PREDISPOSING FACTORS OF HEART DISEASE

Individual level risk factors, which put people at increased risk for cardiovascular diseases, include:

Controllable:
- High blood pressure
- High blood cholesterol
- Smoking
- Obesity
- Physical Inactivity
- Diabetes
- Stress*

Uncontrollable:
- Gender
- Heredity (family history of CHD)
- Age

* Although stress may be a risk factor for CHD, scientists still do not know exactly how stress might be involved in heart disease.

When there is too much cholesterol in your blood, the excess can become trapped in the walls of your arteries. By building up there, the cholesterol helps to cause hardening of the arteries or atherosclerosis. And atherosclerosis causes most heart attacks. How? The cholesterol buildup narrows the arteries that supply blood to the heart, slowing or even blocking the flow of blood to the heart. So, the heart gets less oxygen than it needs. This weakens the heart muscle, and chest pain (angina) may occur. If a blood clot forms in the narrowed artery, a heart attack (myocardial infarction) or even death can result.

Cholesterol buildup happens very slowly - you are not even aware of it. If you lower your high blood cholesterol level, you can slow, stop, or even reverse the buildup - and lower your risk of illness or death from heart disease.

Normal Artery ----
Wall

----- Abnormal
narrowed artery
opening

Cholesterol travels in the blood in packages called lipoproteins. Just like oil and water, cholesterol and blood do not mix. So, in order to be able to travel in the bloodstream, the cholesterol made in the liver is also coated with a layer of protein making a lipoprotein. This lipoprotein then carries the cholesterol through the bloodstream. Two types of lipoproteins affect your risk of heart disease.

Low-density lipoproteins (LDLs): the bad cholesterol. LDLs carry most of the cholesterol in the blood, and the cholesterol and fat from LDLs are the main source of dangerous buildup and blockage in the arteries. Thus, the more LDL-cholesterol you have in your blood, the greater your risk of heart disease.

High-density lipoproteins (HDLs): the good cholesterol. HDLs carry some of the cholesterol in the blood, but this cholesterol goes back to the liver, which leads to its removal from the body. So HDLs help keep cholesterol from building up in the walls of the arteries. If your level of good cholesterol is low, your risk of heart disease is greater.

Why do some people have too much cholesterol in their blood? Many factors help determine whether your blood cholesterol level is high or low. The following factors are the most important:

HEREDITY: Your genes partly determine the amount of cholesterol your body makes, and high blood cholesterol can run in families.

DIET: Two nutrients in the foods you eat make your blood cholesterol level go up: saturated fat, a type of fat found mostly in foods that come from animals; and cholesterol, which comes only from animal products. Saturated fat raises your cholesterol level more than anything else in the diet. Reducing the amounts of saturated fat and cholesterol you at is an important step in reducing your blood cholesterol levels.

WEIGHT: Excess weight tends to increase your blood cholesterol level. If you are overweight and have high blood cholesterol, losing weight may help you lower it.

Physical activity/ exercise. Regular physical activity may help to lower LDL-cholesterol and raise HDL-cholesterol levels.

AGE and SEX: Before menopause, women have total cholesterol levels that are lower than those of men the same age. Pregnancy raises blood cholesterol levels in many women, but blood cholesterol levels should return to normal about 20 weeks after delivery. As women and men get older, their blood cholesterol levels rise. In women, menopause often causes an increase in their LDL-cholesterol level. Some women may benefit from taking estrogen after menopause, because estrogen lowers LDLs and raises HDLs.

ALCOHOL: Alcohol intake increases HDL-cholesterol. However, doctors do not know whether it also reduces the risk of heart disease. Drinking too much alcohol can certainly damage and liver and heart muscle and cause other health problems. Because of these risks, you should not drink alcoholic beverages to prevent heart disease.

STRESS: Stress over the long term has not been shown to raise blood cholesterol levels. The real problem with stress may be how it affects your habits. For example, when some people are under stress, they console themselves by eating fatty foods. The saturated fat and cholesterol in these foods probably cause higher blood cholesterol, not the stress itself.

OTHERS: In addition, another factor that influences your risk of heart disease is where your body stores excess fat. If you have an apple-shaped body with most of your fat around the stomach, you are at a greater risk of heart disease than if your body is pear-shaped, with most of your fat around your hips. Generally, men carry their fat around the stomach, while women carry it on the hips and thighs.

Although these factors each increase the risk of CHD, they do not describe all the causes of coronary heart disease; even with none of these risk factors, you might still develop CHD. More Information :

1. About Cardiovascular Resource I

2. Cardiovascular Resource II

3. Other Risks