MANAGING METABOLIC SYNDROME THROUGH DIET AND EXERCISE

What is Metabolic Syndrome?

Metabolic syndrome is a term for a group of risk factors that increases your risk of heart disease and other health problems such as diabetes and stroke. The risk factors are an increased waistline (men—≥40 inches, women—≥35 inches), elevated triglycerides (≥150 mg/dL), reduced HDL cholesterol (men—≤40 mg/dL, women—≤50 mg/dL), elevated blood pressure (≥130/85 mmHg), and elevated fasting glucose (≥100 mg/dL). A physician will diagnose an individual with metabolic syndrome if they present with at least 3 of the 5 risk factors.

Know Your Facts!

Q: Am I more at risk if I have all 5 risk factors?
A: Yes, your risk of heart disease, diabetes, and stroke increases with the number of risk factors you have.

Q: How much higher is my risk for health complications with metabolic syndrome?
A: You are 2x as likely to develop heart disease and 5x as likely to develop diabetes if you have metabolic syndrome.

Q: Why is elevated blood pressure bad?
A: Elevated blood pressure places extra stress on the walls of your arteries, which then damages the fragile walls. These walls harden, also known as atherosclerosis and causing the heart to work harder with every beat.

Q: Why is elevated fasting glucose bad?
A: An elevated fasting glucose can be sign of diabetes. When you have type II diabetes, your body’s cells become resistant to insulin, which is a hormone that regulates your body’s cell uptake of blood sugar for use as energy.

Q: Is there anything I can do to control my metabolic syndrome aside from taking medication?
A: Yes! There are many modifiable risk factors that contribute to metabolic syndrome. Please refer to the reverse side for lifestyle changes that can help to manage metabolic syndrome.
Factors of Metabolic Syndrome

The following are known to increase risk for metabolic syndrome:

**Modifiable Risk Factors**

- Obesity or being overweight
- Smoking
- Lack of physical activity
- Insulin resistance (from excess weight and lack of physical activity)
- An unhealthy diet

**Non-Modifiable Risk Factors**

- Genetics
- Older age
- Ethnicity
- Insulin resistance (from genetics)
- Family history of type II diabetes
- History of cardiovascular disease
- Nonalcoholic fatty liver disease
- Polycystic ovary syndrome

What Can Lifestyle Changes Do For Metabolic Syndrome?

There are many proven lifestyle changes to help manage metabolic syndrome—

Diets such as the DASH (dietary approaches to stop hypertension) diet, are proven to aid in weight loss. A diet to promote a healthy heart should be low in saturated and trans fats; this can be achieved by avoiding baked goods with butter, as well as deep fried and processed foods. Although smoking is not part of metabolic syndrome, it also increases your risk for heart disease. If you have metabolic syndrome you should stop smoking. Exercise is also a great lifestyle change to make in order to manage your metabolic syndrome.

What Can Exercise Do For Metabolic Syndrome?

Moderate to vigorous (65% or greater of VO\(_2\) max) aerobic exercise 3-5 times a week for a total of around 150 minutes has been shown to decrease the severity health metrics that contribute to metabolic syndrome, and can also eliminate metabolic syndrome altogether! Aerobic exercise in combination with resistance exercise can be especially effective in reducing metabolic syndrome scores. The focus of such a workout should be on the aerobic exercise, but additional light resistance training 2 times a week can be beneficial.