

*What you
don't know about*
Syndrome X
*could affect your ability
to have a baby*



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**Syndrome X is a recently
discovered phenomenon**

Until a few years ago, only a comparative handful of medical researchers had ever heard of Syndrome X. Even today many physicians are still unaware of its existence. So it's very likely that you have never heard of Syndrome X, and it's even less likely that you know whether you're afflicted with it.

Maybe it's time for you to find out what Syndrome X is. Recent studies have shown that 70-80% of the population has the potential to develop Syndrome X. In women, it can be particularly harmful in that it can impede a woman's ability to become pregnant and carry to term.

What exactly is Syndrome X?

Syndrome X is a condition that includes obesity, hypertension, cardiovascular disorder and diabetes mellitus. Usually having too much insulin in the body causes it.

How does that happen?

High insulin levels in the body can result from a number of factors, including stress or weight gain. But increasingly researchers have found that the principal cause of elevated insulin levels is a phenomenon known as insulin resistance. Insulin resistance means literally that your body becomes resistant to insulin action, particularly in the consumption of sugar (glucose) that insulin regulates. Exactly why insulin resistance develops is not yet well

understood. Some researchers believe it may be genetic. Whatever the reason, the effects of insulin resistance are pretty much documented.

What happens is this: Your body cannot properly metabolize glucose when you have become resistant to insulin so your blood glucose level has a tendency to rise. As the glucose level rises, your pancreas, which produces insulin, begins to work harder and it secretes still larger amounts of insulin to try to get the blood glucose under control. Consequently, the insulin level in the blood keeps elevating until it reaches a condition known as hyperinsulinemia.

**What's wrong with
hyperinsulinemia?**

For one thing, hyperinsulinemia, besides controlling sugar consumption, facilitates fat storage and increases body mass. That means one can easily gain excess weight without eating very much. Chronic hyperinsulinemia can also lead to high blood pressure through salt retention and hardening of blood vessels. It also increases fat and cholesterol deposits on blood vessels to block blood circulation, thus likely increasing heart problems, including heart attacks. After a while, the hard-working pancreas, unable to secrete sufficient insulin to control the blood glucose level, will eventually give out, and that will result in Type 2 sugar diabetes.

Previously you said it could also affect a woman's ability to conceive. How?

In women of reproductive age, hyperinsulinemia can disrupt the ovarian function by producing too many male hormones in the ovaries. All women normally have a small amount of male hormones produced by their ovaries and adrenal glands. These male hormones are essential for women's well being as well as sexual function. But an excess of male hormones causes problems; they suppress egg maturation and even damage the eggs themselves. Polycystic ovary syndrome, which makes it hard for a woman to achieve pregnancy without having a miscarriage, has also been traced in most instances to chronic insulin resistance. Therefore, women with insulin resistance frequently have infertility problems in addition to the metabolic problems described above.

How can I tell whether I may have too many male hormones?

Some signs of excess male hormones include unwanted body hair, irregular periods, infertility problems and excess weight. Bear in mind that having any or all of these conditions does not necessarily mean you have an excess of male hormones, but it may be worthwhile to check, especially since the condition may



actually stem from insulin resistance and Syndrome X, in which case early detection is very important.

Why is early detection so critical?

Early detection will help a skillful physician to line up a strategy to control the elevated blood insulin. More importantly, it will help to prevent adverse medical problems such as high blood pressure, heart problems, diabetes, and, if you are of reproductive age, your ability to successfully have a baby. If you think you have any of the signs or symptoms we have described, especially if you have an overweight

condition that you suspect may be caused by a metabolic condition rather than from overeating, consider having your resistance to insulin tested.

How is one tested and where can I get it done?

There is now a specialized test for insulin resistance that is as simple as drawing blood. However, because insulin resistance and Syndrome X are relatively new phenomena, not every facility is equipped to conduct and interpret such tests. To find out whether you suffer from insulin resistance, you will need to seek out a facility that is experienced in detecting and treating insulin resistance. In this area the Delaware Valley Institute of Fertility & Genetics is one of the very few facilities anywhere to offer a specialized Syndrome X Early Detection and Treatment Program.

The Institute's Syndrome X Early Detection and Treatment Program is headed by Chung H. Wu, M. D., FACOG, who is one of the country's foremost authorities on insulin resistance and Syndrome X. As a Professor of Obstetrics and Gynecology and researcher in Reproductive Endocrinology and Infertility at Thomas Jefferson University and UMDNJ-Robert Wood Johnson Medical School, he has been at the forefront in educating the medical profession about this condition and its treatment.

Suppose I already have Syndrome X. Can it be treated successfully?

Yes, it can. If tests show that you have an insulin resistance condition, the Delaware Valley Institute of Fertility & Genetics Syndrome X Early Detection and Treatment Program will develop a made-to-order five-step treatment program specifically for your situation. Under this custom tailored program, you will be taught to manage and treat your own condition and health through consultation, a personalized diet and exercise program, stress management and whatever medications are necessary to help you accomplish your goal. There is no reason why you cannot suppress your blood glucose level, lower your insulin resistance and lead a normal, healthy life, including motherhood, if you follow your individualized program to its successful conclusion.

How can I learn more about this Syndrome X Early Detection and Treatment Program?

To schedule a consultation or arrange for insulin resistance testing, call the Delaware Valley Institute of Fertility & Genetics at (856) 988-0072. For your convenience, there are offices of the Delaware Valley Institute of Fertility & Genetics in Marlton, Vineland, and Lawrenceville, New Jersey.