

How well the body uses blood glucose actually has a lot to do with your muscles.



When insulin is working properly, muscle tissue is the biggest single user of glucose in your body. When insulin signaling in the muscle does not work properly, too much glucose stays in the blood, making it more difficult to control blood glucose. Muscle health is good for everyone, but in people with diabetes it plays a particularly special role.

Before the discovery of insulin, people with type 1 diabetes would develop profound muscle wasting partly because their cells could not use glucose as a fuel source. Thankfully those days are well behind us, but a lot of elegant research since then has taught us that patients with type 2 diabetes often have important changes in their skeletal muscle related to glucose handling as well.

Insulin "resistance" in skeletal muscle means that the muscle cannot

properly access glucose as a fuel source. This not only leaves a lot of extra glucose in the blood but also forces muscle to use something else for fuel. So it switches to using more fat or, more specifically, fatty acids. That is also a problem because as the body produces excess fatty acids they contribute to worsening the insulin resistance. People with diabetes can see this increased fatty acid production as an elevation of their fasting triglycerides.

If that all sounds a little depressing, it shouldn't. In fact, many patients I have this discussion with find it empowering, as they realize how directly they can impact this important aspect of their diabetes. When any of us make our muscles work, we are helping to train them and keep them trained to use insulin and glucose properly. Muscle strengthening exercises also help all of us to control our weight because working muscle is better maintained and maintaining muscle mass helps to give the calories we eat someplace to go besides fat.

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For more information call:
Pike County Health Dept 285-4407

Diabetes Support Group

MAY - No Meeting

JUNE - No Meeting

*Look for your next
newsletter in August.*

