

World Heart Federation - Cardiovascular disease risk factors

There are many risk factors associated with coronary heart disease and stroke. The major risk factors, tobacco use, alcohol use, high blood pressure (hypertension), high cholesterol, obesity, physical inactivity, unhealthy diets, have a high prevalence across the world.

Of particular significance in developing countries is the fact that while they are grappling with increasing rates of cardiovascular disease, they still face the scourges of poor nutrition and infectious disease. Nevertheless, with the exception of sub-Saharan Africa, cardiovascular disease is the leading cause of death in the developing world.

You will not necessarily develop cardiovascular disease if you have a risk factor. But the more risk factors you have the greater is the likelihood that you will, unless you take action to modify your risk factors and work to prevent them compromising your heart health.

Modifiable risk factors

Hypertension is the single biggest risk factor for stroke. It also plays a significant role in heart attacks. It can be prevented and successfully treated but only if you have it diagnosed and stick to your recommended management plan.

Abnormal blood lipid levels, that is high total cholesterol, high levels of triglycerides, high levels of low-density lipoprotein or low levels of high-density lipoprotein (HDL) cholesterol all increase the risk of heart disease and stroke. Changing to a healthy diet, exercise and medication can modify your blood lipid profile.

Tobacco use, whether it is smoking or chewing tobacco, increases risks of cardiovascular disease. The risk is especially high if you started smoking when young, smoke heavily or are a woman. Passive smoking is also a risk factor for cardiovascular disease. Stopping tobacco use can reduce your risk of cardiovascular disease significantly, no matter how long you have smoked.

Physical inactivity increases the risk of heart disease and stroke by 50%. Obesity is a major risk for cardiovascular disease and predisposes you to diabetes. Diabetes is a risk factor for cardiovascular disease.

Type 2 diabetes is a major risk factor for coronary heart disease and stroke. Having diabetes makes you twice as likely as someone who does not to develop cardiovascular disease. If you do not control diabetes then you are more likely to develop cardiovascular disease at an earlier age than other people and it will be more devastating. If you are a pre-menopausal woman, your diabetes cancels out the protective effect of estrogen and your risk of heart disease rises significantly.

A diet high in saturated fat increases the risk of heart disease and stroke. It is estimated to cause about 31% of coronary heart disease and 11% of stroke worldwide.

Being poor, no matter where in the globe, increases your risk of heart disease and stroke. A chronically stressful life, social isolation, anxiety and depression increase the risk of heart disease and stroke.

Having one to two alcohol drinks a day may lead to a 30% reduction in heart disease, but above this level alcohol consumption will damage the heart muscle.

Certain medicines may increase the risk of heart disease such as the contraceptive pill and hormone replacement therapy (HRT).

Left ventricular hypertrophy (LVH) is a risk factor for cardiovascular mortality.

Non-modifiable risk factors

Simply getting old is a risk factor for cardiovascular disease; risk of stroke doubles every decade after age 55.

Your family's history of cardiovascular disease indicates your risk. If a first-degree blood relative has had coronary heart disease or stroke before the age of 55 years (for a male relative) or 65 years (for a female relative) your risk increases.

Your gender is significant: as a man you are at greater risk of heart disease than a pre-menopausal woman. But once past the menopause, a woman's risk is similar to a man's. Risk of stroke is similar for men and women.

Your ethnic origin plays a role. People with African or Asian ancestry are at higher risks of developing cardiovascular disease than other racial groups.