

“Why Firefighters Need To Understand Metabolic Syndrome”

Because we know that the job of firefighting requires an individual to be in top physical condition due the nature and the difficulties of the tasks they are required to perform, understanding metabolic syndrome is an essential part of protecting yourself from a tragic event on the fireground.

What is metabolic syndrome? Metabolic syndrome is a health condition. The term was first coined in 1998 and is now as common as the common cold. According to the American Heart Association, one in every six Americans (47 million Americans) now have this condition. The risks of acquiring metabolic system, increase as we age. It is also referred to Syndrome X. The syndrome is not a disease by itself, however, it reflects the high risks individuals place upon their physiological systems. These risk factors include, hypertension (high blood pressure), hyperglycemia (high blood sugar), unhealthy cholesterol levels and visceral fat (abdominal fat). The five risk factors commonly associated with metabolic syndrome include:

INCREASED WISTLINE: Women: 35 inches or more

Men: 40 inches or more

CHOLESTEROL HIGH TRIGLYCERIDES:

Either 150mg/dL or higher or

Using cholesterol medicine

CHOLESTEROL: LOW GOOD CHOLESTEROL HDL:

Men: Less than 40mg/dL

Women: Less than 50mg/dL or

Using cholesterol medicine

HIGH BLOOD PRESSURE: Blood pressure of 130/85 or

Using cholesterol medicine

HIGH BLOOD SUGAR: 100mg/dL or higher

To be diagnosed with metabolic syndrome, you need to have issues with three of the five symptoms. Some of the chronic illness and diseases this syndrome spawns include, diabetes, obesity, coronary heart disease, inflammation, arteriosclerosis (hardening of the arteries), a condition that leads to strokes and heart attacks, all of which are major concerns for safety on the fireground.

The two major contributors responsible for the development of metabolic syndrome and all the dangerous health risks associated with its' development are nutrition and exercise. Nutritionally, the three most likely concerns include, sugar, processed foods and the volume of food consumed at meals.

The Sugar Connection. Sugar, in all of its' forms and names is a simple carbohydrate. Meaning that the sugar enters your blood stream very quickly. This form of energy is extremely inefficient because it enters the blood stream too quickly, without much digestive energy and floods the bloodstream with too much sugar too quickly. This stimulates the pancreas to release insulin. No energy can enter the cell without an insulin escort. When you continually consume a diet rich in sugar (the hallmark of processed foods), the pancreas is forced to repeatedly send out insulin. If this pattern is repeated day after day (on the SAD- Standard American Diet), there will come a time, when the pancreas can not keep up with the demands that sugar places on it. The result is referred to Insulin Resistance (the first stage of type 2 diabetes). The body can not respond properly to the insulin it makes, resulting in elevated blood sugar levels. The sugar, instead of producing energy, gets stored as visceral fat (most dangerous fat) around the belly. The

result of this serious health condition, if left untreated, becomes like a “pin ball” effect, each stage of development creating other unwanted, unintended health risks. Excess body fat storage leads to overweight and obesity. This then creates pressure on your heart which responds with higher blood pressure levels. Diabetes and coronary heart disease are the eventual destinations of metabolic syndrome. If you let this go unchecked long enough, your first realization of a problem, may well be your last.

The best, most effective, least costly and long- lasting mediation here is good, quality nutrition, including the minimal consumption of processed foods. Lets’ face it, the job can potentially be deadly, the equipment and gear are heavy. It requires strength and conditioning to perform these responsibilities safely and efficiently. Good, high quality nutrients, low in calories and high in nutrients promotes optimal health. While highly processed foods are laced with sugar, salt, fats, dyes, colors, calories, additives and on and on. These foods support poor health and place obstacles (risks) to your health and safety.

The volume (amount) of food on your plate matters. Most people generally finish what is on their plates. An example here is a buffet, where people fill a plate completely, even though they know they can get as many fresh plates as they desire. The most effective strategy I have for this is to simply go from the standard nine- inch plate to the smaller seven- inch plate. The result may be the same. You will fill your plate and probably finish all the food, however, the seven-inch plate is substantially lower in total calories. Keeping a food journal is another way to stay on top of the volume and benefits of good nutrition. Unless you understand what your diet is comprised of and can visually see the problem areas, it is not easy to know if and by how much you are over eating.

Combining good solid, nutrient dense foods (foods high in nutrients and low in calories), while being aware of the volume of how much energy dense foods (foods high in calories and low in nutrients) you are consuming, with a moderately intensive aerobic and weight resistance exercises, 3-5 times a week for an hour per session, is one of the most positive strategies for firefighters to achieve optimal health and job performance, while significantly reducing the risks of serious illness and disease that can spell disaster on the fireground.

This is a positive commitment between yourself and your awesome responsibilities on the scene. We are a dedicated, strong community of men and women. Changing your life-style to facilitate health and fitness is probably the most important gift you can give to yourself, the fire service and your loved ones. Come on! Make the changes you know make absolute sense!

Robert Blaufarb is the Director of Health and Wellness for the Town of Mamaroneck Fire Department. Any questions or advice, please feel free to contact me at mostcalls@msn.com.