

## Why A Nuclear Cardiac Stress Test?

Your physician has requested that you receive a special cardiac imaging procedure, a Nuclear Cardiac Stress Test, to evaluate how well your heart is working. This procedure helps determine if there are any blockages and, if so, their effect on your heart's ability to pump.



Some cardiac problems only become apparent when the heart is working hard. The study therefore compares how your heart performs "at rest" with

how it performs after "stress," in this case, carefully controlled exercise.

Your physician will get test results within 2 days and will then discuss with you what they mean. At that time you'll learn if any further tests or treatments are needed.

## You Should Know

- ▶ You will be in our office 4–5 hours from start to finish.
- ▶ You can drive to the test and home afterwards.
- ▶ This procedure is safe. The substances injected are not dyes, are non-allergenic and have no side effects.
- ▶ Registered nurses and other medical personnel are on hand at all times. A physician monitors the exercise portion of your stress test.

Details on the test, what you can eat, medications you can take and/or what you should or should not do before the study follow. Please read them carefully.

## Preparing For Your Cardiac Stress Test

**Medical Information** – please bring to our office:

- ▶ Your insurance information.
- ▶ A list of your current medications.
- ▶ Your physician referral (if required by insurance). You will be asked to sign a consent form at the office.

## Important Do's and Don'ts

### DO:

- ▶ Ask your doctor if you should make any changes in your diet or medications for **2–3 days** before the test.
- ▶ Let our staff know if you are pregnant, breast-feeding, diabetic or have any other medical conditions that might affect or be affected by this test. You should discuss any of these conditions with your referring physician before your test.
- ▶ Wear loose clothing and shoes suitable for exercising.

### DON'T:

- ▶ Eat for **3–4** hours before the test.
- ▶ Put on any powder or lotion after your last bath or shower before the test.

## The Test

This test has 3 parts: preparation, "rest" pictures and "stress" pictures. The stress part includes controlled treadmill exercise or injection with a drug that mimics the body's response to exercise.

You will be injected with radiotracers, which give off signals that can be seen as they circulate through your heart. A special camera measures the tracer signals while you are at rest, then while you are stressed. Computerized images, created from the signals, tell how your heart is working.

## Preparation

- ▶ Small pads called electrodes are placed on your chest. During the exercise part of the test, they will be attached to a machine to produce an electrocardiogram (EKG) that lets us monitor your heart rate.
  - ▶ An intravenous line (IV) is placed in your arm.



## Appointment

Your appointment is scheduled for

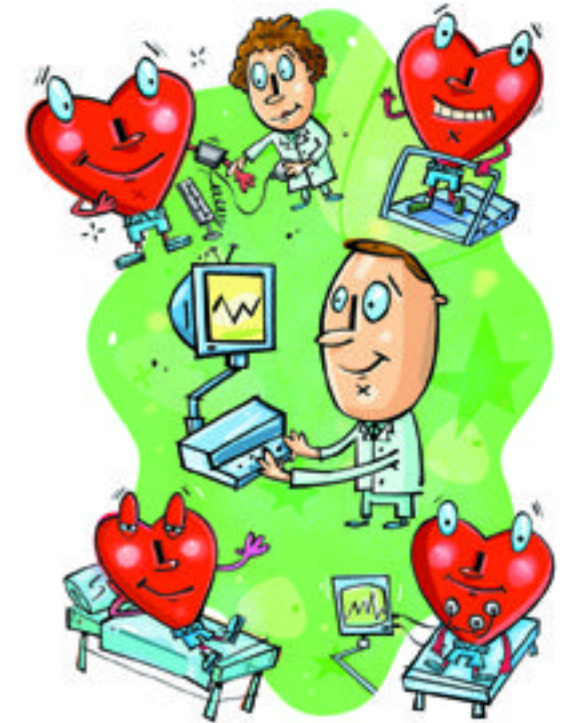
Day of Week/Date \_\_\_\_\_

Time \_\_\_\_\_

Location \_\_\_\_\_



## Your Cardiac Stress Test



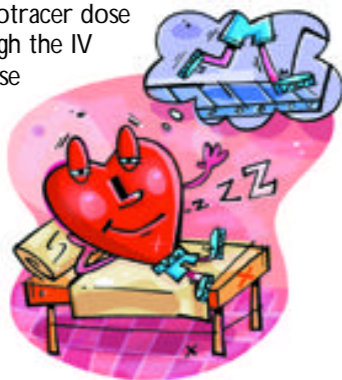


### Rest Pictures

- ▶ The first radiotracer dose is injected through the IV.
- ▶ You relax for approximately 45 minutes to an hour while the tracer circulates and reaches your heart.
- ▶ You are placed on a flat bed with the camera above your heart. Pictures are taken of your heart at rest. Approximate camera time: 15 minutes.

### Stress Pictures

- ▶ The electrodes on your chest are attached to the EKG to monitor heart rate.
- ▶ You exercise on a treadmill for 3–9 minutes, or if your physician does not recommend exercise,
- ▶ You are injected over a 3-minute period with a drug that mimics how your heart responds to vigorous exercise.
- ▶ The second radiotracer dose is injected through the IV while you exercise or after your “mimicking” injection.
- ▶ You rest for 45 minutes to an hour. You may eat something at this time, if you wish.
- ▶ You are placed on the camera bed in the same position as before, and pictures are taken of your heart at peak activity. Approximate camera time: 15 minutes.



A physician is present throughout your exercise period or as the drug takes effect. Registered nurses and other trained medical professionals are with you throughout this procedure.

### After the Test

You may eat and drink as usual, although it's good to drink extra water to eliminate any remaining tracer more quickly.

There are no lasting side effects from the test. A few people who receive the injection to simulate exercise feel a little “odd” (your body didn't exercise but thinks it did!). This is normal. It is not a symptom of illness and will pass quickly.

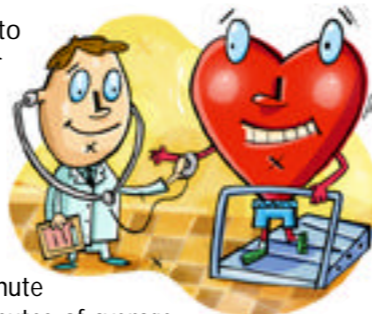
### Frequently Asked Questions (FAQs)

*Why does the test take so long?*

It takes time to prepare for each set, to exercise and to take 2 groups of pictures.

*Why do I exercise for so long?*

It is important to make sure your heart reaches its maximum safe level of exertion. The treadmill part of the test usually has 3 segments: a 3-minute warm up; 3–6 minutes of average exertion, and 3 minutes of peak activity. At this last level you may be walking at the rate of 3.4 miles per hour at a 14% incline. We monitor your heart rate and activity closely. You will not be asked to exercise more than you can safely handle.



*Can I get an allergic reaction from the injection?*

No. These are not dyes. No allergens are present.

*What do the pictures tell?*

These tests show both the amount of blood flow (*perfusion*) from your heart and arteries, and how well different parts of the heart muscle are pumping blood (*function*).

*Is this the same as a thallium stress test?*

Thallium was once the preferred radioisotope for this test. It required patients to be injected, leave the office and return 4–6 hours later. The whole test took a full day.

Our office uses more advanced radiotracers that allow the test to be completed in one, much shorter visit.

*Can I take this test if I am diabetic? Pregnant?*

*What about other conditions?*

Yes, you can take this test. If you are diabetic, ask your doctor about your eating and insulin regimen before the test. If you are pregnant or nursing, or being treated for other health conditions, be sure your referring doctor knows.

Please also let our office staff know before the test if you are diabetic, pregnant, nursing or have other health or medical conditions.

*Can I take my medications?*

Your physician will advise you on this. Some medications, particularly those relating to asthma and blood pressure, can affect test results. Their doses may need to be stopped or modified for several days before the test. Check with your physician before making any changes to your medication schedule.

*What kind of clothing should I wear?*

Wear comfortable shoes and clothing. Wear a front-opening top that can be easily unfastened. Avoid metal buttons and bras with metal underwire.

*Do people ever have heart problems during the test?*

Difficulties during a cardiac stress test are extremely rare. Even so, we keep on site a fully equipped cardiac “crash cart” with defibrillator and medications. Our office is staffed by a physician, registered nurses and Certified Nuclear Medicine Technologists who are prepared for cardiac and other emergencies. If you experience a problem, medical help will be there to treat you until, if necessary, you are transported to a hospital.

*Why can't I eat before the test?*

Foods like coffee, sodas and chocolate contain caffeine, which affects blood flow. Even decaffeinated beverages have some caffeine.



A full stomach affects the quality of heart images, since blood goes to the stomach during digestion. And, some people become ill if they exercise on a full stomach.



You will be able to eat after the second radiotracer injection.

*Will my insurance cover this test?*

Medicare and most private insurers generally cover the test. It is important to contact your insurer in advance regarding coverage. Your referring physician may be able to help with referrals, pre-authorizations or other specific insurance company requirements. In the unusual instance that insurance does not cover the test, we work with you. Our policy is that anyone who needs the test should have access to this technology.

*More questions? Please feel free to call us or contact your referring physician.*

For more information, visit  
[www.integralnuclear.org](http://www.integralnuclear.org)

