

HOW IMPORTANT IS EXERCISE FOR TYPE 2 DIABETES?

Unhealthy diets and sedentary lifestyles are two major factors in the increase in the occurrence Type 2 diabetes. Once you have it, these two factors, diet and exercise, remain the most important factors to manage. You might believe that taking the medication your doctor prescribes for your diabetes condition is the most important thing you can do. But that's not the case; when you have Type 2 diabetes, diet and physical activity are every bit as important. Studies show that when you stay fit and active throughout your life, you'll be able to better control your diabetes and keep your blood glucose level in the correct range. This is so important because keeping your blood glucose level in the right ranges helps prevent damage to your kidneys, your heart, and many other organs in your body that are harmed by high blood glucose.

People with Type 2 diabetes have too much glucose in their blood, either because their body doesn't produce enough insulin to process it, or because their body doesn't use insulin properly (insulin resistant). In either case, diet and exercise help reduce the glucose in your blood. How does this work? Muscles use glucose from the blood as their source of energy. Any use of your muscles increases your body's use of glucose, lowering your blood sugar. Better yet, your muscles can use glucose without insulin when you're exercising. In other words, it doesn't matter if you're insulin resistant or if you don't have enough insulin: When you exercise, your muscles get the glucose they need, and in turn, your blood glucose level goes down.

Exercise actually makes your insulin more effective. That is, your insulin resistance goes down when you exercise, and your cells can use the glucose more effectively.

In addition, exercise helps keep your heart healthy and strong. This is especially important if you have diabetes. People with diabetes are susceptible to developing blocked arteries (arteriosclerosis), which can lead to a heart attack. Exercise helps you maintain lower cholesterol and a better ratio of good to bad cholesterol – and that

helps you avoid arteriosclerosis. It also helps control your blood pressure, which can damage your heart and other organs when it is too high.

When you exercise you'll strengthen your bones and improve mood and sleep. And let's not forget that you just look better when you are in shape.

Before You Begin

To get started on a good, reasonable exercise plan:

- Talk to your doctor. This is particularly important if you already have blocked arteries or high blood pressure.
- Set realistic goals. If you haven't exercised much recently, you will want to start slow and gradually increase the amount and intensity of the activity.
- Stay hydrated by drinking water.
- Check your blood sugar before and after exercise using your glucose meter, so you know how exercise affects you. If you are prone to low blood sugar always have a treatment for low blood glucose handy (a 15 g carb snack is a good idea).

What Kinds of Exercise to Do

Start by being more active. Making small changes to your routine can help you incorporate more physical activity into your day. For instance, walk the stairs at work, "two flights down," "one flight up."

In addition to just being more active, adding an exercise program can really benefit you. There are three main kinds of exercise:



Aerobic

Resistance
(strength) training

Flexibility training

You should aim to have a good balance of all three.

Aerobic Exercise

Aerobic exercise, also called cardio, is exercise that increases the heart rate, such as walking, jogging, swimming, and biking. It may be hard to get started on your aerobic plan, but once you begin you might just get hooked on the boost of endorphins.

You should aim to get at least 30 minutes of aerobic exercise most days of the week. If you think that you can't find 30 minutes, you can break up the exercise into chunks – 10 minutes here and there. Build up gradually and know that all activity helps.

You need to find a way to exercise that you actually enjoy – because if you don't like it you won't do it. Remember that walking your dog is a form of exercise. Taking the stairs is exercise. Walking from your car and into the store is exercise – so park farther away. Find a friend to walk or run with. Having someone else exercising with you makes it more fun and motivating.

Resistance Training

Once you have been able to include aerobic activity into your days, then you can start including resistance, or strength, training.

Like aerobic exercise, resistance training has been shown to improve insulin sensitivity, and also helps you maintain strong, healthy bones. Resistance training often requires the use of equipment such as weights or resistance bands, although you can also use your own body weight to build up strength. Lifting your body against gravity is a resistance exercise, and there are lots of simple resistance exercises you can do at home. Examples include alternating leg lifts when you wake up or before you go to sleep, and holding your arms out against gravity until they are tired.

You can easily find resistance exercises and instructions online. Start slowly and gradually increase repetitions, sets, and resistance. If you go to a gym, ask for guidance on the equipment. As a rule of thumb, lifting hand weights for 20-30 minutes two or three times a week is sufficient to get the full benefits of strength training.

Flexibility Training

Whether or not you have diabetes, flexibility training will improve your range of movement and quality of life.



Like aerobic and resistance exercises, flexibility exercises also contribute to the body's improved insulin efficiency and lowers blood glucose. People who stretch also have less pain, improved sleep, and better cardiovascular health.

Stretching should lengthen the muscle to just before the point of discomfort and never go to the point of pain.

Some stretching tips:

- Complete at least one stretch per major muscle group, optimally holding each stretch for 15 to 30 seconds.
- Complete equal stretching exercises on both sides of your body.
- Breathe deeply during all stretches to relax your muscles more.
- Stretch opposing muscle groups equally (for example, quads and hamstrings).
- Don't bounce during stretches, as doing so can cause muscle tears and joint injuries.
- Don't hold your breath or strain while stretching.
- Three very effective ways to stretch are yoga, tai chi, and Pilates.

Make Exercise a Priority

As tough as it may be to find time or motivate yourself to keep active and exercise, keep at it! It will make your body more efficient at using its insulin and glucose, and it will make you happier and healthier.

Make a commitment to being active. Your long-term health depends on it.

Sources:
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