



Exercise can help control blood sugar

I don't understand how exercise affects blood sugar. Isn't blood sugar controlled by diet?

Actually, regular, moderate exercise is extremely important in controlling blood sugar, especially for people who have type 2 diabetes — the kind of diabetes in which your body makes insulin but doesn't use it effectively. Moderate exercise actually helps your body make use of that insulin, and that's what helps in blood sugar control.

First, when you exercise, your muscles need some source of energy. With moderate exercise (walking, not sprinting, for example), the easiest form of energy for muscles to use is the glucose in your bloodstream — thus reducing your blood sugar level. In fact, research suggests that regular exercise can help muscles take up glucose up to 20 times the normal rate.

Second, regular exercise also appears to increase your muscle cells' "insulin sensitivity," or their ability to uptake glucose from the bloodstream. Increasing insulin sensitivity can help you gain better control over blood sugar, or even prevent the onset of type 2 diabetes.

In fact, a study recently published in the *American Journal of Epidemiology* bears this out. Boston University researchers used data from the ongoing Black Women's Health Study to study the habits of more than 45,000 African-American women between 1995 and 2005. They found that the risk participants faced of being diagnosed type 2 diabetes was

significantly lower among those who reported regularly taking a brisk walk — even when researchers took into account their age, income and diet. Getting such regular exercise reduced the risk of diabetes even in participants who were severely obese, the researchers reported. What's more, they found that participants who said they watched more than five hours of television a day were 86 percent more likely to develop diabetes compared to those who watched less than an hour day.

Strength-training can also be helpful. A 2006 study in *Diabetes Care* showed that after 16 weeks of strength-training, older Hispanic men and women with diabetes significantly improved their insulin sensitivity.

However, the key is to keep the exercise at a moderate level. Short bursts of intense exercise, such as a sprint, can actually increase your blood sugar levels. If you have diabetes, it's important to check with health-care professionals as you develop a plan for regular exercise. They can help you determine when it's important to test your blood sugar.

More information about diabetes and exercise is available from the National Diabetes Information Clearinghouse at http://diabetes.niddk.nih.gov/dm/pubs/physical_ez/.

Chow Line is a service of Ohio State University Extension and the Ohio Agricultural Research and Development Center. Send questions to Chow Line, c/o Martha Filipic, 2021 Coffey Road, Columbus, OH, 43210-1044, or filipic.3@cfaes.osu.edu.



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Editor:

Your readers in central Ohio may be interested in attending "Cooking for a Healthy Lifestyle with the Diabetic Chef," Monday, March 30, at 6:30 p.m. See details at <http://www.ag.ohio-state.edu/~news/story.php?id=5015>

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