

## Information about your PET/CT Exam

## What is a PET/CT?

Positron Emission Tomography, also called PET imaging or a PET scan, is a type of nuclear medicine imaging. Nuclear Medicine uses small amounts of radioactive material to diagnose and determine the severity of or treat a variety of diseases. PET uses a radioactive material called a radiopharmaceutical or radiotracer, which is injected into your bloodstream, swallowed or inhaled as a gas. This radioactive material accumulates in the organ or area of your body being examined, where it gives off a small amount of energy in the form of gamma rays. The PET scanner detects this energy and with the help of a computer creates pictures offering details on both the structure and function of organs and tissues in your body.

## How to prepare for your PET/CT

The procedure will take about 2 to 3 hours altogether so plan to be at the imaging center for 2-4 hours.

- No strenuous activity the day before the exam.
- Nothing to eat 6 hours prior to exam (Note: you may drink clear water only).
- No vitamins on the morning of exam, it is fine to take prescribed medications with water.
- Please follow a high protein low carb diet 24 hours prior. You will be provided a list of foods to eat and avoid.
- Please ensure you drink at least 16 ounces of water one hour prior to the procedure.
- If you are anxious and/or claustrophobic, please make arrangements with your doctor for medication, and arrange for a family member or friend to drive you home after the exam.
- Refrain from wearing any metal (i.e. jewelry, barrettes, and any clothing with metal zippers or other metal adornments, sports bras are recommended for women).
- Let your technologist know if you are pregnant or breast feeding.
- If you are diabetic and your blood sugars run high, please arrange for medication adjustment with your doctor.
- If you have had previous scans preformed at other facilities, please bring these films or CDs with you to your appointment.

## What can I expect on the day of my exam?

After you check in at the front desk, the technologist will talk with you prior to your exam and ask you questions about your overall health history. He or she will also explain what will happen during the PET/CT and answer any questions you may have. You will then be taken to a separate area and asked to remove any clothing, jewelry or other objects that might interfere with the scan.

You will be given a locker to store any valuables and clothing in. If you are asked to remove any clothing you will be given scrubs to wear during your exam. The technologist will then start either one or two intravenous (IV) lines in your hand or arm for the injection of radionuclide. Certain types of scans of the abdomen or pelvis may require that a urinary catheter be inserted into the bladder to drain urine during the procedure. The technologist will then inject the radionuclide into your vein. The radionuclide needs to be absorbed into your tissue for 30-60 minutes depending on the type of exam. You will remain in the separate PET/CT waiting area while it is absorbed.

After the radionuclide has been absorbed for the appropriate amount of time, the technologist will take you to the PET/CT scanner and place you as comfortable as possible on the table and the scan will begin. The scanner will move slowly over the body part being studied. During the entire exam you will be able to communicate with the technologist with the patient intercom system. You will need to remain as relaxed and still as possible during your exam to make sure your technologist is able to get the clearest images possible.

When the scan is complete, the technologist will remove the IV and if a catheter was placed that will be removed at this time as well. You will be taken back to the PET/CT waiting area to change if needed.