blood sugar blues

what is insulin resistance?

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HEART ATTACK, STROKE, AND DIABETES ARE words that send fear into the hearts of many of us. These diseases are all among the top ten causes of death for women. Another frightening word obesity causes Americans to spend over 30 billion dollars each year in attempts to avoid it. In fact, weight loss spending is one of the biggest businesses in the country. Yet our nation continues to get fatter! We are worried that our excess weight will increase our chances of dying from heart disease, hypertension, or the complications of diabetes. If we keep this up, it will.

But how about these words: Insulin Resistance. Do these words bring you concern? Insulin resistance is believed to be the common cause of obesity, heart attacks, strokes, and diabetes, and may be a contributor to other health issues as well. It is believed that up to 75% of the nation may have insulin resistance. It may be affecting you.

This condition contributes to obesity as well as many other deadly diseases. Yet most people don't even know that they have it – or even know what it is. People hear the word insulin and assume that it is referring to diabetes. But this condition affects millions of people who do not have diabetes. So why haven't you heard much about it? For two reasons: Firstly it has only been recognized as a disease for less than 10 years. The mechanisms and extent of its effects are still being studied. Secondly, we are not yet sure of the best way to diagnose it.

Doctor Gerald Reaven, of Stanford University first identified insulin resistance as a health concern in 1988. Dr. Reaven's theory was that some people have a genetic tendency for their cells to resist the action of the insulin hormone. The job of the insulin hormone is to control blood sugar levels and prevent diabetes. If the cells resist this important hormone, then the body compensates by overproducing the hormone. Dr. Reaven identified several health concerns that seemed to be caused by excess insulin including being overweight, hypertension, diabetes and hypoglycemia, lipid abnormalities, cardiac disease, polycystic ovarian disease, infertility, and gout. Reaven believed that this health concern was a grouping of related diseases with one cause – excess insulin, which he coined Syndrome X.

His discovery was rejected by most of the medical community, until fairly recently. In the 1990's we began to realize that something was at work destroying the health of our nation. Dr. Reaven's theory began to attract some attention. Dr. Reaven maintained that the low fat diets that were then being promoted as "healthy" were higher in carbohydrate and therefore increased insulin production in a person with insulin resistance. Other researchers began to investigate Dr. Reaven's theory.

On May 15th, 2001 the National Heart, Lung, and Blood Institute issued new practice guidelines to physicians on the prevention and management of high cholesterol calling for "more aggressive treatment and better identification of Americans who are at risk for cardiac disease." This NIH report specifically emphasizes the importance of "identifying…risk factors linked to insulin resistance…which dramatically increase the risk for coronary events." It is stated in the report that "the metabolic syndrome" (Dr. Reaven's Syndrome X) "has emerged as being as strong a contributor to early heart disease as cigarette smoking. In addition, the insulin resistance that goes along with the syndrome is one of the underlying causes of Type 2 diabetes. It's thus very important to recognize the syndrome and treat it with lifestyle changes." Prior to this report, the general medical community paid very little attention to insulin resistance.

It has been estimated that 25% of Americans have the Metabolic Syndrome. Millions of Americans have elevated cholesterol, cardiac disease, hypoglycemia, borderline diabetes or family history of diabetes, polycystic ovary disease, infertility, high blood pressure, and gout. In fact, many of these disease conditions are increasing in epidemic proportions. Our nation's unlimited supply of simple carbohydrates as well as saturated and trans fats promotes insulin resistance. The fact that we are less active than generations before adds to the problem. Those who carry the genetic tendency toward insulin resistance are more likely to show symptoms in our society than their ancestors did in an earlier culture.

9 Simple Tips to Control Insulin Response

1 Limit intake of starchy foods and fruits to no more than half to one cup every two to five hours. Starchy foods include breads and cereals, grains such as rice, starchy vegetables including corn and potatoes. Don't eliminate these high carbohydrate foods. Low-carb diets are not necessary and may not be healthy. Simply, don't over-carb at any meal or snack. Your body is sensitive to how much carbohydrate you eat at one time. The amount of carbohydrates that you eat in a day's time will vary depending on how many calories you need each day. A person with greater caloric needs simply must eat more often.

2 Cut down on sugary foods. If you choose to eat sugary foods, eat very small portions and don't eat any starchy foods or fruits in the same two-hour period.

3 Eat small portions of high protein foods. Two to three ounces of protein is all you need at each meal. This is approximately the size of a deck of cards. One ounce should suffice for a snack. Including more protein, especially animal proteins will add calories and fat, and may increase your risk of heart disease.

4 Eat vegetables anytime. Veggies have very little effect on insulin levels so eat all you want. They offer the added benefit of high levels of antioxidants and natural compounds that protect cells from the effects of excess insulin.

5 Choose complex foods whenever possible rather than foods that have been refined or processed. For example, use brown rice instead of white rice, whole wheat bread instead of breads made with enriched wheat flour, whole fruits instead of fruit juices. Not only are these foods good sources of antioxidants, but they also contain fiber, a substance that slows down the glycemic response and allows insulin to work more effectively.

6 Include healthy fats and oils from nuts, seeds, and fish. A very low fat diet will result in increased carbohydrate intake, causing undesirable increases in insulin levels, so include some healthy fats at every meal. It is wise to limit your use of unhealthy fats. These include saturated fats, as in butter, bacon, and other fatty meats and high fat dairy products and also include hydrogenated fats, as in stick margarines and shortening found in many baked goods. For example, use tub margarines without hydrogenated fat instead of stick margarine or butter. Or dress your salad with an oil and vinegar type dressing instead of a creamy-style dressing.

7 Eat just what you need to satisfy you. If you are no longer hungry, stop eating. You can eat again if you are hungry just two hours. Don't try to stock up just in case you get hungry. An insulin resistant body likes frequent small meals.

8 Be active. Inactivity makes muscle cells more resistant to insulin. Find activities that you enjoy and try to fit in at least 30 minutes almost every day. You don't have to join a gym or do heavy-duty aerobic exercise. Walking is great and actually burns more fat than more intense exercises. Fit in some resistance training as well. Use gravity (as in leg lifts, lunges, or crunches), and consider adding stretchy bands, or hand weights if you don't have fancy equipment.

9 Include occasional splurges. You must think of this as a lifetime way of eating, not a diet. Even though some foods may not be healthy for your body, it also may not be healthy to expect that you will never again in your lifetime eat these foods. The goal is not to be perfect. You simply should try to eat healthy foods most of the time.

Now that you understand how insulin resistance can lead to being overweight, and all of the health issues that go along with it, it is time to stop worrying, and take steps to improve your risk.

Mary-Kay Grossman R.D. *has treated thousands of patients for Insulin Resistance over the past eleven years. She co-authored the book,* ***The Insulin Resistance Diet*** *with Dr. Cheryle Hart For more information, go to* ***www.insulinresistancediet.com***