What can I do to reduce my risk from coronary artery disease?

1. **Stop smoking**
   Smokers are twice as likely to have a heart attack than non-smokers. Smoking:
   - Reduces oxygen to the heart muscle.
   - May cause heart-rhythm problems.
   - Reduces “good” cholesterol (HDL).
   - Increases heart rate and blood pressure.
   After stopping smoking, benefits begin right away.

2. **Lower your cholesterol**
   (Plaque in arteries is formed from cholesterol)

3. **Increase your activity level**
   The American Heart Association advises exercise for at least 30 minutes, five times a week.

4. **Lose weight** if you need to.
   If you are very overweight, you have a higher risk for heart disease. Reducing your weight will:
   - Lower your cholesterol and triglycerides
   - Raise your “good” cholesterol (HDL)
   - Help control high blood pressure
   - Help control or prevent diabetes
   - Reduce the risk of heart attack and stroke.

5. **Control your blood sugar**
6. **Treat high blood pressure**

**Outcomes** after angioplasty and stenting depend upon the following:

- Age of the patient
- Number of arteries supplying blood to the heart that are diseased
- Location of the blockage in arteries and location of the heart attack
- Time taken to report to the hospital following the heart attack
- Degree of stenosis in the blocked artery
- Clinical status of the patient.

The less of these risk factors you have the better the clinical outcomes.
What is a coronary angiogram?

An Angiogram is used to show any narrowing or blockage of your coronary arteries. It is the 'gold standard' test to find out if you have coronary artery disease. Contrast agent (dye) is injected into the arteries through a catheter (thin, plastic tube). This allows the doctor to see on an X-ray screen where an artery is narrowed or blocked.

How is it done?

This test is done as a day stay procedure in hospital by a cardiologist who will explain the procedure to you before it is done. You will be awake and able to communicate throughout the procedure. A large x-ray camera will be above the table to take pictures of the procedure. The cardiac catheterisation laboratory, or 'cath lab', is a specialised x-ray room where your coronary angiography/angioplasty/stenting will be done. The catheter is inserted either through the groin or the wrist (radial route).

What is angioplasty and stenting?

Angioplasty and stenting is often used instead of surgery to treat narrowed or blocked coronary arteries. If any narrowing or blockages are found, then a tiny wire is passed across the plaque and a balloon is passed and is inflated to compress the plaque. The artery may recoil as the balloon goes down. Most of the time, one or more stents may be placed in the artery to help keep the artery open. A stent is a metal tube or spring coil. This is placed percutaneously into the diseased part of your artery using a balloon.

What are the risks?

An angiogram is a relatively very safe test and serious complications are very rare. Sometimes there is a minor oozing of blood, but it is very uncommon.

After care

You will be asked to rest in bed for between 1 and 4 hours depending on whether the procedure is done via the wrist or groin. If your groin was punctured, it is important to keep your leg straight for the duration of the monitoring period.

Why do I need coronary angiography?

Coronary angiography is used to diagnose a number of heart conditions and to help guide treatment. It may be used:

- After a heart attack
- To help diagnose angina – where pain in the chest is caused by a restricted blood supply to the heart
- To plan interventional or surgical procedures – such as a coronary angioplasty, or coronary artery bypass surgery (CABG)

What is coronary artery disease?

Coronary artery disease is a disease of the blood vessels of the heart. Two major blood vessels (called coronary arteries) carry blood and oxygen to the heart. Over many years, plaque (fatty material) may build up in the arteries. If plaque or a clot blocks or stops the blood flow to the heart, it can cause a heart attack (the death of heart muscle cells). When heart muscle cells die, the heart loses some of its ability to pump blood through the body. There could be serious complications like death due to electrical short-circuiting, cardiac rupture or valve failure.