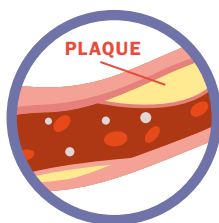


## Q What is a Coronary Artery Calcium (CAC) Score?

It is a test result from a specialized computerized tomography (CT) scan of the heart, referred to as a “**Coronary Calcium Scan**” that lets you know whether your arteries are hardened.

## Q What does it mean to have “calcification” in my arteries?

The **blood vessels on the surface of the heart can develop plaque** that leads to heart attacks. Over time, calcium gets into the plaque causing it to harden. This is visible on the CT scan as “coronary artery calcium”.



The **coronary artery calcium (CAC) score** is the amount of hardened plaque in the arteries on the surface of your heart.

The higher your CAC score, the higher your risk for heart attack and stroke.

## Q Before having a coronary calcium scan, do I need to fast or prepare in other ways?

No preparation is needed.

## Q How long does a coronary calcium scan take?

The scan takes less than 5 minutes.

## Q Will a coronary calcium scan expose me to radiation?

Yes, but the exposure is very low, similar to a mammogram.

## Q Do I have to get an IV for a coronary calcium scan?

No.

## Q What is considered to be a “good” or “healthy” CAC score?

Lower is better, zero is the best. #PowerofZero

## Q In which ways can a CAC score be helpful?

	YES	NO	EXPLANATION
Guides which medicine to use	✓		The CAC score can help with the decision about using medicine (ex. statins, aspirin) to reduce your risk for heart attack or stroke
Guides how much medicine to use	✓		The CAC score can help determine how much medicine to use
Evaluates chest pain		X	Coronary calcium scans are not appropriate to evaluate chest pain; the test cannot determine whether an artery is blocked
Identifies which artery needs a stent or bypass		X	It does not show whether arteries are open or blocked
Shows response to medication		X	Statin medications lower cholesterol and reduce the risk for heart attacks and strokes. There are changes in the artery wall and plaque, but those are not reliably seen on the coronary calcium scan
Improves risk prediction of future heart attacks and/or strokes	✓		The #MESA risk calculator, which considers your CAC score, is more predictive than assessments of risk using your lipid and blood pressure test results alone. Learn more at <a href="http://www.mesa-nhlbi.org">www.mesa-nhlbi.org</a>

## Q What do I need to do if I have a high CAC score?

Talk to your Doctor about your condition. Let them know whether you have chest pain, trouble breathing, or other limitations in your regular physical activities.

A healthy lifestyle is the most important thing you can do if you want to manage your risk for a heart attack or stroke, especially if you have a high CAC score. Learn more about heart-healthy nutrition at [LearnYourLipids.com](http://LearnYourLipids.com) or speak with your healthcare team about diet and physical activity recommendations for you and your family.

The more plaque seen, the higher the cardiovascular risk, and the more important it is to manage your health more aggressively.

- Your healthcare team may prescribe medications such as statins or aspirin to lower your risk for heart attack or stroke.

Stress testing and cardiac catheterization should NOT be done because of a high CAC score.



**Q I am under 40 years old. Should I have a coronary calcium scan?**

Not typically. However, it might be worthwhile if you have close relatives who developed coronary artery disease before age 60 or if you have inherited conditions such as familial hypercholesterolemia that cause early heart disease.



**Q Should I have a scan if I am older than 75 years old?**

Maybe. It can help you decide with your healthcare team if you need to start, stop, or adjust your cholesterol-lowering medication(s).

**Q What are the “downsides” to having a coronary calcium scan?**

You will have to pay for the test on your own as most insurance plans do not cover the expense. The cost is anywhere from \$35-300 so you will want to ask for pricing before scheduling your scan.

It is not unusual to find minor lung “nodules” during a scan. Your doctor will help decide whether these need additional attention, including a repeat scan. This can cause anxiety but note that coronary calcium scans are NOT a reliable way to detect lung cancer.

**Q Why haven’t I been told about getting coronary calcium scan before?**

It is complicated. The test has been available for several decades and the technology has been improving. Safe, low-dose-radiation scanners are now widely available, and we now have evidence from tens of thousands of patients in clinical trials that show this test is useful.

The National Lipid Association (NLA) published a summary document that explains the evidence behind the use of CAC scores, and provides recommendations on when the test should be used. Your doctor can review this for details.\*

\*Orringer CE, Blaha MJ, Blankstein R, et al. The National Lipid Association scientific statement on coronary artery calcium scoring to guide preventive strategies for ASCVD risk reduction. *J Clin Lipidol.* 2021;15(1):33-60. doi:10.1016/j.jacl.2020.12.005