



WHAT IS INSULIN RESISTANCE?

What is Insulin Resistance Syndrome? If you have had difficulty losing weight, or if you are a woman with irregular periods, or perhaps you're just curious about what Insulin Resistance means, read on: Insulin Resistance Syndrome is similar to **Diabetes**, in that there are problems with insulin production and/or utilization of insulin. In Insulin Resistance Syndrome, the pancreas compensates by secreting *even more* insulin. The blood glucose levels often are within a normal range. But because the body has a consistently higher level of circulating insulin, there may be elevated levels of triglycerides (fat in the blood) as well as reduced HDL (“good cholesterol”). In addition, Insulin Resistance Syndrome may have elevated systolic and diastolic blood pressures. Because of the higher circulating level of insulin, weight loss may be more difficult.

What are the symptoms of Insulin Resistance Syndrome? There may be no outward physical signs, other than possible difficulty with weight management. Weight loss difficulty does NOT mean you may have Insulin Resistance Syndrome. A thorough review of symptoms, family history and specific blood tests, including a fasting glucose test and/or a glucose tolerance test, both which must be interpreted by a physician, are necessary to diagnosis Insulin Resistance Syndrome.

Who is at risk for Insulin Resistance Syndrome? There are three groups of the population who may be most at risk:

- Women with **PCOS (Polycystic Ovarian Syndrome)**
- People who are overweight and who have a family history of Type II Diabetes
- People who have been diagnosed with Type II Diabetes

What is the exact cause of Insulin Resistance Syndrome? The cause of Insulin Resistance is not fully understood. Genetics may be a significant factor. Researchers are investigating the role of fetal malnutrition in establishing a predisposition towards Insulin Resistance Syndrome. Also, many scientists speculate that part of the cause may be a lifetime of eating highly processed foods, especially foods high in refined sugars, coupled with inactivity. For women with PCOS, Insulin Resistance Syndrome is likely due to a complicated interaction among estrogen, testosterone, and insulin.

If I am concerned that I may have Insulin Resistance Syndrome, what should I do?

First, schedule an appointment with a health professional at Student Health Services. Discuss your concerns with them. If your medical history and symptoms indicate a need for further investigation, they may order specific blood tests. In addition, they may refer you to the campus Nutritionist who can review your diet and provide specific recommendations along with exercise suggestions for blood glucose management. Nutrition strategies include reducing refined carbohydrates while increasing lean protein intake.

Carol Kelly, RD, LD

Helpful Links :

American Association of Clinical Endocrinologists: www.ace.com

American Diabetic Association: www.diabetes.org

National Institutes of Health:

<http://diabetes.niddk.nih.gov/dm/pubs/insulinresistance/insulinresistance.pdf>

Or contact:

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