# **Diabetes and Cancer: Physical Activity Benefits**

Regular exercise is important for good health. When you have cancer and diabetes, daily exercise may have added benefits.

Exercise helps to increase flexibility, strength and endurance. It helps control weight and manages blood sugar level. People with cancer who keep active have less fatigue.

#### **Before You Start**

Talk to your doctor before starting an exercise program. You may need a full medical evaluation. If you have taken steroids you may be at risk of muscle strains, ligament tears, and bone fractures. Ask for a referral to physical therapy for proper and safe home exercises.

Ask your oncology team about activities that are right for you. This is especially true for those over 35 or those with complications from diabetes.

## **Types of Physical Activity**

Aerobic exercise is best. It works your heart and lungs plus your muscles. Choose activities that you enjoy. If you have leg and foot problems, try activities that are less stressful on joints, such as pool aerobics.

In addition to exercise, try these tips to increase your activity level:

- Skip the elevator and take the stairs.
- Park your car further away.
- Walk whenever you can.
- Walk a few blocks before getting on the bus, and get off a few blocks before your stop.
- Take a break from your desk to stretch and move around.
- Do household chores such as raking leaves, washing the car or mowing the lawn.

### **Physical Activity and Low Blood Sugar**

Physical activity helps move sugar out of the blood and into the cells. This lowers your blood sugar. This is one of the benefits of exercising, and helps to control diabetes. However, be aware of symptoms of low blood sugar while you exercise:

- Blurred vision
- Hunger
- Dizziness
- Irritability

- Excessive sweating
- Rapid heart rate
- Headache
- Trembling

- Sleepiness
- Difficulty concentrating

If you experience these symptoms, eat at least 15 grams of carbohydrates. Have simple carbohydrate (fast absorbing sugar) available. These include:

- ½ cup regular carbonated soda
- 3 to 4 glucose tablets
- ½ cup juice

- 2 tablespoons raisins
- 8 Lifesavers candies or 10 jelly beans

#### **Test Before and After**

When you begin an exercise program, test your blood sugar before and after the activity. Keep a log of your activities and blood glucose results. Your doctor will review them with you.

#### **Timing Your Physical Activity**

People who control diabetes with insulin must carefully plan when they exercise. Know the time your type of insulin is at its peak effect. This is the time you are most likely to have low blood sugar. Do not exercise at your insulin peak time; it may cause even more drop in blood sugar.

Some insulin continues to work through the night. If you exercise before bed while on this long-lasting insulin, you may have very low sugar levels while you sleep. This may be dangerous.

Talk to your health care team about the timing of your exercise program. Once you develop a schedule, keep it consistent.

### **Tips for Success**

- Schedule time to exercise 3-5 times a week for 30 minutes a day.
- Find an exercise partner to help you stay motivated.
- Warm up for five minutes before starting your workout.
- Cool down at a low intensity for five minutes. Remember to stretch after you've cooled down.
- If you have not been exercising, start with five to 10 minutes of activity. Slowly add more time as you progress.
- Avoid immediately exercising the part of your body where you have recently injected insulin. For example, do not inject insulin into your leg before bicycling or into your arm before playing tennis or into your abdomen before doing sit-ups.
- Always carry ID or wear a bracelet or necklace (such as MedicAlert®). It should include your diagnosis, doctor's phone number and an emergency contact name and number.
- Check your feet. Inspect your feet for sores or blisters, and wear comfortable, properly fitting shoes. Choose thick, cotton-blend exercise socks to prevent blisters. Keep your feet dry. Consider using an insert for extra foot support. See Diabetes Skin and Foot Care video for more information.
- Drink enough water that your urine is light colored. During exercise drink even if you are not thirsty.
- Avoid outside physical activity in hot, humid weather.
- Do not exercise if you are sick. Avoid alcohol before or immediately after exercise. Drinking alcohol without eating may increase risk of low blood sugar.