

What is nuclear medicine?

Nuclear medicine is a form of medical imaging that uses small amounts of radioactive material to diagnose and determine the severity of or how to treat a variety of diseases, including many types of cancers, heart disease, gastrointestinal, endocrine, neurological disorders and other abnormalities within the body. Because nuclear medicine procedures are able to pinpoint molecular activity within the body, they offer the potential to identify disease in its earliest stages as well as a patient's immediate response to therapeutic interventions.

How is the procedure performed?

After you have arrived, a certified nuclear medicine technologist will give you a small, safe amount of radioactive tracer; this will be administered either orally or by an IV injection in your arm.

It can take anywhere from several seconds to several days for the radiotracer to travel through your body and accumulate in the organ or area being studied. As a result, imaging may be done immediately, a few hours later or even several days after you have received the radioactive material.

When it is time for the imaging to begin, the camera (scanner) will take a series of images. The camera may rotate around you or it may stay in

Why use nuclear medicine?

Nuclear medicine imaging is an effective diagnostic tool due to the ability to show both the function of an organ as well as the anatomy of it. This additional insight detects certain diseases and various medical conditions much sooner than other medical imaging examinations. Nuclear medicine can be valuable in the early diagnosis, treatment, and prevention of numerous medical conditions.

one position and you will be asked to change positions in between images. While the camera is taking pictures, you will need to remain still for brief periods of time. In some cases, the camera may move very close to your body. This is necessary to obtain the best quality images. If you are claustrophobic, you should inform the technologist before your exam begins.

The length of time for nuclear medicine procedures varies greatly, depending on the type of exam. Actual scanning time for nuclear imaging exams can take from 20 minutes to several hours and may be conducted over several days.



What should I expect after the procedure?

Unless your physician tells you otherwise, you may resume your normal activities after your nuclear medicine scan. If any special instructions are necessary, you will be informed before you leave.

Through the natural process of radioactive decay, the small amount of radiotracer in your body will lose its radioactivity over time. It may also pass out of your body through your urine or stool during the first few hours or days following the test. You should also drink plenty of water to help flush the radioactive material out of your body as instructed by the nuclear medicine personnel.