Wellness Minute

Health Information You Can Use On Your Path To Wellness

Insulin Update

"Does it feel like your body is stuck in fat-storage mode instead of fat-burning mode?"

Does it feel like your body is stuck in "fat-storage" mode instead of "fat-burning mode"? If so, chances are really high, the hormone insulin is involved. Most people think of insulin as the body's way to reduce blood sugar. But beyond insulin's blood sugar reduction, insulin has many, many metabolic consequences.

Let me refresh you on a few basics. Insulin is secreted by the pancreas as we eat carbohydrates, particularly carbohydrates without fiber. Carbohydrates get converted to sugars and get absorbed into the blood stream. The amount of sugar that can exist safely in the blood is tightly regulated because the body cannot tolerate too much sugar. So, insulin is secreted by the pancreas and facilitates or pulls sugar into cells, where is it stored or burned as fuel. But at some point, the cell can only store or burn so much glucose, so cells down regulate or decrease the number of docking points, or what are called insulin receptor sites, to reduce sugar coming into the cell. This slows down the ability of sugar to enter the cell. With less receptor sites, the same amount of insulin has less of an ability to clear sugar from the blood, and so more insulin is secreted.

This phenomenon of hyper insulin has negative side effects. What are some of these negative effects? I am glad you asked. Insulin is necessary to pull the mineral magnesium into the cell. Blocked insulin receptor sites in the cell mean low intra-cellular magnesium levels. Magnesium is critical for energy production, healthy heart, vascular and blood pressure regulation. Hyperinsulinemia causes the excretion of magnesium as well as calcium in the urine. Excess insulin in the blood also causes retention of sodium, which causes fluid retention, which in turn causes an increase in blood pressure.

Dr. Rosedale, in his book, The Rosedale Diet, asserts that insulin resistance affects all our hormones and how they are converted to their active forms. For example, thyroid hormones must convert from T4 to the active form T3. T3 is the spark our cells need to burn fuel efficiently. Furthermore, inefficient use of our sex hormones: estrogen, progesterone, testosterone, and the repair hormone DHEA have been tied to insulin resistance. You see it's not only the levels of hormones that are important, but sometimes

hormones are also bound up and can't get into the cell to perform their functions.

How many times have you heard someone say, "My doctor says my thyroid is perfect, but I can't lose weight?" Or "My blood work is great, but I am still exhausted and feel like garbage?" There is a significant correlation between elevated insulin levels and certain types of cancer, namely breast, colon, prostate, and pancreatic cancer. Poor sugar regulation and insulin dysregulation has also been indicated in aging, memory problems, fatigue, anxiety and depression, immune suppression, obesity, vascular disease and heart disease.

Tests for Insulin levels are very inexpensive and can be easily done after a 12-hour fast on an outpatient basis. The fasting insulin levels I like to see should be less than 10; below 6 is ideal. Traditional lab values suggest treatment should begin when levels exceed 18. However, if fasting insulin levels are over 10, insulin resistance is well under way and needs attention and monitoring with repeated lab testing.

Obviously dietary refined, even starchy carbohydrates should be reduced until insulin levels are stable and lifestyle changes are made. Intermittent fasting or what some people call "time restricted eating" is also beneficial. Experts suggest eating in an 8–10-hour window each day, completing all eating by 6 or 7:00 pm. Also, exercise is critical for anyone who is struggling with insulin resistance.

Cells will burn sugar with activity and movement. So, the best way to reduce sugar, besides not eating it, is to burn it. Also, the most stubborn cases of insulin resistance usually involve one or more food allergens, so reducing food sensitivities should be considered.

As far as supplements, consider trying The NutriClear Plus Cleanse program and also the Metabolic Biome Plus program from Biotics Research. Both are excellent starting points to balance and control insulin.

Your wellness clinician will create an insulin controlling program based on your condition. But let me encourage you, don't wait for your doctor or wellness clinician to educate you. Increase your understanding about insulin sensitivity and begin implementing the basics today, right now. Your wellness clinician will help tweak your progress, but you must start the process. The fact that you have watched this program this far tells me you, or someone you know, can benefit from this information. I believe in you, I believe in your body's innate ability to heal once the building blocks are in place. I encourage you to take responsibility to get healthy and then be a light to those around you.