



Understanding Diabetes

Basic Steps to Help You Manage Your Health



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Introduction

If you've received this booklet, you may have just learned that you have diabetes. For some people, this news comes as a surprise. For others, it helps to explain the strange symptoms they've been having.

In every case, the question is the same:
Now what do I do?

This booklet gives you the basics steps for managing diabetes. If you follow the advice offered here, you will start building the habits you need to manage diabetes throughout your life.

If you've already been living with diabetes, take a moment to review this booklet. It may give you new tips for self-care, or it might remind you of healthy choices you still need to work on.

We invite you to meet with a diabetes educator and attend diabetes classes. These classes will further assist you in managing your diabetes. See "Resources for People with Diabetes" on page 19 for a list of phone numbers and other helpful resources.

What Is Diabetes?

Diabetes is a disease that causes too much sugar in the blood. It's a lifelong disease. It **doesn't** go away, but you can manage it.

Managing diabetes means managing the sugar, or glucose, in your blood. When blood glucose is managed well, people with diabetes can live long, healthy lives.

What are the signs of diabetes?

You may have some, all or none of these problems:

- Extreme thirst
- Needing to pee (urinate) more often
- Headache or blurred vision
- Hunger
- Feeling drowsy or tired
- Slow healing after an illness or injury
- Getting infections often

How does diabetes affect my body?

Your body's main source of energy is glucose, a kind of sugar. A hormone called insulin carries glucose from your blood into your body's cells.

If you have diabetes, your body **doesn't** make enough insulin, or the insulin it makes **doesn't** work the way it should. So, glucose builds up in your

blood. This is called high blood glucose.

Over time, high blood glucose hurts blood vessels and nerves. It also makes it harder for your body to heal and fight infection. This can lead to serious problems in the eyes, kidneys, heart, legs and feet. Managing your blood glucose helps prevent these problems.

What should I do if I have diabetes?

Learn how to manage your diabetes. The goal is to keep your blood glucose as close to normal as possible. (Normal is 60 to 99.) This way, you can prevent or reduce damage to your body.

To manage your diabetes:

- Eat a wide range of healthy foods.
- Manage your weight.
- Be physically active.
- Check your blood glucose as prescribed.
- Manage your blood pressure and cholesterol.
- Take your medicines as prescribed.

Ask your doctor to write a referral so you can take diabetes classes. These classes are offered at your clinic or nearby hospital. The classes give you the tools and knowledge you need.

Are there different kinds of diabetes?

There are two kinds of diabetes: type 1 and type 2.

Type 1 diabetes

Type 1 diabetes happens when your body's immune system destroys the cells that make insulin. Your body **can't** make insulin on its own. People who have type 1 diabetes **must** take insulin.

Type 2 diabetes

With type 2 diabetes, your body makes its own insulin. But it **doesn't** make enough, or the insulin it makes **doesn't** work well. This is the most common kind of diabetes. Often, people **don't** know they have type 2 diabetes until they get a routine blood test.

You are more likely to get type 2 diabetes if you:

- Are overweight.
- Have high blood pressure.
- Have high cholesterol.
- Are **not** physically active.
- Have a family history of type 2 diabetes.
- Are African American, Latino/Latina, Native American, Asian American or Pacific Islander.
- Have given birth to a baby weighing more than 9 pounds, or have gotten diabetes while pregnant (gestational diabetes).

To learn more

American Diabetes Association
www.diabetes.org
1-800-342-2383 (1-800-Diabetes)

National Diabetes Education Program
ndep.nih.gov
1-800-438-5383

Living Healthy with Diabetes

Healthful eating

Healthful eating means eating well-balanced meals and snacks at regular times.

- Eat a variety of healthy foods to help control blood glucose (blood sugar).
- Space your meals during the day. Try to eat a meal every 4 to 5 hours. Include a variety of foods from all food groups.
- If you wish, you may have one or two small snacks between meals. Snacks should be nutritious and lower in calories than a meal. (For example: fat-free yogurt, ½ cup fruit, 3 cups popcorn, ¼ cup nuts). Ask your dietitian about healthful snacks.
- **Do not skip meals.**

There are no foods that you cannot eat. But it is important to know which foods most affect your blood glucose.

Three main nutrients give the body energy (calories):

- Carbohydrate
- Protein
- Fat

- Foods with carbohydrate will raise blood glucose. These foods include breads, pasta, cereals, rice, fruits, milk and yogurt.
- **Do not avoid carbohydrate.** Eating the right amount of carbohydrate at meals and snacks will help to control blood glucose.
- Check blood glucose as directed by your health care provider to see how food choices affect it.

Healthy eating at a glance

- Pay attention to portion sizes.
- Eat a variety of healthy foods every day.
- Choose foods high in nutrition:
 - Fruits and vegetables
 - Beans and legumes
 - Whole grains
 - Heart healthy fats
 - Lean meats and proteins
 - Foods without added sodium, sugars and fat

Manage your weight

Managing weight is not only about how much you eat, but also about the quality of foods you eat.

- Eat smaller portions.
- Eat less sugar.
- Eat less of the high-fat foods.
 - Eat smaller portions of healthy fats such as nuts, avocado and olives.
 - Limit fried foods, fatty meats (bacon, sausage, hot dogs, cold cuts), butter, salad dressings, cream, gravy, chips, bakery items, whole milk, ice cream, pizza, fast food and hard cheeses.
- Choose high-fiber foods such as vegetables, fruits and whole-grain breads and cereals.
 - These foods help you to feel more satisfied with your meal or snack. They are full of nutrients.
- Eat mindfully
 - Listen to your body's signals for hunger. Eat when you feel hungry and stop when you start to feel full.
 - Avoid eating when bored, sad or upset.

Physical activity

Activity can help control your glucose levels. The American Diabetes Association recommends 150 minutes of moderate physical activity (walking, biking, swimming) a week or 75 minutes of vigorous activity (jogging, aerobics) per week. Add to that strength training (lifting weights, resistance bands) two or three days a week.

Talk to your doctor before starting an activity program. This is very important if:

- You are over age 35.
- You have had type 1 diabetes for more than 15 years.
- You have had type 2 diabetes for more than 10 years.
- You have any risk factors for heart or artery disease (such as high blood pressure, high cholesterol or being overweight).
- You have a history of heart or artery disease.
- You have any kind of nerve damage (neuropathy).
- You have eye disease (retinopathy).

Carbohydrate Counting

Your body turns carbohydrate into glucose. Glucose is your body's main source of energy.

What is a carbohydrate?

Carbohydrate (carb) is a nutrient found in food. Carbs are made up of starches, sugars, and fiber. They are necessary for your brain and body to function at their best.

It is important to eat a variety of foods with carbs. Work with your dietitian to develop a healthy eating plan that fits your lifestyle.

<i>Carbohydrates</i>	<i>Foods with little carbohydrate</i>
Grains <ul style="list-style-type: none"> • bread • cereal • rice • pasta Starchy vegetables <ul style="list-style-type: none"> • peas • potatoes • corn • winter squash • dried beans, lentils Fruit Milk and yogurt Sweets and desserts	Proteins <ul style="list-style-type: none"> • meats • chicken and turkey • fish • eggs • cheese Non-starchy vegetables Fats <ul style="list-style-type: none"> • butter, margarine • oils • salad dressings • mayonnaise • nuts, peanut butter Black coffee and tea

How much carbohydrate should I eat?

Foods with carbs make your blood glucose (sugar) levels go up. But, carbs are important for energy and a healthy diet, so don't skip them! Along with protein and fat, they are needed at every meal. Just watch your portion sizes and spread your food choices throughout the day. This will help to keep your blood glucose stable.

Counting carbs at meals helps you eat the right amount. You may count in grams (found on a food label) or carb choices. Your dietitian can show you how to count and help you decide how many carbs are right for you. As a general rule:

- Women may have 45 to 60 grams carbohydrate (3 to 4 carb choices) per meal.
- Men may have 60 to 75 grams carbohydrate (4 to 5 carb choices) per meal.
- For snacks, men and women may have 15 to 30 grams carbohydrate (1 to 2 carb choices).

One carb choice is a serving of food equal to 15 grams of carbohydrate (see next page for serving sizes).

Remember: In addition to counting carbs, it is important to eat a variety of whole, fresh foods for good nutrition. Choose whole grains, fruits and vegetables, unsaturated fats, lean proteins and low-fat dairy foods.

Carbohydrates

Each serving of starch, fruit, milk or sweets equals 1 carb choice.

Starches

Starches can be full of healthy vitamins, minerals and fiber, in particular, whole grains or starchy vegetables.

- One bread slice or small roll (whole wheat, rye, pumpernickel or white)
- One 6-inch tortilla, *chapati*, *roti* or *injera* bread
- One waffle or pancake (size of a slice of bread)
- One 6-inch pita, rice or corn patty (baked)
- ¼ of a 10-inch *naan* bread
- ½ English muffin, hot dog or hamburger bun
- ¼ large bagel or ½ medium bagel
- ½ cup unsweetened cooked cereal or ¾ cup unsweetened dry cereal
- ½ cup cooked spelt or bulgur
- 4 to 6 crackers
- ½ cup cooked rice, pasta, couscous, barley, quinoa, millet, wheat or farro
- ½ cup starchy vegetables (peas, corn, sweet potato, white potato, yams)
- ½ cup cooked legumes (dried beans or lentils, including black beans, kidney, pinto and garbanzo beans)
- ½ cup plantain or yucca
- 1 cup winter squash (acorn, pumpkin, butternut)
- 31 (¾ ounce) pretzels sticks
- 18 (1 ounce) potato chips or tortilla chips
- 3 cups popped popcorn

Your carb choices

Breakfast:

Lunch:

Dinner:

Snacks:

Fruit

Fruits are full of healthy vitamins, minerals, cancer-fighting antioxidants and fiber.

- One small fresh fruit (the size of a tennis ball)
- One half grapefruit
- ½ cup fresh or frozen fruit
- 1 cup melon, berries or papaya
- ½ large banana
- ½ cup grapes
- ½ cup canned fruit (in light syrup or fruit juice)
- ½ cup apple or orange juice
- ⅓ cup grape, cranberry or prune juice
- 2 tablespoons raisins or Craisins
- ¼ cup dried fruits (prunes, apricots, figs)
- 1 large or 3 small dates

Milk

Milk and yogurt are great sources of calcium and vitamin D.

- 1 cup milk
- 1 cup plain yogurt or 6 ounces light yogurt
- 1 cup soy milk

Sweets and desserts

Sweets and desserts are high in sugar and calories with little nutrition. Choose these rarely.

- 2-inch square of cake or brownie
- 2 fortune cookies
- ½ cup ice cream or frozen yogurt
- ¼ cup sherbet or sorbet
- ⅓ cup rice pudding or *kheer*
- 1 tablespoon syrup, molasses, jam, jelly, sugar or honey
- 1 tablespoon sweet-and-sour sauce

Combination foods

These foods are often higher in fat, calories and salt. Choose these less often.

- 1 cup casserole or lasagna equals 2 carb choices
- 1 cup broth or cream soup equals 1 carb choice
- 1 cup bean soup equals 2 carb choices
- ¼ of a 12-inch thin-crust pizza equals 3 carb choices
- Burrito equals 3 carb choices
- Medium order of French fries equals 3 carb choices
- 6-inch sub sandwich equals 3 carb choices

- Soft-shell taco equals 1½ carb choices
- One small egg roll equals 1 carb choice
- One medium meat samosa or ½ vegetable samosa equals 1 carb choice

Foods with little carbohydrate

Non-starchy vegetables

Non-starchy vegetables have little carbohydrate and plenty of vitamins, minerals, cancer-fighting antioxidants and fiber. A serving is 1 cup for raw leafy greens or ½ cup for all other vegetables. Aim to eat 3 to 5 servings per day.

- | | |
|--|---|
| • Asparagus | • Jicama |
| • Amaranth or Chinese spinach | • Lettuce (all types) |
| • Beans (green or wax beans) | • Mushrooms |
| • Bean sprouts | • Okra |
| • Beets | • Onions |
| • Broccoli | • Parsnips |
| • Brussels sprouts | • Pea pods |
| • Cabbage (green, red, napa, bok choy, or Chinese) | • Peppers |
| • Carrots | • Radishes |
| • Cauliflower | • Rutabaga |
| • Celery | • Sauerkraut |
| • Cucumber | • Spinach |
| • Eggplant | • Summer squash (zucchini, summer, crookneck) |
| • Greens (collards, kale, mustard, turnip) | • Tomatoes (fresh and canned) |
| | • Tomato or vegetable juice |
| | • Turnips |

Proteins

Proteins have many nutrients, but may contain fat. Aim to eat 6 to 8 ounces of protein foods each day to prevent excess fat and calorie intake.

1 ounce equals any one of these:

- 1 slice of cheese
- 1 egg
- ½ cup tofu
- ½ cup cooked dried beans or edamame (soybeans)

2 ounces equals any one of the following:

- ½ cup low-fat cottage cheese
- ½ cup tuna (packed in water)

3 ounces cooked chicken, turkey, fish, lean beef, pork, lamb or wild game is about the size of a deck of cards.

Fats

Fats have twice as many calories per bite compared to carbohydrates and proteins. Choose heart healthy plant fats (unsaturated) most often. Aim to eat animal fats (saturated) less often. One serving of fat equals any one of the following:

Fats from plants (unsaturated)

- 1 teaspoon margarine, oil or mayonnaise
- 1 tablespoon light margarine or light mayonnaise
- 1 tablespoon nuts or seeds
- 1 tablespoons salad dressing

- 2 tablespoons light salad dressing
- 2 tablespoons avocado, mashed
- 2 teaspoons peanut butter or other nut butter
- 8 to 10 olives

Animal fats (saturated)

- 1 teaspoon butter
- 1 tablespoon cream cheese
- 1 tablespoon half-and-half
- 2 tablespoons sour cream or low-fat cream cheese

Free foods

Free foods have few calories and carbohydrates. One serving of free foods equals:

- sugar-free, fat-free condiment (mustard, sugar-free jelly)
- 1 tablespoon of ketchup or BBQ sauce (a bigger serving will not be a free food)
- vinegar, lemon juice or lime juice
- dill pickles
- sugar-free Jell-O
- black coffee or tea, sugar-free soda pop, club soda or diet tonic water
- herbs and spices

Sample Meal Plan for Diabetes

Breakfast (4 carb choices, 60 grams carbohydrate)

Coffee, tea or water

1 cup (8 ounces) skim or 1% milk (1-carb choice)

1 small piece of fresh fruit or 1 cup berries (1-carb choice)

Any **one** of the following (2-carb choice):

- 1 slice toast with 1 tablespoon of margarine or peanut butter and ½ cup of cereal with skim or 1% milk
- 1 cup cereal with skim or 1% milk
- 1 egg and 2 slices toast with 1 tablespoon margarine or peanut butter

Lunch (4 carb choices, 60 grams carbohydrate)

Coffee, tea or water

1 cup (8 ounces) skim or 1% milk (1-carb choice)

Small piece fresh fruit or 1 cup berries (1-carb choice)

Raw vegetables (add to sandwich or serve on the side)

Any **one** of the following (2-carb choice):

- Sandwich (made with 2 slices whole-grain bread)
- ½ sandwich with 1 cup soup
- 2 corn tortillas with meat and vegetables

Dinner (4 carb choices, 60 grams carbohydrate)

Coffee, tea or water

Breast of chicken or pork chop (3 to 4 ounces)

Cooked vegetable

Tossed salad with small amount of low-fat dressing

1 cup (8 ounces) skim or 1% milk (1-carb choice)

1 small piece fruit or ½ cup canned fruit, packed in juice or light syrup (1-carb choice)

Any **one** of the following (2-carb choice):

- Medium baked potato
- 1 cup mashed potato
- ⅔ cup rice or pasta

Snacks (1 or 2 carb choices, 15 to 30 grams carbohydrate)

Any **one or two** of the following:

- Small piece fresh fruit
- 3 graham cracker squares
- 1 cup raw vegetables with low-fat dip
- 1 ounce (12 to 15) baked chips with salsa
- Light yogurt (100 calories)
- 1 cup (8 ounces) skim or 1% milk
- 3 cups popped popcorn
- 6 vanilla wafers

Checking Your Blood Glucose

Checking blood glucose (sugar) regularly tells you how well your diabetes care plan is working. Your blood glucose readings will also help you and your care team adjust your diabetes care plan, if needed.

To check your blood glucose, you will need a drop of your blood to use with your blood glucose meter. Take your meter with you wherever you go. You may want to keep a second meter at work or school.

How do I check my blood glucose?

1. Gather your equipment:
 - Blood glucose meter
 - Test strips (small plastic strip)
 - Lancets (sharp needle) and lancing device
 - Sharps container
 - Blood glucose log book
2. Wash your hands in warm, soapy water. Rinse and dry them well.
3. Prepare your lancing device and place a test strip in the meter to turn it on.

4. Lance (prick or poke) the side of the tip of your finger with the lancing device. To easily get a drop of blood, keep your hand below heart level. After you lance your finger, gently squeeze your finger at the top knuckle. (If you have trouble getting blood, talk with your diabetes educator.)
5. Apply blood to the tip of the test strip.
6. Write your result in your log book. If your glucose level is above or below your target range, take a moment to think about why this might be. Write a short note about it in your log book.
7. Remove the lancet from the lancing device. Place the lancet in your sharps container. You may throw your used test strip away in the garbage.



Please bring your log book and blood glucose meter to every clinic visit.

Safely disposing of your lancet (sharps)

Your sharps container should:

- Seal tightly and stand up straight without tipping over.
- Hold objects without leaking, breaking, cracking or letting the sharps push through.
- Be clearly labeled and easy to dispose.
(Contact your garbage company for information on disposal.)

Check blood glucose regularly

Ask your care team to mark the times you should check your blood glucose level.

- Before breakfast
- Two hours after breakfast
- Before lunch
- Two hours after lunch
- Before dinner
- Two hours after dinner
- At bedtime (at least three hours after eating)
- Other: _____

Goals are:

Before a meal: _____

Two hours after a meal: _____

Bedtime: _____

When should I check my blood glucose?

Talk with your diabetes care team about when and how often to check your blood glucose. You should also check your glucose when:

- You have signs of low blood glucose. If you know your blood glucose level, you can treat it correctly. If you cannot check your blood glucose, eat or drink something that contains carbohydrate.
- You are sick. The level of glucose in your blood can rise when you are sick. You may need to check your glucose more often than usual (every 2 to 4 hours). Work with your diabetes care team *now* to plan for those days when you feel sick.

When should I call my diabetes care team?

Call your care team when:

- Your blood glucose has been over 240 for more than a day.
- Your blood glucose is below 70 two or more times in one week.
- **For type 1 diabetes:** You have ketones in your blood or urine.

Have the following information ready when you call:

- Your blood glucose numbers
- The type and amount of diabetes medicine you take and when you last took it
- If you have taken any other medicines or have made recent lifestyle changes
- Your temperature, if you are sick
- **For Type 1 diabetes:** if you have ketones in your blood or urine

Call 911 if you need help treating low blood glucose.

Know the Difference Between High and Low Glucose

High blood glucose (hyperglycemia)

Symptoms

- Extreme thirst
- Urinating more often
- Headache
- Hunger
- Blurred vision
- Feeling drowsy or tired
- Slow healing after illness or injury
- Frequent infections

Possible causes

- Too much food
- Wrong type or amount of diabetes medicine or insulin
- Stress or illness
- Some medicines

What to do

- Test your blood glucose regularly.
- **If you take insulin:** take correction insulin.
- Check ketones, if your blood glucose is over 240.
- Call the doctor if your glucose level is often above your goal. The doctor may need to change your insulin or diabetes medicine.
- Call your care team if you are ill.



Low blood glucose (hypoglycemia)

Symptoms

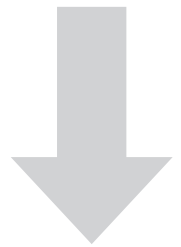
- Shaking, sweating, fast heartbeat
- Feeling dizzy, tired or weak
- Feeling anxious and irritable
- Feeling nervous, crabby or confused
- Hunger
- Vision problems, headache
- Numb or tingling mouth

Possible causes

- Not enough carbohydrate
- Too much insulin or diabetes medicine
- More activity than normal
- Stress, alcohol, some medicines

What to do

- Test your blood glucose:
 - If under 70, have ½ cup juice or 3 to 4 glucose tablets.
 - If under 50, have 1 cup juice or 6 to 8 glucose tablets.
- Repeat test every 15 minutes until blood glucose is between 70 and 100. **Call 911 if it does not get better.**
- Call your care team if you have low blood glucose two or more times per week.



Treating Hypoglycemia (Low Blood Glucose)

Type 1 and Type 2 Diabetes

What is hypoglycemia?

When your blood glucose (blood sugar) level goes below 70, or you have certain symptoms, we say you have hypoglycemia (low blood glucose).

If not treated quickly, it can be dangerous. Follow the treatment guidelines listed here. If you over-treat low glucose, it can cause “rebound hyperglycemia” (high blood glucose), which is not healthy for your body.

Reduce your risk of hypoglycemia

1. Treat low blood glucose right away.
2. Eat balanced meals and snacks spread evenly throughout the day.
3. Your blood glucose should be at least 100 to drive, exercise, do heavy housework or if you can't eat for an hour.
4. Take the prescribed amount of medicines that lower blood glucose (such as sulfonylureas, meglitinides or insulin).
5. Ask your doctor before taking any herbal remedies (such as bitter melon or fenugreek), as these may lower blood glucose.
6. Watch your blood glucose carefully if you are under stress, exercising harder or more often or drinking alcohol on an empty stomach.
7. Call your care team if your blood glucose readings are often low.

What are the signs of low blood glucose?

You may have low blood glucose if:

- You feel shaky.
- You start sweating.
- Your heart begins to beat fast.
- You feel dizzy, tired or weak.
- You feel nervous, crabby or confused.
- You are suddenly very hungry.
- You cannot see well.
- You have a headache.
- Your lips or mouth feel numb or tingly.

Very young children may seem dazed, confused, tired and crabby. If they are old enough to talk, their speech may slow. Some children use a special word to describe how they are feeling, such as “silly,” “weird” or “tired.”

Sometimes symptoms occur at night. If you are restless, sweating, having nightmares or waking up with headaches, you may have low blood glucose. Check your glucose and treat yourself if needed.

How should I treat low blood glucose?

You need to treat low blood glucose as soon as possible. It will not get better on its own.

What to do:

1. Check your blood glucose, if you can.
2. Eat or drink carbohydrate right away.
 - If glucose level is 51 to 70: eat or drink 15 grams of carbohydrate (one carbohydrate choice from the box below).
 - If glucose level is less than 50: eat or drink 30 grams of carbohydrate (pick two different carbohydrate choices or one carbohydrate choice and have twice the amount shown.)

Each of these items has 15 grams of carbohydrate (1 carbohydrate choice):

- 3 to 4 glucose tablets
- ½ cup (4 ounces) regular soda pop (soda pop with sugar)
- ½ cup (4 ounces) fruit juice
- Small box of raisins
- 1 cup (8 ounces) skim or low-fat milk
- Small tube (15 grams) of glucose gel

– Note: Do not take insulin for the carbohydrate you eat to treat a low blood glucose.

3. Wait 15 minutes before eating or drinking anything else. Then, re-check your blood glucose.
4. At your next meal, eat your regular amount of carbohydrate and take your regular dose of insulin.

5. Repeat these steps until your glucose is between 70 and 100. **Your glucose level should be at least 100 if:**

- You are going to drive. Always check glucose before you drive.
- You are going to exercise. This includes heavy housework, yard work, running, walking or other physical activity.
- Your next meal or snack is 1 hour or more away.

6. Check your glucose again in one hour if you take insulin, sulfonylureas or meglitinides.

Call 911 if your blood glucose does not get better.

What happens if I can't treat myself?

Your doctor may prescribe glucagon (medicine to raise your blood glucose). If your glucose is very low and you cannot eat or drink carbohydrate, someone else can give you a shot of this medicine.

If your doctor prescribes this, we will give you special instructions to share with family and friends (as well as teachers, day care providers and other caregivers, if the glucagon is for a child).

When should I call my care team?

Let your diabetes care team know if:

- You have more than two to three low blood glucose readings in a row.
- You have two or more low readings in 24 hours.
- You have low readings at the same time of day several days in a row.
- You often need to eat extra food to keep your blood glucose from getting too low.

How to Manage Diabetes on Sick Days

When you are sick, your blood glucose may be higher than usual. It is important to do the following.

- **Always take your diabetes medicine or insulin, even if you can't eat.** Ask your diabetes care team if you should change the amount of medicine or insulin you take when you are sick.
- **Test your blood glucose often:** before every meal and at bedtime, or every 4 hours during the day. Record your blood glucose levels.
- **Try to sip 6 to 8 ounces (3/4 to 1 cup) of caffeine-free liquid every hour while awake.** This will help keep you hydrated.
 - If you are having trouble keeping liquids down, sip as much as you are able.
 - Options include water, clear broth, tea (no caffeine), soda pop (no caffeine) and clear fruit juice.
- **If your stomach is upset and you cannot eat as you normally would:** you may eat or drink 1 carb unit (15 grams of carbohydrate) every hour while awake. This may be added to the liquids you drink every hour.

Some options include:

- ½ cup fruit juice
- ½ cup regular (not diet) soda pop, no caffeine
- 1 Popsicle (not sugar-free)
- ½ cup regular Jell-O (not sugar-free)
- 5 to 6 saltine cracker squares
- 1 piece of toast

If You Live Alone

Always keep some sick-day foods handy in case you are unable to go to the store to buy them.

If you get sick, ask a friend or family member to check on you a couple of times a day.

- **If you take insulin:** You will need to take your mealtime insulin and your correction insulin as prescribed by your care team.
- **Ask your care team or pharmacist how over-the-counter medicines may affect your diabetes (especially cough syrups and cough drops).**

When should I call my care team?

Call your care team if:

- Your blood glucose has been over 240 for more than a day.
- You have vomiting (throwing up) or diarrhea (loose stools) for more than six hours.
- You feel sleepier than usual.
- You have trouble breathing.
- You are unable to think clearly.

If you need to go to the hospital, your care team may change your diabetes plan.

Choosing a Doctor to Help You Manage Your Diabetes

Often, your family doctor is the first person you will see for your diabetes care—and the person you will see most often at clinic visits. For this reason, it is vital to choose a doctor who is up-to-date on diabetes care and research.

Diabetes care requires a team approach. Besides you and your doctor, your care team should include a nurse, dietitian, pharmacist and diabetes educator.

If you are not yet working with a diabetes educator, ask your doctor for a referral. Educators are experts in diabetes. They will teach you the skills you need to manage your disease.

If you have financial concerns related to your health care, please contact the American Diabetes Association of Minnesota at 763-593-5333 or 1-888-DIABETES [1-888-342-2383].

You may also visit the American Diabetes Association web site at www.diabetes.org.

What should I expect from my care team?

Your care team should help you manage your diabetes. Each provider should be committed to helping you control your blood glucose (blood sugar) and watch for health problems. Good management by you and your care team includes:

- Regular clinic visits (at least four times a year)
- Regular glucose testing at home
- Ketone testing when your blood glucose is high (if directed by your care team)
- An A1c test every three to six months
- Yearly cholesterol and triglyceride tests (more often if you take medicine for cholesterol)
- Blood pressure tests at each doctor's visit
- Proper foot care:
 - A foot exam at each doctor's visit
 - Checking your feet often at home (your care team should tell you what to look for)
- A yearly eye exam with an ophthalmologist (eye doctor)
- A dental exam every six months
- A urine protein check each year
- Help managing your medicine or insulin
- A meal plan that's right for you.

What should I expect from my doctor?

Your doctor should be able to explain the following:

- **The benefits of well-controlled diabetes.** Over time, high blood glucose levels can lead to severe illness and long-term problems. If you control your blood glucose, you will reduce your risks and greatly improve your quality of life. To do this, you will need the support of your doctor and family.
- **How, when and why to test your blood glucose.** Regular testing teaches you how to manage your diabetes better. Your doctor or nurse will show you how and when to test your blood glucose. They will tell you what your results mean. They will also teach you how to use your results to improve your health.
- **How to find a meal plan that's right for you.** Certain foods can affect your blood glucose level. Your doctor should refer you to a dietitian to help you plan meals that fit your lifestyle. Your dietitian can also provide tools to help you build new eating habits.
- **Why and how often to have an A1c test.** This test shows your average blood glucose level over two to three months. Your doctor should order this test every three to six months.
- **Why to have regular check-ups and self-exams.** Regular tests and exams will help catch problems before they become harder to treat.
- **The need to control blood glucose during pregnancy.** If you are pregnant or are planning to become pregnant, talk to your care team. Good glucose control is vital to the health of both mother and baby.

You might also ask your doctor:

- How many patients with diabetes do you manage?
- Do you work with other diabetes experts such as dietitians and nurse educators?
- Do you attend a CME (continuing medical education) course in diabetes yearly?
- Do you read professional diabetes journals such as *Diabetes Care* or *Clinical Diabetes*?

Resources for People with Diabetes

Diabetes websites and resources

For more information about support groups and other resources in your area, contact your diabetes educator or national diabetes groups, such as the American Diabetes Association.

General diabetes

American Diabetes Association

1-800-342-2383; www.diabetes.org

(general information on diabetes, gestational diabetes or diabetes in children)

National Center for Chronic Disease Prevention and Health Promotion

1-800-232-4636 (CDC-INFO);

www.cdc.gov/diabetes

Medline Plus

www.nlm.nih.gov/medlineplus/diabetes.html

National Diabetes Information Clearinghouse

1-800-860-8747; www.diabetes.niddk.nih.gov

National Diabetes Education Program

1-800-438-5383; www.ndep.nih.gov

American Association of Diabetes Educators

www.diabeteseducator.org (find an educator near you)

Diabetes and nutrition

My Food Advisor

<http://diabetes.org/food-and-fitness/food/myfoodadvisor.html>

Academy of Nutrition and Dietetics

www.eatright.org

National Agricultural Library

www.nutrition.gov

Choose My Plate, USDA

www.choosemyplate.gov

Diabetes and nutrition apps

- Calorie King
- MyFitness Pal
- Glucose Buddy
- AADE Goal Tracker

Gestational diabetes

March of Dimes

www.marchofdimes.com/pnhec/188_1025.asp

National Institute of Diabetes and Digestive and Kidney Disease

1-800-860-8747;

www.diabetes.niddk.nih.gov/dm/pubs/gestational

Children with diabetes

Juvenile Diabetes Research Foundation
International
www.jdrf.org

Children with Diabetes Family Support Network
www.childrenwithdiabetes.com

My Plate Kids' Place, USDA
www.choosemyplate.gov/kids

American Diabetes Association
www.diabetes.org/in-my-community/diabetes-camp/
(camps for children with diabetes)

Diabetes and cystic fibrosis

Cystic Fibrosis Foundation
www.cff.org (diabetes manual available)

M Health Fairview diabetes education

M Health Fairview offers a number of resources to help you manage your diabetes, including diabetes classes and pharmacist support.

For children (from any hospital or clinic)

M Health Fairview University of Minnesota Masonic Children's Hospital: 612-365-6777

For adults

M Health Fairview University of Minnesota Medical Center

- *West Bank:* 612-672-6700
- *East Bank:* 612-626-1123

M Health Fairview Clinics
612-672-6700

M Health Fairview Clinics and Surgery Center -
Maple Grove
763-898-1000

Fairview Range Medical Center
218-362-6224

M Health Fairview pharmacists

Your pharmacist can answer many of your questions about your medicines. To schedule an appointment with a Medication Therapy Management pharmacist, call (612) 672-7005 (toll free: 1-866-332-3708).

For a complete list of Fairview pharmacies and contact information, go to <https://www.fairview.org/services/pharmacy>.

Additional M Health Fairview services

M Health Fairview also offers the following services to support your diabetes care.

- Behavioral Health
- Cardiovascular and Heart Care
- Care Coordination
- Eye Care
- Foot Care
- Kidney Care
- Neurology
- Nutrition Care
- Physical Therapy and Diabetes Activity Program
- Weight Management

Ask your provider or diabetes educator if you'd like more information.

Notes:

