

Inflammation & Plaque: The Silent Killer

CRP-hs & Lp-PLA2

Chronic inflammation in the body is the root cause of many medical conditions including cardiovascular disease. Other diseases related to inflammation are diabetes, depression, hypertension and Alzheimer's disease. Inflammation affects the walls of the arteries and increases risk for **plaque formation** and **plaque rupture**; the cause of heart attacks and strokes. Inflammation is the body's natural defense mechanism to fight off infection and toxins. If the natural balance of our immune system is disrupted, it can shift into a chronic state of inflammation adversely affecting our entire body, including our arteries where cholesterol is then deposited and plaque buildup begins.

The following two blood tests are independent predictors of risk factors for heart disease and stroke events (plaque rupture):

- **CRP-hs** (C-Reactive Protein-highly sensitive) are a simple blood test that measures the amount of inflammation in the body.
- **Lp-PLA2** is a blood enzyme that is associated with the formation of vulnerable, rupture-prone plaque in the arteries. Elevated levels confer an additive risk for a heart or stroke event of up to 5X the normal risk when the CRP-hs is elevated.

Obvious reasons for inflammation include arthritis, infection and injury. Other causes that may be silent and insidious include:

- ❑ Diet high in sugar, refined flour, trans and saturated fats and processed food
- ❑ Overweight, especially abdominal fat
- ❑ Smoking
- ❑ Lack of exercise
- ❑ Stress, physical and emotional
- ❑ Sleep deprivation (less than 7 hours per night)
- ❑ Toxins (mercury, lead)
- ❑ Food allergies such as gluten and dairy
- ❑ Nutritional deficiencies including Vitamins D, B, C and Omega-3 fatty acids

How do we lower inflammation?

- ❑ Diet **LOW** in trans/saturated and low glycemic index carbohydrates, **HIGH** in monounsaturated fats, fruits and vegetables.
- ❑ Exercise most days of the week
- ❑ Smoking cessation
- ❑ Weight loss
- ❑ Omega 3 fatty acid supplement (EPA & DHA)
- ❑ Fruit and vegetables
- ❑ Stress management
- ❑ Adequate sleep
- ❑ Medications including Statins, Fibrates, Niacin (Vit B3 or Nicotinic Acid)