



Coronary heart disease

Coronary heart disease, also known as ischaemic heart disease, is a condition caused by narrowing of the arteries (coronary arteries) supplying blood to the heart muscle. Narrowing of the arteries occurs when the lumen (inside lining of blood vessels) becomes furred up with fatty deposits (atheroma). This process is known as atherosclerosis or hardening of the arteries. This can reduce the blood flow through the artery. Sometimes, a blood clot (thrombosis) can form over a patch of atheroma and this can completely block the blood flow. This can result in angina, heart attack or heart failure. There are many lifestyle factors that can be taken to reduce the risk of forming atheroma and hence preventing coronary heart disease. Some can be modified, treated or controlled and some that cannot.

Non-modifiable risk factors include:

Increasing age: The older a person is, the higher the risk.

Male gender: Men have a greater risk of a heart attack than women, and they have heart attacks earlier in life.

Heredity: Children of parents with heart disease or stroke are more likely to develop it themselves.

Early menopause: these women have a higher risk of coronary heart disease.

Modifiable risk factors include:

Smoking: Smoking doubles your risk of developing heart disease. Your risk of having a stroke and developing lung diseases including lung cancer are also increased. The increased risk falls rapidly after stopping smoking (although it takes a few years before the excess risk reduces completely). Exposure to passive smoking also increases the risk for non-smokers.

Lack of physical activity: Getting, and staying, active can reduce your risk of developing heart disease. To gain health benefits, you should do at least 30 minutes of moderate physical activity at least 5 times a week eg. brisk walking, jogging, swimming cycling, etc. You need to do this regularly on most days as you cannot store up the benefits of physical activity.

Overweight: Carrying excess weight puts a strain on your heart. You are also more likely to develop high blood pressure, high blood cholesterol and diabetes – these in turn can also increase the risk of heart disease. Those with excess body fat, especially around the waist, are at higher risk than on the hips and thigh.

Diet: Increase your fibre intake (at least 30g/day) to help lower your risk of heart disease. Eat fibre from a variety of sources such as whole-meal bread, bran, oats, wholegrain cereals, fruits and vegetables.

Cut down on saturated fats – high levels of saturated fats can increase the level of cholesterol in the blood. Replace foods high in saturated fats with foods high in unsaturated fats such as oily fish, nuts, seeds, avocados, olives, etc

Eat 2-3 portions of fish per week, including a portion of oily fish (mackerel, sardines, salmon, fresh tuna,

etc). These are rich in omega-3 fats which can protect against heart disease.

Eat at least 5 portions of fruits and vegetables daily. As well as low in fat, they contain antioxidants and vitamins which may help to prevent atheroma from building up.

Cut down on salt to no more than 5g a day (less for children) to maintain healthy blood pressure.

Reduce alcohol intake – a small amount of alcohol may be beneficial to the heart but drinking too much or binge drinking can damage the heart muscle leading to abnormal heart rhythms, heart failure and liver disease. Don't forget alcohol contains calories.

Stress: People under stress may over-eat, start smoking or increase their smoking, and exercise less. Too much stress can cause the blood pressure to rise as we overwork our hearts. The best way to deal with stress is to use a range of coping mechanisms including yoga, meditation, therapy or to talk to a trusted friend or professional counselor.

Sleep: When we sleep, our body is given a chance to reboot and recover. This is important for all aspects of our health, not just our hearts. When we are asleep, our heart rate and blood pressure go down. This gives our heart a much needed break.

Other treatable or partially treatable risk factors

High blood pressure: This is also a risk factor for stroke, heart attack, kidney failure and heart failure. Usually high blood pressure causes no symptoms so make sure you have yours checked regularly by your doctor. You can lower high blood pressure by regular physical activities, losing weight and eating healthily especially with less salt in the diet.

High blood cholesterol: As blood cholesterol rises, so does the risk of coronary heart disease. This is even more so if you have other risk factors like diabetes and high blood pressure. Lowering your cholesterol level will reduce your risk of developing coronary heart disease. People with high cholesterol levels and who are at high risk of developing coronary heart disease will need to lower their cholesterol levels with medications.

Diabetes mellitus: This can increase the risk of cardiovascular diseases especially if the blood sugar is not well controlled. It is important that diabetics have good control of their blood sugar levels.

Other factors that can contribute to heart disease risk include:

Screening for coronary heart disease

No matter how busy you are, the most important thing is your health. The key to good health is taking preventative measures everyday by eating right, exercising regularly and refraining from smoking and drinking excess alcohol. Equally important is early detection of diseases through regular health screenings appropriate for your age with your doctor. Those with risk factors should be screened at an earlier age.

Screening requires a consult with your doctor to assess risk factors, checking of body mass index and blood pressure, and a fasting blood test which should at least consist of testing for cholesterol and blood sugar.

Having a lifestyle conducive for a healthy heart takes effort but the benefits make it all worthwhile. It is never too late to cultivate 'healthy heart' habits.