THE IMPORTANCE OF HEART HEALTH

Cardiovascular disease (CVD) is a term used to describe a group of conditions affecting the heart or blood vessels. Examples of this condition include all heart and circulatory diseases such as angina, heart attack, congenital heart disease, hypertension, stroke and coronary heart disease.

According to the World Health Organisation, *"Cardiovascular diseases (CVDs) take the lives of 17.9 million people every year, 31% of all global deaths."* To put this into perspective, cancer comes second to this disease with annual global deaths at 8.2 million.

However, it is important to understand that these conditions are largely preventable by tackling behavioural patterns early on.

The Newcastle Heart Project compared coronary heart disease risk factors in Indian, Pakistani and Bangladeshi communities and also compared South Asians as a whole with Europeans.

One of the key findings amongst this sample size of 6,448 participants was that, *"South Asians have more coronary heart disease than Europeans despite apparently lower levels of risk factors."*

Non-Modifiable Risk Factors

Age - Simply ageing increases the risk of cardiovascular disease. Coronary artery disease is more likely to occur as you get older, especially after the age of 65.

Gender - This is a significant factor as males are at a far greater risk of heart disease compared to premenopausal women. Heart disease has often been considered a man's disease. However, post-menopause, the risk between male and females equalises.

Family History - The risk of developing heart disease increases if you have close relatives that have developed the condition early. If both parents have suffered from heart disease before the age of 55, your risk of developing heart disease can rise to 50% compared to the general population

Race - Ethnic origin plays a distinct role. People with African or Asian ancestry are at a higher risk of developing cardiovascular disease than other racial groups. Hundreds of publications have identified disparities, between race and ethnic groups which have been observed for decades.

Modifiable Risk Factors

Smoking - The most preventable risk factor is smoking. By smoking, the lining of the arteries are damaged leading up to the buildup of fatty tissues. As a smoker, you are twice as likely to develop a heart condition compared to a non-smoker. Exposure to secondary smoke can even increase the risk to non-smokers.

High blood pressure - Put simply, blood pressure is the pressure of blood in your arteries - the vessels that carry your blood from your heart to your brain and the rest of your body. You need a certain amount of pressure to get the blood around your body. High blood pressure – or hypertension – means that your blood pressure is consistently higher than the recommended level. It is not unusual for high blood pressure to go unnoticed as it is not something that you can feel, however, if left untreated your heart may become enlarged. Due to this growth, the heart would no longer be efficient in its ability to pump and could lead to heart failure.

You can reduce your blood pressure by

- Quitting smoking
- Exercising
- Losing weight
- Cutting down on alcohol and caffeine

Diabetes - Diabetes causes damage to your blood vessels. This makes you 2-3 times more likely to develop heart and circulatory conditions like coronary heart disease, stroke and vascular dementia.
The Heart Protection Study was one of the largest studies with a sample size of 20,536 adults of which included nearly 6000 participants with diabetes. The results found that the risk of a heart attack or stroke could be greatly reduced by lowering levels of harmful LDL cholesterol

Inactivity- According to the World Health Organisation, 60% of the world is not sufficiently active. Over long periods of time - if moderate physical activity is conducted - this could reduce the risk of heart disease.

Physical activity assists in maintaining weight and improving the body's use of insulin.

Being active is beneficial for:

- Blood pressure
- Blood lipid levels
- Blood glucose levels
- Blood clotting factors
- Health of your blood vessels
- Inflammation

Plenty is known about why exercise is good for patients with CVD but not enough is known as to why many CVD sufferers engage in little physical exercise. A study whose findings were published in the *European Heart Journal 2013* outlined some of these factors.

Being overweight - In being overweight you may develop hypertension, diabetes and atherosclerosis.

You can tell if you are obese by the size of your waist, the ratio of your waist to your hips, and the relationship between your height and your weight. This last measurement is known as the Body Mass Index (BMI). It is not a perfect way of checking your cardiovascular risk but as your BMI increases, so does your risk of heart disease and stroke.

According to the World Health Foundation, *"...there are 400 million adults worldwide who are obese and one billion who are overweight."*

High blood cholesterol- We all have some cholesterol in our blood, which is needed to stay healthy. This fatty substance, produced naturally in the liver, is used by every cell in our body.

Cholesterol is divided into two main types –"good" and "bad". Too much "bad" cholesterol in your body can cause adverse long-term issues as the fatty substance can

clog up the arteries which may lead to heart and circulatory diseases like a heart attack or stroke.

When people talk about keeping their cholesterol down, they usually mean their total cholesterol level. This is worked out by measuring your “good” HDL cholesterol, your “bad” non-HDL cholesterol and your triglyceride level.

To achieve a healthy heart, the desired outcome is to have a low non-HDL “bad” level and a high HDL “good” level.

Lowering cholesterol levels can be achieved by eating a healthy diet and engaging in regular exercise.

When Should I Go For A Health Screening?

Everyone over the age of 40 should consider having a Cardiological Screening to find out their risk of getting coronary heart disease, having a heart attack or a stroke. The assessment gives your consultant information about your future risk and what they can advise you to do to keep your heart healthy.

There are several different tests to assess people’s risk of coronary heart disease. Health professionals may recommend different tests for different people, depending on the person’s family history:

- Medical history taking
- Physical examination
- Electrocardiogram (ECG)
- Blood tests
- Urine tests
- Chest radiograph (x-ray)
- Treadmill stress test

Regular health exams and thorough tests will help pre-empt problems before they start. This is essential in maximising your chances for treatment and a cure that can prevent further serious issues. By getting the essential health screenings and possible treatments available, you are taking positive steps that will enable you to live a full and long life.