

# DIABETES AND HEART DISEASE

## HOW TO CONTROL YOUR DIABETES **AND** REDUCE YOUR RISK OF HEART DISEASE

Name: \_\_\_\_\_

*Check where applicable*

- Take an active part in your treatment.**
- Eat right and control your weight.**
  - Eat a variety of foods. Choose food from each of the four food groups.
  - Have some starchy food at each meal, such as bread, pasta, potato, or rice.
  - Cut down on fat, especially fat that comes from animal foods such as meat, butter, and cheese.
  - Avoid candy and cookies.
  - Allow 4-6 hours between your meals.
  - Eat healthy, small snacks.
  - Limit your alcohol - no more than 2 drinks per day.
- Plan to be active 30 minutes or more every day.**
- Take your medication as prescribed.**
- Check your blood glucose regularly.**
- Don't smoke.**
- Control your blood pressure.**
- Control your blood cholesterol.**

# SOME IMPORTANT FACTS ABOUT DIABETES AND HEART DISEASE

*If you have diabetes, you are more likely to have a heart attack or a stroke.*

*Diabetes usually develops in adults, especially if someone in your family has diabetes. You can help control your diabetes by making some changes in how you live.*

*Diabetes can also damage the blood vessels in other parts of your body, especially in your eyes and kidneys. This can lead to serious problems such as blindness and kidney failure.*

**THE GOOD NEWS IS: YOU CAN REDUCE YOUR RISK OF HEART DISEASE.**

**Work with your doctor:**

**To control your diabetes.**

**To control the other factors that can lead to heart disease.**

# CONTROLLING YOUR DIABETES

## WHAT IS DIABETES?

Much of the food we eat is broken down into glucose (a kind of sugar). This glucose then travels into the blood where it is carried to the cells. Insulin is a substance made by the body that allows glucose to get into the cells. Inside the cells, the glucose is used as fuel to give us energy.

If you have diabetes, your body cannot make enough insulin, or it cannot properly use the insulin it makes. The glucose stays in your blood, and your cells don't get the energy they need.

There are two main types of diabetes: Type 1 and Type 2. Type 1 diabetes usually occurs early in life. With Type 1 diabetes, you need to take insulin every day. Type 2 diabetes is the most common type. It can often be controlled by eating carefully and by being physically active every day. But you may need pills or insulin or both if your blood glucose cannot be lowered to a normal level with diet and exercise.

## SEVEN WAYS TO CONTROL YOUR DIABETES

*If you have **any** questions about this information, ask your doctor.*

### I. TAKE AN ACTIVE PART IN YOUR TREATMENT

Learn how to live with diabetes. Keep regular appointments with your doctor. If you miss one, call and make another one as soon as you can. If you want to talk with a diabetes educator or a dietitian, ask your doctor about referring you to one. Sometimes, resources for diabetes are listed in the white pages of your phone book under "diabetes."

### 2. EAT RIGHT

You need three nutritious, balanced meals every day. Controlling your weight is also very important.

#### **THREE MEALS A DAY**

- Choose a variety of foods. Be sure to choose food from each of the four food groups (grain products, vegetables and fruit, milk products, meat and alternatives).



- At each meal, have a starchy food, such as bread, pasta, potato, or rice.
- Cut down on fat, especially fat that comes from animal foods. Choose leaner meats, poultry, and fish. Choose low-fat dairy products such as 1% or skim milk, cheese with 15% milk fat (15 % M.F.) or less on the label, and low-fat yogurt.
- Avoid foods that are rich in sugar, such as candy and cookies.
- Wait 4 to 6 hours between meals.
- When you are thirsty, drink water. (Only drink diet pop once in awhile.)
- Only use artificial sweeteners in moderation. Check with a dietitian if you are not sure how much you are allowed.
- Only drink alcohol in moderation. This means no more than 2 drinks per day. And, if you do have a drink, make sure it's with a meal. Some people should have no alcohol because of their medication; check with your doctor.
- If you have high blood pressure or kidney disease, cut back on salt. Use less salt in cooking and at the table, and avoid salty foods.

### SNACKS

- If you have to go more than 6 hours between meals, be sure to have a snack.
- Keep your snacks nutritious and small: a piece of fruit, raw vegetables, low-fat cheese and unsalted crackers.
- If you take insulin once or twice a day, you will need a bedtime snack.

## 3. BE ACTIVE

Being active is very important for people with diabetes. Being active helps control both your diabetes and your weight. Start slowly and progress gradually. Your goal is to be active every day.

- Plan to be active 30 minutes or more every day. Activities should be moderate in intensity. These activities make you breathe faster than normal, like when you're walking quickly or dancing. **But don't overdo it. Make sure that you can still talk easily.**
- You don't have to do 30 minutes of activity all at once. You can work up to this by doing small amounts several times a day. Try to do at least 10 minutes of activity each time.
- Choose activities that you enjoy and that are right for you. The best ones are those that use the large muscles, especially those in the legs. When these muscles are working, they require more oxygen, so the heart has to beat faster. This way your heart becomes a stronger, more efficient pump.

### **Before you start an activity program, talk with your doctor. Find out:**

- ✗ if the activity you are planning is a good choice for you
- ✗ if you should make some changes in what and when you eat
- ✗ if your medication should be adjusted
- ✗ how to manage a low blood sugar reaction that can happen after too much physical activity

### **You should not exercise if your blood glucose is poorly controlled, if you have serious heart disease, or if you have any of the following caused by diabetes:**

- ✗ serious problems with your vision
- ✗ pain, tingling or numbness in your feet or legs

### **You should not exercise in very hot or cold weather.**

**Here is a sample of types of activities that are best:** fast walking, biking, running, swimming, and aerobics.

These activities are great, but they are not the only way to be active. Enjoy physical activities as part of your daily routine.

- Take the stairs instead of the elevator.
- Walk or ride your bike, instead of taking the car.
- Park your car or get off the bus a few blocks early, and walk the rest of the way.
- Cut the grass or rake the leaves.
- Go dancing.
- Play ball with your kids.
- Vacuum the house or sweep the patio more often.
- Walk around the block on your breaks at work.

#### 4. TAKE YOUR MEDICATION, AS YOUR DOCTOR PRESCRIBES IT

Some people can control their diabetes by eating carefully and by being active every day. Others need medication. Whichever kind of medication you take, follow your doctor's instructions carefully. If you take insulin, regular meals are especially important.

**So, if you have Type 1 diabetes and are so sick that you cannot eat as usual, follow these guidelines:**

- Even if you have trouble eating, always take your insulin.
- If you cannot eat, call your doctor right away. Ask your doctor what to do.
- Test your blood glucose every 4-6 hours. You may need to adjust your insulin.
- Check your urine for ketones every 4-6 hours.
- Call your doctor or go to a hospital Emergency if you have any of the following:
  - your blood glucose remains above 14 mmol/L
  - your urine ketone level is high
  - you keep vomiting or cannot drink liquids



## 5. KEEP TRACK OF YOUR BLOOD GLUCOSE

You must test and keep track of your blood glucose. Talk with your doctor about how to do this and how often you should do it. Be sure to keep a record of the results. Here is an example of the kind of information you will probably be asked for:

- ✗ the date and time you test your blood glucose
- ✗ your test results: before breakfast, before lunch, before dinner, and at bedtime
- ✗ the name of your medication, how much you are taking, and when you take it
- ✗ anything different that may have affected your blood glucose level such as having a fever, missing a meal, or getting too much exercise

### MANAGING LOW BLOOD GLUCOSE REACTIONS

When you take insulin, low blood glucose reactions happen from time to time when you don't eat enough, or when you miss a meal or snack. They can also happen after too much exercise, or if you take too much of your diabetes medication. If your diabetes is being treated by pills alone, low blood glucose reactions are not as common. Check with your doctor.

#### Here are some early signs that you are having a low blood glucose reaction:

- hunger
- feeling light-headed
- nervousness
- cold sweats
- weakness
- faster heart beat
- confusion



#### IF YOU THINK YOU ARE HAVING A LOW BLOOD GLUCOSE REACTION, FOLLOW THESE STEPS:

- Test your blood glucose. If it is less than 3.5 mmol/L, then you need some fast-acting sugar such as one of these:
  - 4 oz of orange juice
  - 4 oz of a regular soft drink
  - 2 teaspoons of sugar or honey
  - 4 to 6 "Life Savers"<sup>TM</sup>
- Wait 10 to 15 minutes; then test your blood glucose again. If it is still low, eat or drink a fast-acting sugar again.
- Always follow this with a snack containing carbohydrate, such as unsalted crackers or bread.
- If you can't test your blood glucose, and you think you are having a low blood glucose reaction, go ahead and follow the instructions above.

## 6. TAKE SPECIAL CARE OF YOUR FEET

You must pay special attention to your feet. Because diabetes can damage your blood vessels, this can lead to poor circulation, especially to your feet. When this happens, you may lose sensation in your feet. Then you may not notice small sores, and these sores may not heal well.

### **How to prevent problems:**

- Check your feet every day for sores, blisters, and cracks between your toes. If you find a problem such as a sore that isn't healing, contact your doctor or your diabetes educator.
- Keep your feet clean, dry and soft.
- Always wear socks and comfortable shoes.
- Cut your toenails straight across so they are even with the ends of your toes.

## 7. HAVE REGULAR EYE EXAMINATIONS

Diabetes can affect the blood vessels in your eyes, and this can lead to blindness. You may not have any warning symptoms of eye trouble. Talk to your doctor about having regular eye examinations.



# CONTROLLING THE OTHER FACTORS THAT CAN LEAD TO HEART DISEASE

In addition to diabetes, other factors can lead to heart disease. These are: smoking, high blood pressure, high blood cholesterol, physical inactivity, and overweight.

Controlling your blood glucose is very important, but it is not enough. Because you are more likely to have a heart attack or a stroke, you also need to control these other factors.

**You can make a difference. The more risk factors you control, the lower your risk of heart disease. If you want to lower your risk of heart disease:**

- Don't smoke.
- Control your blood pressure if it is high.
- Ask your doctor if you need your blood cholesterol checked.
- Be active.
- Control your weight.

*Your doctor may suggest other pamphlets on each of these topics. Ask for the ones that interest you.*

There are resources in your community to help you control your diabetes and other risk factors for heart disease. For more information, contact the organizations below (at no charge):

- Canadian Diabetes Association: 1-800-BANTING (226-8464) or [www.diabetes.ca](http://www.diabetes.ca)
- Dietitians of Canada: [www.dietitians.ca](http://www.dietitians.ca)
- Lifescan Tele-Library: 1-800-847-SCAN (7226)

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