

What is a Nuclear Stress Test?

A nuclear stress test involves having pictures of your heart taken before and after exercise. From these sets of pictures, your doctor will be able to determine how well your blood is flowing through your heart when you are exercising and when you are at rest.

Technologists in Nuclear Medicine take pictures of your heart using a special camera. Since your heart is inside your body, a low-dose radioactive isotope (which has no side effects) is injected through an intravenous (IV) into your blood stream that will allow the camera to “see” your heart. Once you have had your injection of the isotope, you will wait 60 minutes for it to circulate before they take the first set of pictures.

Then, you’ll be directed the Stress Test Lab where you will walk on a treadmill. Your heart rate, rhythm of your heart, and blood pressure will be monitored throughout the exercise portion of the test. Once you’ve hit a pre-determined heart rate (based on your age), you will have the radioactive isotope injected again and more pictures will be taken about 30 minutes later.

Some patients cannot walk on a treadmill to reach their pre-determined heart rate. For these cases, a medication (Persantine or Dobutamine) will be injected through the IV to increase the heart rate and blood pressure instead of walking on the treadmill.

How to prepare for a Nuclear Stress Test?

- No caffeine for 24 hours prior to the test. This includes liquids and foods like coffee and tea (even decaffeinated), cola, and chocolate.
- Nothing to eat or drink 4 hours prior to your test and until your test is complete. However, you may drink plain water at any time up to and during the test.
- No alcohol for 24 hours prior to the test.
- Please take your medications as usual, unless your physician has instructed you otherwise.
- Please bring all of your medications to the appointment (or an up-to-date list).
- No smoking from midnight the night before your test and until your test is complete.
- Patients with Diabetes please note: You may eat plain, dry bread/toast, plain crackers and clear juice up to 1 hour prior to your test.

Exercise Stress Test: 4–5 hours

- Wear or bring clothing appropriate for exercise
- Loose fitting top and pants and comfortable rubber-soled flat shoes (i.e. runners, shorts, and a short sleeved shirt)

Persantine Stress or Dobutamine Stress (cannot walk on treadmill): 4–5 hours

- Wear clothing that is comfortable
- Loose fitting top and pants

What will happen after the Nuclear Stress Test?

You will be able to resume all normal activities after your nuclear stress test. The supervising physician will send the report to your physician. The results will be given to you by your physician.