Insulin Resistance

Over 80 million Americans suffer from insulin resistance. This problem appears to be at the center of a web of related health problems. Women who are insulin resistant are at much greater risk of obesity, diabetes, hypertension (high blood pressure), heart disease, high cholesterol, breast cancer and polycystic ovarian syndrome (PCOS). There is some evidence that insulin resistance may contribute to endometrial cancer. It has also been implicated in Alzheimer's disease.
Insulin resistance generally accompanies the most common complaint of women; fatigue and weight gain. As women approach menopause, they become increasingly intolerant of carbohydrates and find it easier to gain weight, especially around their waists. Afternoon blahs, sugar crashes and carbohydrate cravings may all be early insulin resistance symptoms.

Insulin sensitivity — the way it should work

All of the food we eat, fats, proteins and carbohydrates are broken down during digestion into proteins, micronutrients and glucose. The body uses the proteins and nutrients in cellular metabolism, immune function, and cell replacement. The body uses glucose as its basic fuel, which is carried by the bloodstream to individual cells.
Our demand for fuel varies from moment to moment, but the brain needs our blood sugar level to remain stable. So getting the cells the energy they need without changing that level is a critical function — and that's the role that insulin plays. Insulin signals the cells to absorb glucose from the bloodstream. The body monitors what we've digested, blood sugar levels, and cell demands, and releases insulin in just the right amounts. That's why a healthy body is described as "insulin sensitive."

How insulin resistance develops

Our metabolism was developed by God to handle only so many carbohydrates. IN times past we ate mostly complex carbohydrates rather than simple carbs. Today most calories in an average diet come in the form of carbohydrates, and most of those are simple carbohydrates or sugars that quickly enter the bloodstream. The body has to release high levels of insulin to keep the level of glucose in the bloodstream from

spiraling out of control. But in time the cells begin to quit responding to this signal. At this point the body is "insulin resistant." It is often said that the body is peaking 2 different languages.
One immediate consequence is that the body is forced to release even more insulin. Letting blood sugar get too high is simply not acceptable. The resulting excess of insulin in the bloodstream is called *hyperinsulinemia*. But the body was not designed for these prolonged high levels of insulin, which disrupt cellular metabolism and spread inflammation. Diabetes occurs when the body fails to keep blood glucose under control. But as we have noted, that is only the most obvious of the diseases caused by insulin resistance. There are many negative health effects before full-blown diabetes.

Syndrome X and menopause

Of special concern to women is how insulin resistance disrupts fat metabolism. When the cells won't absorb the extra glucose, the liver has to convert it into fat. Fat cells are loaded with glucose receptors, so this is a vicious cycle. Ironically, while the insulin-resistant woman is gaining weight, her cells are actually "starved" for glucose, so she feels exhausted and tends to eat carbohydrate-heavy foods in search of energy.
These extra fat cells are also little estrogen factories. So weight gain contributes to the estrogen dominance that causes so many symptoms during the early stages of perimenopause.
Symptoms relating to syndrome X usually predate the onset of menopause, but most women do not complain of them until then. A woman's health can deteriorate rapidly during menopause with the decrease of estrogen levels in the body. And digestive issues that were once merely a hassle become an affliction when the body's natural defenses against inflammation (estrogen being one) are depleted.
In addition, women approaching menopause are particularly prone to becoming insulin resistant due to metabolic changes related to fluctuations in adrenal and thyroid secretions. In fact, the decrease of certain hormones, like estradiol, may trigger sensitivity to insulin in patients who never experienced it before. Certain blood pressure medications can mask symptoms without treating the problem. Frequently, women unwittingly make their symptoms worse by fighting weight gain with low-fat, high-carbohydrate diets.

How do I know if I'm insulin resistant?

The unfortunate truth is that anyone can become insulin resistant — even if they are thin. We are all at risk in our society where we have access to a lot of refined carbohydrates (white bread, sugar, bagels, pasta, potatoes, sodas, processed foods with added fructose, etc.). In fact, most of us are likely to be somewhat resistant to insulin. It is just a matter of degree. The more processed and refined food that we eat, the more insulin we require to metabolize it. The more insulin in our blood, the less responsive our cells become. As we age, this continual exposure wears out our tolerance for refined carbohydrates and reduces our sensitivity to insulin.
If you suffer from high cholesterol, high triglycerides, or hypertension, you should get checked for insulin resistance, regardless of your weight or age. If you have high blood pressure, it is likely that you are also suffering from insulin resistance. High blood pressure medication will not cure insulin resistance.

Signs and symptoms of insulin resistance

You are at the highest risk for developing this condition if you have a family history of type 2 diabetes or if you have suffered from gestational diabetes, hypertension, or are seriously overweight Apple-shaped women, or those who tend to gain most of their weight around their abdomen, show less tolerance for insulin. To assess your risk, measure yourself around the smallest part of your waist (don't hold your stomach in!) and the biggest part of your hips. Divide the waist measurement by the hip measurement. A ratio bigger than 0.8 for women (or 1.0 for men) indicates that your abdomen is obese and you are at risk for developing insulin resistance.
Women with dyslipidemia, especially those with low HDL levels and high triglycerides, may also be resistant. I tend. A skin change called ***acanthosis nigricans***, which is warty-like darkened patches of skin at the neck and armpits, indicates insulin resistance in over 90% of the women who experience it.
The good news is that insulin and glucose levels are very easily influenced by changes in lifestyle, exercise, and diet. If you are diagnosed with insulin resistance, there is a lot you can do to reverse its course.
What to do:

1) Know your insulin level by doing some simple testing. In order to evaluate a patient for evaluate a patient for insulin resistance, we

recommend a blood test for glucose and insulin levels after fasting for 12 hours and then again two hours after a meal (preferably a high-carbohydrate meal). On the fasting tests, we hope to see glucose levels of no more than 75–80 and insulin of less than 14; higher levels indicate a risk of insulin resistance. Increased triglycerides also cause suspicion.

2) Change your diet. The insulin resistance diet! The Insulin Resistance diet consists primarily of lean meats and dairy; high-fiber grains, vegetables and legumes; leafy greens; and a little fruit. This diet will substantially aid the body's ability to balance insulin levels. If a patient is already insulin resistant, I recommend a meal plan consisting of breakfast, lunch, dinner, and two snacks. Each meal should have no more than 35 grams of carbohydrates in the form of vegetables and fruits, and limited whole grains (and prohibiting "white" food altogether, such as bread, pasta, and sugar) and some lean protein. Each snack should contain only 7 grams of similar carbohydrates.
3) Healthy fats, or those rich in essential fatty acids (EFA's), are also important in an insulin-resistance diet. EFA's can be found in avocados, cold-water fish like salmon and tuna, flax seed, and eggs and can also be taken in supplement form. Other supplements like chromium picolinate and B vitamins can be very helpful as can several minerals.
4) Regular exercise of 30 minutes or more per day, 3–5 times a week is also beneficial for regulating metabolic function and hormonal balance.
5) Decreasing stress, thereby lessening strain on the adrenal glands will result in better overall health and contribute to keeping the body's insulin levels in check.
6) Stopping smoking, moderating alcohol intake and proper sleeping habits will help to alleviate blood chemistry surges, which in turn will promote a much healthier body
7) Your body's hormonal balance is like a symphony. Insulin is one of the loudest and most important instruments. When its metabolism goes wrong, it throws off everything else. Balancing hormones is very important in controlling insulin resistance. Natural hormonal replacement might be necessary to achieve total health.

For more help contact with diet contact Jodi Smith at 317-466-3636