

ABOUT METABOLIC SYNDROME

Do you tend to gain weight around your middle (apple shape vs pear shape)?

You might have metabolic syndrome, also known as syndrome X and insulin resistance syndrome.

What is metabolic syndrome?

Metabolic syndrome indicates a series of biochemical changes in your body. We believe that insulin resistance plays a major role in the development of these conditions. Being insulin resistant means not responding to the effects of insulin the way a normal body should. Insulin is manufactured by the body to transport glucose (sugar from the digestion of food) into cells, where it is used for energy. Insulin resistance occurs when the cells are less receptive to insulin and more is required. Insulin resistant people may need to manufacture twice as much insulin to keep their levels of blood sugar normal. These elevated insulin levels are believed to impact body chemistry in many ways.

We have recently discovered that people can appear healthy for many years, while these metabolic abnormalities are increasing their risk for diabetes, heart attack and stroke. It is difficult to measure insulin resistance directly, so we usually use the “footprints”, or associated findings, to diagnose metabolic syndrome.

How is it identified?

The presence of 3 or more of these risk factors is considered metabolic syndrome:

- Abdominal fat, measured by a waistline of 40 inches (or more) for men; and 35 inches (or more) for women (measured across the belly), *(less for Asian-Americans)*
- A blood pressure of 130/85 mm Hg or higher *(or taking medicine for hypertension)*
- A triglyceride level above 150 mg/dl *(or taking medicine to lower triglycerides)*
- A high density lipoprotein level (HDL) less than 40 mg/dl (men) or under 50 mg/dl (women), *(or taking medicine to increase HDL)*
- A fasting blood glucose (sugar) level greater than 100 mg/dl *(or taking medicine to lower blood sugars)*

Who gets metabolic syndrome?

Around 25% of all US adults have metabolic syndrome. Closer to 40% of adults over 60 have it. Metabolic syndrome is impacted by genetics and by lifestyle. Changing your lifestyle can dramatically reduce your risk of heart disease and may prevent the development of diabetes.

What can you do?

The main characteristics of the American diet are that we eat too much and too much of that is unhealthy food. The more we eat the more we want to eat – especially when it comes to certain kinds of carbohydrates. With metabolic syndrome when we eat sweets and refined carbohydrates, they cause the production of more insulin, which makes us even hungrier. Because insulin resistance requires the production of more insulin, there is a tendency towards swings in blood sugar, which can result in feeling tired and irritable and make it difficult to concentrate. Because high insulin levels also stimulate fat storage, it can be harder to lose weight. Saturated fats and trans fats significantly increase the risk of metabolic syndrome.

All this can be changed. Making changes in lifestyle can reverse the effects of metabolic syndrome and dramatically improve your risk for heart disease, stroke and diabetes. These changes will make you feel better overall, with more stable energy levels. Best of all, the recommendations for metabolic syndrome are consistent with the recommendations for anyone who wants to be fit and healthy.

- Lose weight – even a 5-10% drop in body weight can improve insulin resistance.
- Exercise – increased activity can improve insulin levels. You can benefit from exercise even if you are unable to shed weight. Start slow and build gradually. Do something you enjoy and can sustain.
- Change your diet – to more complex (high fiber) carbohydrates, less saturated fats (animal fats) and trans fats, and eat regularly throughout the day. The hungrier you get the harder it is to choose wisely and stop when full.
- Limit alcohol intake – to two drinks a day for men, one drink a day for women.
- Stop smoking.
- Talk to your doctor about your risk factors and about what you can do.
- Work with a dietitian to make permanent lifestyle changes.