

## Myocardial Perfusion Scan (Heart Scan)



**Patients must also read their appointment letter  
and any enclosures carefully**

### **What is a Myocardial Perfusion Scan (Heart Scan)?**

---

A myocardial perfusion scan (heart scan) is a scan that checks the flow of blood to your heart muscles. It involves an injection of a small amount of radioactive liquid followed by imaging with a special camera.

## How do you prepare for this scan?

---

Instructions with regard to eating, drinking and medication are explained in the appointment letter and on the covering sheet. It is very important that you follow these instructions.

If you are **diabetic** or have any problems with the instructions in your appointment letter or this leaflet, please ring the department on the number at the end of this leaflet.

Please bring a lump of cheese (approx. 2oz/50gm) to each of your appointments.

**Females:** Due to the radiation involved, there is a very small risk to an unborn or breastfeeding child. Therefore, it is important that you let us know in advance if you are, or may be, **pregnant** or **breastfeeding**.

## Who can come with you for this scan?

---

It is fine if you want someone to come with you on the days of each scan. However, because we only have one waiting room, we advise you not to be accompanied by children or pregnant women to help to minimise the radiation exposure to these people.

## Finding the Nuclear Medicine Department and Cardiac Outpatients

---

The Nuclear Medicine Department is located in Zone C, Department C16.

Cardiac Outpatients is in Zone B, Department B59.

## How is the scan performed?

---

The scan is performed in two parts, usually one week apart. The rest scan is usually in the first week, when an image is taken showing your heart muscles at rest. The stress scan (usually in the second week) shows your heart working harder.

## Week one – Rest Scan

---

This is performed in the Nuclear Medicine department. A small amount of slightly radioactive liquid will be injected into your arm. Approximately 1 hour later you will have your scan.

During the hour between the injection and the scan you will be asked to eat a bar of chocolate which we will provide. You will also be asked to eat a lump of cheese (approx 2oz/50gm), which you will need to provide. Just before the scan we will ask you to drink a few cups of water. You can use the toilet at any time.

For the scan, you will be asked to remove all clothing from the waist up and wear a hospital gown. You will need to lie down, preferably on your tummy for the scan with your arms raised above your head resting on the scanning bed. A camera will take pictures of your heart. This takes about 20 minutes and you will need to keep very still during this time. Your heart beat will be monitored during the scan.

When the scan is finished you will be asked to stay in the waiting room while the images are technically assessed. Sometimes it is necessary to repeat the scan, so please allow plenty of time for your appointment and do not make other arrangements for after your scan. If a repeat scan is necessary the technician will explain why.

## Week two – Stress Scan

---

You will initially be asked to attend Cardiac Outpatients, where your heart rate will be increased for a few minutes to increase the blood flow to your heart. You may be asked to walk on a treadmill, but if you are unable to do this you will be injected with a drug which simulates the effects of exercise on the heart. Your blood pressure will be monitored every few minutes and a heart trace (ECG) will be recorded. When your heart rate has increased, the doctor will give you an injection of radioactive liquid.

You will then eat a chocolate bar, which again we will provide, and a lump of cheese (approx. 2oz/50gm), which again you will need to bring with you.

You will then be asked to make your way to the Nuclear Medicine Department for your scan. If you have difficulty walking we can arrange for you to be taken in a wheelchair.

Before the scan, you will be asked to drink some water. The scan is performed in the same way as for the rest study.

When the scan is finished you will be asked to sit in the waiting room while the images are technically assessed.

It is sometimes necessary to repeat the images for this second part as well, so it would be best for you to allow plenty of time and not to make any other arrangements. If a repeat is necessary the technician will explain why.

## Why are you asked to eat chocolate, cheese, and drink water?

---

Eating and drinking in this way helps us see your heart more clearly. If you want this to be explained more fully please ask the technician on the day of the scan.

## How will this scan affect you?

---

The injection and the scan for the rest study should not affect you in any way. You may feel tired after the stress study and prefer to have someone with you on the homeward journey. Neither study will affect your ability to drive home.

For **24 hours** after the injection, all patients should sit on the toilet when passing urine.

## Are there any risks from the radioactive liquid?

---

The radioactive liquid is used as sparingly as possible and the benefits of this scan far outweigh the small risk from radiation. The radiation dose to you is similar to the radiation that you receive from natural sources in four years.

## Will the radiation affect other people?

---

The radiation dose to other people around you is low and is therefore not a cause for concern.

## How will you get the results?

---

The doctor (usually a cardiologist) who referred you for this scan will write to your GP with the results about three to four weeks after the scan has been completed. If your GP does not receive a letter, you or your GP can contact the cardiologists' secretary at the Royal United Hospital.

## Travelling after your scan

---

Some airports, seaports, train stations, bus stations and major sporting event venues have installed very sensitive radiation detectors. It is possible that these detectors may be triggered by the small amount of radioactivity remaining in your body on the days following your scan. Therefore, if you are planning to travel within **seven days** following your scan, it is recommended that you carry your appointment letter to show to officials if necessary.

## Additional Information:

---

If you have any concerns or questions with regard to this procedure, or if you need this information in another format such as larger print, please telephone the Nuclear Medicine Department on the phone number below:

**Nuclear Medicine Department: 01225 824076**