What is Nuclear Imaging?
Answering Your Questions About the Procedure

DEPARTMENT OF NUCLEAR MEDICINE
Monmouth Medical Center
An affiliate of the Saint Barnabas Health Care System
What is Nuclear Imaging?

Nuclear imaging uses radioactive materials and complex technology to provide unique and detailed information for the diagnosis of medical problems.

Because nuclear imaging can review more detailed information than any other exams, it enables physicians to diagnose and treat certain disease and disorders at a very early stage of development. This brochure is intended to provide you with information about the procedure.

Before the Procedure

Preparation differs, depending upon the area of the body that is being examined. In most cases, food and liquids are not restricted.

You may be instructed not to eat foods or take medications that are high in iodine, such as seafood, table salt or cough medicine for at least three to four days before thyroid studies.

If you are pregnant or nursing, please inform your physician before the exam is scheduled.

About the Procedure

Depending on the part of the body to be imaged, you will receive either an intravenous injection or swallow a capsule that contains small amount of radioactive compound.

You may then have a waiting period ranging from 20 minutes to three hours, as this compound travels through the body and emits gamma rays.

When you are ready for the procedure, you will be asked to lie on an examining table with a camera placed above you and close to your body. This special equipment detects the gamma rays and records them, as a computer helps to interpret and reconstruct the image.

The only discomfort is that associated with the procedure, which usually takes from one-half to one hour, is lying still in the same position for this time. After the examination is interpreted by the radiologist, a written report will be sent to your physician.

The Radiation Dose

The amount of radiation that a person receives from a nuclear imaging exam is usually less than the amount of radiation received from diagnostic X-rays. Also, the compound quickly loses most of its radioactivity and leaves the body within a few hours.

The procedure, the equipment and the facility in which the exam takes place are required to meet strict safety standards regulated by the U.S. Nuclear Regulatory Commission. In addition, Monmouth Medical Center has a full-time radiation safety officer to ensure full compliance with all regulations. While a generally safe procedure, it does involve radiation. As such, the benefits of having it performed should outweigh any associated radiation risks.

If you have any questions regarding your procedure, please contact the Department of Nuclear Medicine at 732-923-6690 or the medical physicist at 732-923-6811.