If you are having a lot of high or low blood sugar results, call your diabetes provider to talk about this. You may need to test your blood sugar more often or adjust your diabetes treatments.

What is low blood sugar reaction?

A low blood sugar reaction is called hypoglycemia. It can occur in people who take medicines for diabetes.

It is important that you know how to recognize the symptoms of hypoglycemia. You will need to act quickly to get your blood sugar level back to normal. If you do not, you could have a much more severe reaction or pass out. Most times, it is very easy to correct a low blood glucose reaction.

The **usual causes** of low blood sugar reaction are:

- Missing or delaying a meal
- Taking too much medicine or taking it at the wrong time
- Getting more physical activity than usual
- Drinking alcohol without eating

Early symptoms of low blood sugar are:

- Headache
- Hunger
- Shaking
- Sweating
- Fast heartbeat
- Pale skin
- Irritability

Later, more severe symptoms are poor coordination, blurred vision, confusion, difficulty staying awake, seizures, even coma.

What should I do to be prepared for possible hypoglycemia?

- Keep 3 packets of **real sugar** or small box of juice with you – at home, in the car, and at work – just in case you need it.
- Make sure to tell your family and friends that you could have a low blood sugar reaction so that they are prepared to help you.

What should I do if I think I have hypoglycemia?

- Check your blood sugar number with your glucose meter.
- If the result is less than 70 (or you do not have your meter with you), eat 3 packets (1 tablespoon) of **real sugar** or drink a small glass of juice right away.
- Check your blood sugar number again in 15 minutes.
 - **If it is more than 100 and you feel better**, have a healthy snack or eat a meal within the next hour.
 - **If it is still less than 70**, eat more sugar or juice and call for help. Repeat testing and take sugar or juice every 15 minutes until help arrives.
 - **If you have symptoms** such as poor coordination, blurred vision, confusion, difficulty staying awake, or seizures, call 9-1-1.

- If you have a low blood sugar reaction within 2 weeks after discharge, call the UW Medicine Contact Center at 206-520-5000 to talk with your diabetes care provider. You may need to have your medicine adjusted.

Refer to this table when you have low blood sugar:

If my blood sugar number is:	I will:	I will then retest my blood sugar:	My repeat blood sugar number should be:	If my repeat blood sugar number is more than 100, I will:
70 to 90	Eat a healthy snack or meal soon	1 hour after I finish eating	More than 100	<ul style="list-style-type: none"> • Go back to my regular routine
Less than 70	Eat 3 packets (1 tablespoon) of real sugar or drink a small juice	15 minutes after I ate the sugar	More than 100	<ul style="list-style-type: none"> • Eat a meal or healthy snack within an hour • Call my diabetes provider if my blood sugar number is less than 70 twice in a day
Less than 70 more than once in a row	Eat another tablespoon of real sugar or drink another small juice	15 minutes after I ate the sugar	If my blood sugar is less than 70 more than twice in a row, I need to call 9-1-1	<ul style="list-style-type: none"> • Keep eating sugar and retest every 15 minutes until help arrives

What is high blood sugar reaction?

A high blood sugar reaction (**hyperglycemia**) can also happen if you:

- Do not take your diabetes medicine, take too little, or take it at the wrong time
- Do not store your insulin properly or use it past 30 days
- Eat too much or do not eat a good balance of food
- Have an illness or infection
- Have trauma or stress (physical or emotional)

Some symptoms of high blood sugar are:

- Feeling thirsty
- Feeling hungry, tired
- Having to urinate often
- Dry or itchy skin
- Blurred vision

What should I do if I have hyperglycemia?

- Drink extra water
- Test your blood sugar more often
- Take your diabetes medicines as prescribed
- Follow your meal plan and get some exercise
- Call your diabetes care team if your blood sugar is still high

What should I eat if I have diabetes?

If you have diabetes, your food choices are vital for your health. A dietitian can help you plan meals to keep your blood sugar at the best level for you.

About Carbohydrates

Carbohydrates (“carbs”) increase your blood sugar. Foods that are high in carbohydrates include:

- Grains (pasta, rice, bread, and cereal)
- Beans
- Starchy vegetables (potatoes and corn)
- Milk and yogurt
- All fruit and fruit juice

Helpful Tips

- Keep your blood sugar levels as close to normal as possible. This helps your body function normally.
- Follow these guidelines to help keep your blood sugar stable.
 - Eat 3 meals each day.
 - Do **not** skip meals.
 - Drink water when you are thirsty.
 - Avoid all sweetened beverages. This includes regular soda, fruit juice, sports beverages, and hot chocolate.
 - Limit salt and high-fat “junk” foods.

- Keep your diet consistent. This means eating similar amounts of food at similar times of the day. This can help your doctor prescribe the most effective diabetes medicine for you.
- Talk with your dietitian to learn more about reading nutrition labels and planning your meals to include foods you like and can afford. We are here to help you.

Meal and Snack ideas

Sample Breakfast

With 3 to 4 servings of carbohydrates (45 to 60 grams)

- 1 to 2 scrambled eggs
- 1 piece of fruit or ½ cup of fruit
- 2 slices whole-grain toast with butter
- 1 cup coffee or tea or 1% or nonfat milk

Sample Lunch

With 4 servings of carbohydrates (60 grams)

- Tuna salad sandwich: 2 to 3 ounces light canned tuna with mayonnaise, lettuce or spinach, tomato, and 2 slices whole-grain bread
- 1 serving fruit
- ½ cup raw carrot sticks
- 1 cup 1% or nonfat milk

Sample Dinner

With 4 servings of carbohydrates (60 grams)

- 3 ounces lean meat (7% to 9% fat), grilled or baked (3 ounces of meat is about the size of the palm of your hand)
- ⅔ cup brown rice
- 1 cup steamed broccoli
- 1 cup 1% or nonfat milk
- 1 piece of fruit or a ½ cup fruit

Optional Snacks

With 1 serving of carbohydrates (15 grams)

- 1 to 2 ounces cheese (1 ounce of cheese is about the size of your thumb) with 5 to 7 whole-wheat crackers
- 1 piece of fruit or ½ cup fruit with 1 to 2 ounces nuts (about 1 handful)
- 1 to 2 tablespoons of natural peanut butter on 1 slice whole-grain bread

Are there different types of diabetes?

The most common kinds of diabetes are:

- Type 1 diabetes
- Type 2 diabetes
- Gestational diabetes

Type 1 Diabetes

- Used to be called Juvenile Onset Diabetes Mellitus or Insulin Dependent Diabetes Mellitus (IDDM)
- Usually occurs before the age of 30 (but sometimes occurs after 30)
- The pancreas no longer makes any insulin
- 5% to 10% of people with diabetes have type 1 diabetes

Type 2 Diabetes

- Used to be called Adult Onset Diabetes Mellitus or Non-Insulin Dependent Diabetes (NIDDM)
- Can occur at any time of life, beginning in adolescence
- The pancreas still makes some insulin
- Occurs more often in overweight people
- Other family members may have diabetes
- 80% to 90% of people with diabetes have type 2 diabetes

Gestational Diabetes

- Found for the first time during pregnancy
- Increases your risk for developing type 2 diabetes later in life, especially if you are overweight

Who is on my diabetes health care team?

Diabetes care is hard work, but you are not alone. Your health care team will help you. Be sure to ask for help when you need it.

Your diabetes health care team includes:

- Your primary care provider (PCP) and team (nurse, dietitian, pharmacist, social worker). These providers help you make changes in your daily life and medicines to control and manage your diabetes.
- Specialists to keep your eyes, blood vessels, kidneys, and feet healthy.
- A financial counselor, if you need help paying for health care.
- The American Diabetes Association, if you want to know about community events, or you need more information or legal advocacy. Call 800-DIABETES (800-342-2383).

References: American Diabetes Association, UW Medical Center Health Online, Harborview and UW Medical Center Endocrinology and Glycemic Teams

Questions?

Your questions are important. Call your doctor or health care provider if you have questions or concerns.

Endocrine & Diabetes Care
Center: 206-598-4882