

THE HEART DISEASE- DIABETES CONNECTION



Understand why people
with diabetes are more
susceptible to heart disease.

Adults with diabetes are two to four times more likely to die from heart disease than those without. While diabetics are more likely to develop heart disease, those with type 2 diabetes are particularly at risk.

Coronary artery disease (CAD) is the cause of death in more than half the patients with diabetes. In one study, at least 68% of people aged 65 and older with diabetes die from some sort of heart disease. Other studies show that the risk of heart attack in diabetics is equivalent to that of non-diabetics with a prior history of heart attack. Women with diabetes are also more likely to die of heart disease than those without. One study showed that women with diabetes have a risk of cardiovascular death up to 7.5 times higher than women without diabetes.

Even with glucose levels under control, the risk of heart disease is present. This is because diabetes causes wear and tear of blood vessels, making the heart work harder. In Asia, type 2 diabetes usually occurs in the setting of metabolic syndrome, a cluster of conditions — hypertension, high blood sugar,

excess body fat around the waist, and abnormal cholesterol levels — that occur together, raising one's risk of developing diabetes. This is also known as insulin resistance syndrome, or Syndrome X.

The most common cause of heart disease in a diabetic is hardening of the coronary arteries, or atherosclerosis. This is caused by a buildup of plaque in the blood vessels.

When the plaque breaks up, the body sends platelets to seal it. As the artery is small, more so in diabetic patients, these platelets could block blood flow and trigger a heart attack.

Heart attack symptoms include shortness of breath, feeling faint, nausea, excessive and unexplained sweating, and pain in the chest, shoulders, jaw and left arm. But diabetics may not get chest pain — it is believed that diabetes-related nerve damage blunts such feelings.

Diabetics who present with heart attacks are at an increased risk of dying from their cardiac event or developing heart failure. Heart failure is a serious condition where the heart cannot pump blood adequately, which can lead to fluid buildup in the lungs, causing breathing difficulty, fluid retention, and swelling in other parts of the body. Diabetic patients also have a higher incidence of multi-vessel disease and greater number of diseased vessels. Early screening of CAD in diabetics is important to ensure that appropriate medical treatments and interventions are carried out, particularly for diabetics participating in high-intensity sports.

To avoid diabetes-led heart disease, diabetics should:

Exercise regularly to better control blood sugar level. Muscles at work uses more glucose than those at rest. Exercise is also beneficial for weight control and stress management. Aim for 150 minutes a week of moderate-intensity aerobic activity that raises the heart rate and makes you perspire.

Adopt a heart-healthy diet by controlling portion size, limiting intake of saturated and trans fats, eating more fruits, vegetables and wholegrain products, selecting low-fat protein sources, and reducing sodium intake. Allow yourself an occasional treat and you will find that this heart-healthy diet is both possible and enjoyable.



Dr Eric Hong

Cardiologist

Dr Eric Hong is currently Consultant Cardiologist at EH Heart Specialist and Visiting Consultant to Mount Alvernia Hospital and Raffles Hospital. Dr Hong has special interests in interventional cardiology, sports cardiology, cardiac rehabilitation, and advanced non-invasive multimodality cardiac imaging. He is also a member of the American College of Sports Medicine (ACSM) and inducted Fellow of numerous prestigious bodies, including the Academy of Medicine, Singapore (Cardiology), American College of Cardiology, European Society of Cardiology, Royal College of Physicians (UK), Harvard Medical School, American Society of Nuclear Cardiology, and American Society of Angiography and Interventions. He continues to be invited as faculty and lecturer to speak at international cardiology conferences overseas, including those in Asia, Europe and the United States.

Connect

EH HEART SPECIALIST PTE LTD

3 Mount Elizabeth

#03-09 Mount Elizabeth Medical Centre
Singapore 228510

Tel: 6736 1068

www.ehheartspecialist.com

Fast facts

1 Diabetes causes wear and tear of blood vessels, which means the heart has to work harder.

2 Besides heart attacks, diabetics are also at risk of heart failure and developing multi-vessel disease.

3 To keep heart conditions at bay, diabetics should exercise regularly and adopt a heart-healthy diet.