# Heart Disease: Your True Risk

*If you have heart disease, or think you do, it's vital to take action to protect your heart health. Fortunately, there's a lot you can do. This fact sheet gives you the key steps, including how to survive a heart attack and prevent serious damage to heart muscle. Caring for your heart is worth the effort. Use the information here to start today to take charge of your heart health.*

## WHAT IS HEART DISEASE?

Coronary heart disease is the most common form of heart disease. Usually referred to as simply "heart disease," it is a disorder of the blood vessels of the heart that can lead to a heart attack. A heart attack happens when an artery becomes blocked, preventing oxygen and nutrients from getting to the heart.

Some women with heart disease aren't too concerned about their disorder because they think it can be cured by surgery. This is a myth. Heart disease is a lifelong condition—once you get it, you'll always have it. But there is much you can do to control heart disease, prevent a heart attack, and increase your chances for a long and vital life.

If you have heart disease, or think you do, it's vital to take action to protect your heart health. Fortunately, there's a lot you can do. This fact sheet gives you the key steps to identifying your true risk for heart disease. Talk to your doctor today about testing (SpectraCell's LPP™ and LPP Plus™) to identify your true risk. *Caring for your heart is worth the effort.*

## RISK FACTORS

If you already have heart disease, you'll need to work especially hard to control your risk factors. Risk factors are health conditions or habits that increase the chances of developing a disease, or having it worsen. If you don't have heart disease get tested to be sure risk factors haven't been missed by standard cholesterol tests. Learn your true risk factors right away.

There are two types of heart disease risk factors—those that are beyond your control and those that can be changed. Those that can't be changed are a family history of early heart disease and age. Those risk factors that can be controlled are smoking, high blood pressure, high blood cholesterol, overweight/obesity, physical inactivity, and diabetes. While having even one risk factor is dangerous, having multiple risk factors is especially serious, because risk factors tend to "gang up" and worsen each other's effects.

## IDENTIFYING YOUR RISK

Cholesterol has historically need used as the standard indicator for heart disease, but about 50% of those who have heart attacks have normal cholesterol (NIH). According to the National Cholesterol Education Program measuring lipoprotein particles is crucial for accurate assessment of heart disease risk and treatment. The LPP™ test identifies all of the lipoprotein particles that are dangerous by the National Cholesterol Education Program (NCEP) and provide treatment guidelines to address high values.

### Particles Identified by NCEP as important:

**Small, dense LDL (LDL III & IV):** these particles are very dangerous and easily penetrate the arterial wall causing plaque. These particles are not treatable with statin drugs (Lipitor®, Zocor®, Crestor®, etc.) Treated with niacin, fibrates and lifestyle changes.

LPP Lipoprotein Particle Profile™

ADVANCED TESTING FOR CARDIOVASCULAR RISK

**RLP (remnant lipoprotein):** very dangerous particles that skip the oxidation process and are very similar to plaque. Treated with omega 3 fatty acids.

**Lp(a):** a small dense LDL that builds plaque and causes plaque to rupture. Although heredity plays a large role, treatment with niacin can lower levels.

**HDL 2b:** this particle tells your doctor how well LDL is being removed from your system. Treated to improve with exercise and lifestyle changes.

## Other Important Information in the LPP Plus™

**Homocysteine:** an amino acid linked to higher risk of coronary heart disease, stroke and peripheral vascular disease. Especially important in patients where other risk factors may not exist. Treated with folic acid, B6, B12 and lifestyle changes.

**HS C-Reactive Protein:** A marker for inflammation, linked to increased risk for heart disease, diabetes and metabolic syndrome. Treated with lifestyle changes.

**Fasting Insulin:** A marker for insulin production. High fasting insulin is a sign of insulin resistance and the start of type II diabetes or metabolic syndrome and may require further testing. Treated with lifestyle changes.

## TREATMENT

Heart disease and its risk factors can be treated in three ways: by making heart-healthy changes in your daily habits, by taking medication, micronutrients, and in some cases, by having a medical procedure. Following your doctor's instruction is a very important part of your heart health treatment plan.

**Making Lifestyle Changes.** This involves adopting new habits, such as not smoking, following a heart-healthy eating plan, maintaining a healthy weight, and becoming more physically active.

**Taking Medication.** Your doctor may prescribe nutritional supplements and/or medication to treat high blood cholesterol, high blood pressure, or heart disease itself. For instance, Omega 3 Fatty acids and B vitamins may be prescribed to help lower certain dangerous lipoprotein particles and promote over all heart health. If you do take medications or nutritional supplements, it is vital to also keep up your heart-healthy lifestyle, because it can help to keep doses of some medicines as low as possible and promote overall wellness. Be sure to follow your treatment program exactly as your doctor advises; this includes lifestyle changes, special diets and supplementation. As your caregiver, they truly have your best interest at heart.

A SPECIAL NOTE FOR WOMEN ON POSTMENOPAUSAL HORMONE THERAPY

Postmenopausal hormone therapy (formerly known as hormone replacement therapy) was once thought to lower the risk of heart attack and stroke for women with heart disease. But research now shows that women with heart disease should not take it. Postmenopausal therapy can involve the use of estrogen plus progestin or estrogen alone. Studies on each type show that, for women with heart disease:

- *Estrogen-only therapy will not prevent heart attacks*
- *Estrogen plus progestin therapy increases the risk of heart attack during the first few years of use and also increases the risk of blood clots, stroke, and breast cancer*