How does exercise help diabetes?
You may have heard that getting regular exercise helps control blood sugar. How can that be?
Your body turns the food you eat into glucose, a type of sugar. You need this sugar for energy.
When you have diabetes, the sugar builds up in your blood. But when you exercise, your body uses sugar. This helps keep it from building up in your blood and results in lower blood sugar and better control of diabetes.

How else can exercise help you?
Exercise may help you in other ways too. It can help you reach and stay at a healthy weight. It also helps improve blood pressure and cholesterol, which can reduce the risk of heart disease. Some people who get enough exercise are even able to take less medicine. Talk to your doctor about this.

Exercise can make you feel stronger and happier. It can help you relax and sleep better, and give you confidence in other things you do.

How do you get started?
First, talk to your doctor about how and when to exercise. You may need to have a medical exam and tests before you begin.

Some types of exercise can be harmful if your diabetes is causing other problems, such as problems with your feet. Your doctor can tell you whether you need to avoid certain kinds of exercise.

After talking to your doctor, you're ready to start.
Choose an exercise you like and that fits into your schedule.

Try to exercise for about the same amount of time each time. This helps keep your blood sugar levels in the same range.
If you want to exercise more, increase how hard or how long you exercise in small amounts.

Always wear good shoes and socks while you exercise. Be sure that your shoes fit well. Wear polyester or blend (cotton-polyester) socks to keep your feet comfortable and to prevent blisters. Try to wear socks with flat or soft seams, or seamless socks. Think about using silica gel or air midsoles in your shoes.

Don't try to do too much at first. Build up your exercise program bit by bit. Try to get at least 2½ hours a week of moderate activity. Or try to do vigorous activity for at least 1¼ hours a week. It's fine to be active in blocks of 10 minutes or more throughout your day and week.

What precautions are needed?
Here are some things to keep in mind.

Watch for low blood sugar
Ask your doctor how often you need to check your blood sugar.
• If your diabetes is controlled by diet or diabetes medicine that does not lower your blood sugar, you will not need to eat a snack before you exercise.

• Some medicines, such as glyburide and nateglinide, can cause low-blood-sugar emergencies. If you take that type of medicine or insulin, check your blood sugar before you exercise. If your blood sugar is less than 100 mg/dL, eat a carbohydrate snack first.

Check your blood sugar more often if you greatly increase how long or how hard you exercise. Check with your doctor if you have been slowly increasing how much you exercise and have had symptoms of low blood sugar more than 2 or 3 times in one week. Your doctor may need to change how much medicine you take.

**Watch for high blood sugar**
When blood sugar is too high, it can lead to diabetic ketoacidosis. This can happen when you are very dehydrated.

• If your blood sugar is high (for example, over 300 mg/dL) and you have ketones, don't exercise.

• If your blood sugar is high (for example, over 300 mg/dL) and you do not have ketones, exercise with caution.

**Muscle strength**
Talk to your doctor before doing any muscle-strengthening exercises. These exercises may be harmful if your diabetes is causing other problems.

If your doctor says it's okay, then try to do muscle-strengthening exercises at least 2 times a week. These exercises include push-ups and weight training. You can also use rubber tubing or stretch bands. You stretch or pull the tubing or band to build muscle strength. Be sure to work the major muscle groups: legs, hips, back, abdomen, chest, shoulders, and arms.

**Be prepared**

• Have someone with you when you exercise, if possible. You may need help if your blood sugar level drops below a target range.

• Drink plenty of water before, during, and after your exercise session.

• Wear medical identification at all times. You can get medical identification, such as a bracelet, from a pharmacy or on the Internet.

• Carry a quick-sugar food, like glucose tablets or raisins, with you while you exercise. You may have symptoms of low blood sugar while you exercise or up to 24 hours after you stop.