Metabolic Syndrome

Metabolic syndrome is the combination of different conditions (see below) clustered together to greatly increase a person's chances of heart attack, stroke, and diabetes type 2. This syndrome is also called insulin resistance syndrome, or metabolic syndrome X.

The conditions include:

- Central obesity (belly fat)
- Diabetes mellitus (high blood sugar)
- High triglyceride levels and low high-density lipoprotein (HDL) levels
- High blood pressure (hypertension)

Causes of metabolic syndrome

Metabolic syndrome, thought to be a genetic condition, may be hereditary in nature. People with insulin-resistant conditions such as diabetes and hyperinsulinemia are more prone to develop metabolic syndrome.

Diabetes occurs when the body cannot produce or properly use the hormone insulin. Hyperinsulinemia occurs when large amounts of insulin are pumped into the bloodstream.

Excessive insulin in your bloodstream increases your odds of having a heart attack because it

- Raises your triglyceride levels.
- Lowers your levels of HDL (the "good cholesterol").
- Raises your levels of low-density lipoprotein (LDL or the "bad cholesterol").
- Makes it harder for your body to clear fats from your blood after you eat.
- Raises your blood pressure.
- Increases your risk of blood clots.

Insulin resistance is moderately common in Americans;10-30% of the population.

Metabolic syndrome signs and diagnosis

Most patients do not have symptoms, but there are a few warning signs such as abnormal levels of HDL or triglycerides, elevations in blood pressure, and being overweight. Blood tests will be ordered to measure glucose and insulin levels in your bloodstream.

Treatments for metabolic syndrome

Because this syndrome involves many conditions, the root causes need to be identified and treated, such as diabetes, hyperinsulinemia, high cholesterol levels, or high blood pressure. Maintaining a healthy weight through diet and exercise will improve your insulin sensitivity and lower your blood pressure and cholesterol levels. Medicines may be necessary in some cases as well as lifestyle alterations.