

Taking care of the heart is vital if problems are to be avoided when older.

By Jessica Leow

Heart problems often plague the middle-aged and elderly, but this does not have to be the case.

Heeding the health of the heart – even in childhood – can mean less heartache in later years.

“Factors beyond our control include age, gender, and family history. But take heart – there are many factors we can control,” said Dr Lim Choon Pin, Consultant, Department of Cardiology, National Heart Centre Singapore (NHCS).

Here, he describes the heart at different stages in life and what people can do early to prevent problems later.

20s-30s: Laying the groundwork

Barring a family history or childhood incidence of heart disease, at this age the heart is generally healthy, and free of blockage and plaque. But how it fares two decades later depends on how it is cared for now. “Take care of your heart early in life, and you will reap the rewards as you age. Generally speaking, if you do, you can expect your heart to remain healthy and strong for most of your life,” said Dr Lim.

He said that cholesterol plaques may start forming in blood vessels at this stage. Lifestyle habits can impact the heart and result in cardiovascular-related risk factors such as diabetes, high blood pressure and high cholesterol.

However, unless you show cardiac symptoms or have significant cardiovascular risk factors, there is generally no need for routine cardiac imaging or stress tests.

But the young should not take things for granted. Dr Lim’s advice: Do 30 minutes of moderate-intensity exercise such as brisk walking, cycling, dancing and gardening five times weekly, or 25 minutes of high-intensity exercise such as jogging, running, swimming laps or playing tennis three times a week. Maintain a balanced diet that is rich in vegetables, fruits, whole grains and fish (rich in omega-3 fatty acids). Keep Body Mass Index (BMI) between 18.3 and 23. Do not smoke, and ensure moderate alcohol intake.

Also, get at least six hours of sleep daily. Lack of sleep has been linked to increased insulin resistance, diabetes and heart disease. A review of multiple studies involving almost 500,000 people revealed that those who did not get adequate sleep had an almost 48 per cent chance of dying from heart disease and a 15 per cent greater risk of stroke when followed up 25 years later.

At this stage of life, it is important to start looking at one’s global cardiovascular risk. This means that we should start calculating our individual risk of cardiovascular events over a 10-year period, and to keep these risk factors in check if the risk scores increase. To calculate your risk, use the Health Promotion Board’s risk calculator: www.hpb.gov.sg/HOPPortal/dandc-article/10030.

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40s-60s: Proceed with care

If they are prudent with their lifestyles and dietary habits, we can expect the majority of the population to have good and strong hearts at this time of their lives. “While it is normal to have a healthy, unblocked heart, it is becoming increasingly less common,” said Dr Lim.

The main problem now is ischaemic heart disease: “Patients show up with more symptoms of blockages in the arteries and heart attacks. As a result, many may develop weak heart function, resulting in heart failure.”

Good lifestyle and dietary habits may help maintain a strong heart, but age is an inherent risk factor. Dr Lim cited studies showing that an increased risk of developing coronary artery disease starts at an average age of 45 for men, and 55 for women. The cardiologist said the later onset age for women is likely due to the protective effect of oestrogen prior to menopause. It protects against atherosclerosis, a disease of the arteries characterised by the deposition of fatty material on the inner walls of arteries.

Dr Lim’s advice: Go for regular checks for diabetes, high cholesterol and high blood pressure/ Diabetes, high cholesterol and high blood pressure can cause damage to blood vessel walls, make them more prone to injury, and increase the risk of blockage.”

Tests that can screen for the presence or probability of coronary artery disease – each with its advantages and risks – include the treadmill stress test and the high-sensitivity C-reactive protein test.

70s-80s: Wear & tear

Even those who have laid the groundwork early in life, and have relatively fewer coronary issues and no blockages in their heart arteries, may still develop some physiological stiffening of heart muscle due to the wear and tear of ageing, or disease such as high blood pressure. As a result, breathlessness or swelling in the lower limbs may occur.

People in this age group are also at a higher risk of developing abnormal heart rhythms, often due to blockages in the heart arteries or fibrosis of the nerve conduction in the heart. This can result in very slow heart rates requiring pacemaker implantation, or irregular heart rhythm, called atrial fibrillation, which puts them at risk of stroke.

Heart valves may also degenerate over time. Some patients may encounter stiffening or leaking of their heart valves, leading the need for valve surgery or valve procedures. Advances in minimally invasive procedures have made it possible for even the very elderly to undergo cardiac procedures at low risk.