

What You Need to Know About Your Sestamibi Exercise Stress Test

The sestamibi exercise stress test involves exercising on a treadmill or stationary bicycle while you are closely monitored. The test is used to assess your heart function and determine if there is an adequate blood flow to your heart. The test is also used to:

- Determine how well your heart tolerates activity;
- Determine your likelihood of having coronary artery disease (blocked arteries); and
- Evaluate the effectiveness of your cardiac treatment plan.

What should I wear on the day of the test?

Please wear or bring comfortable clothes and shoes to exercise in.

Can I eat or drink on the day of the test?

Yes. However, **DO NOT** eat or drink anything except water **for 4 hours before the test**. You will be allowed to eat once the second part of the test is complete.

DO NOT drink or eat caffeinated, decaffeinated or caffeine-free products (cola, Mountain Dew, chocolate products, coffee or tea) **for 24 hours before the test**. Caffeine will interfere with the results of your test.

Should I take my medications the day of the test?

Since many over-the-counter medications contain caffeine (such as diet pills, No Doz, Excedrin and Anacin), **DO NOT** take any over-the-counter medication that contains caffeine for 12 hours before the test. Ask your physician, pharmacist or nurse if you have questions about other medications that may contain caffeine.

DO NOT take the following heart medications on the day of your test unless your physician tells you otherwise or if it is needed to treat chest discomfort the day of the test:

- Isosorbide dinitrate (for example: Isordil, Sorbitrate)
- Isosorbide mononitrate (for example: Ismo, Indur, Monoket)
- Nitroglycerine (for example: Deponit, Nitrostat, Nitropatches)

Your physician may also ask you to stop taking other heart medications on the day of your test. If you have any questions about your medications, ask your physician.

NOTE: Do not discontinue any medication without first talking with your physician.

- If you use an inhaler for your breathing, please bring it to the test.

Guidelines for diabetics

If you take insulin to control your blood sugar, ask your physician what amount of your medication you should take the day of the test. Often, your physician will tell you to take only half of your usual morning dose and to eat a light meal 4 hours before the test. If you take pills to control your blood sugar, do not take your medication until after the test is complete.

Do not take your diabetes medication and skip a meal before the test.

If you own a glucose monitor, bring it with you to check your blood sugar levels before and after your test. If you think your blood sugar is low, tell the lab personnel immediately. Plan to eat and take your blood sugar medication following your test.

What happens during the test?

- Your test will take place in Nuclear Medicine located at Suite 402. A physician supervises the test.
- During the first part of your test, a nuclear medicine technologist will place an IV into a vein in your arm or hand and inject a small amount of thallium. Thallium is a radioactive tracer -- it is not a dye. It will be necessary for you to wait approximately 30 minutes after the thallium injection to allow it to circulate. You will then be asked to lie very still under a camera with your arms over your head for about 20 minutes. The camera will record images that show the physician how efficiently blood is circulated through the coronary arteries to each area of the heart muscle at rest.
- When the camera has finished recording the images, the technologist will tell you what time you need to report back for the second part of the test.
- During the second part of your test, a stress lab technician will gently rub ten small areas on your chest and place electrodes (small, flat, sticky patches) on these areas. The electrodes are attached to an electrocardiograph (EKG) monitor that charts your heart's electrical activity during the test.
- Before you start exercising, the technician will perform a resting EKG and take your blood pressure.
- The lab personnel will ask you to start exercising. At first the exercise is very easy. The rate of exercise will increase gradually. You will be asked to continue until you are exhausted. The lab personnel will watch for any changes on the EKG monitor that suggest the test should be stopped.
- One minute before you stop exercising, a small amount of sestamibi (a different kind of radioactive tracer) will be injected into the IV. When you have finished exercising, the IV will be removed.
- After you have finished exercising, you will be asked to again lie very still under the camera with your arms over your head for about 20 minutes. The camera will record images that show your physician how well blood circulates through the coronary arteries to each area of the heart muscle during exercise.

How will I feel during the test?

You will be encouraged to exercise until you are exhausted. It is normal for your heart rate, blood pressure, breathing rate and perspiration to increase.

How long does the test take?

The appointment will take about 3 to 4 hours. The first part of the test will take about 1 1/2 hours. The second part of the appointment will take about 2 1/2 hours (actual exercise time is usually between 7 and 12 minutes).

How do I get the results of my test?

Your physician will discuss them with you after a nuclear medicine specialist has reviewed the information.