



Exercise - Instant Results!

Your provider has prescribed exercise to help with your diabetes and your blood glucose control. Why? Research has shown that every time you get active, your body gets a quick health boost. This is especially true for people with diabetes. It's an effective "medicine" for diabetes because it doesn't matter if you are a trained athlete or have been a couch potato..... it's helpful for everyone!

The reason? According to expert Sheri Colber-Ochs, PhD, professor of exercise science at Old Dominion University in Norfolk, Va. The reason it's helpful for everyone... is that you have two ways to get blood glucose out of your blood stream and into your muscles. Exercise works on both and gets them to "rev up".

The ways that exercise lowers blood glucose:

Exercise temporarily lessens the cells resistance to insulin. Insulin sensitivity is increased, so your cells are better able to use any available insulin to take up glucose during and after activity. Exercising for 30 minutes gives you improved insulin action from 2 to 72 hours after, according to Colber-Ochs.

When your muscles contract during activity, it stimulates another mechanism that is completely separate of insulin. During exercise, a little door opens up to the muscles so that they directly absorb glucose from the blood. This mechanism allows your cells to take up glucose and use it for energy whether insulin is available or not.

Additional Benefits

Another benefit of exercise regardless of your fitness level: Exercise creates space in the muscles to store glucose coming into the body from what you eat, think of it as a storage tank. Muscles can store the glucose in a form called glycogen and have it available when you need it! However, if you don't exercise the muscles don't have that space and their "tank is always full". Full muscles force the body to send that homeless glucose to the liver, which turns it into fat for long term storage. Too much fat in the liver is harmful to your long term health.

This is how exercise can help lower blood glucose in the short term. And when you are active on a regular basis, it may also lower your A1C. The good effects of exercise don't stop with better glucose control. Blood pressure decreases, the heart pumps blood harder through the blood vessels and this increased blood flow makes the vessels more elastic and flexible, allowing them to handle more pressure. Exercise also can enhance your mood immediately. The brain releases brain hormones that make you feel good. These are the same pleasure hormones that are released when eating sugar, salt and fat. So for people trying to eat a healthy diet, exercise can make you feel just as good as a bowl of ice cream! And the mood improvement from exercise lasts longer than the momentary benefits of the ice cream!

Understanding Your Blood Glucose Reaction

The affect physical activity has on your blood glucose will vary depending on how long you are active and many other factors. Physical activity can lower your blood glucose up to 24 hours or more after your work out by making your body more sensitive to insulin.

You should become familiar with how your blood glucose responds to exercise. Checking your blood glucose level frequently before and after exercise can help you see the benefits of activity. You also can use the results of your blood glucose checks to see how your body reacts to different activities. Understanding these patterns can help you prevent your blood glucose from going too high or too low.

Getting started

Put safety first. If you have heart problems, high blood pressure, or other another disease, please talk to your provider before starting an exercise program. Ease into a routine and start slowly. I will write more about overcoming barriers to exercise next month. Please visit these links and get some tips on starting to increase your activity. No matter what your age or fitness level is, being active is good for your health.

<http://ndep.nih.gov/resources/diabetes-healthsense/make-a-plan.aspx>

www.dpacmi.org/MakeAMove

Useful Links

[Diabetes Partners in Action Coalition - DPAC](#)

[Northern Michigan Diabetes Initiative - NMDI](#)

[Upper Peninsula Diabetes Outreach Network](#)

[National Diabetes Education Program - NDEP](#)

[American Diabetes Association - ADA](#)

[American Association of Diabetes Educators - AADE](#)

[National Kidney Foundation of Michigan - NKFM](#)

[Juvenile Diabetes Research Foundation - JDRF](#)