

Preparation for your PET/CT Scan

When making appointment, please inform the PET coordinator if you are diabetic for specific instructions. As with most tests, tell your doctor if you are pregnant or think you might be pregnant. PET/CT scans are not usually performed on pregnant women due to concerns about radiation exposure to the fetus. Do not bring children or pregnant women to your appointment.

For FDG PET/CT exams (Whole Body and Brain)

- You should not exercise or participate in strenuous physical activity for 24 to 48 hours prior to your appointment.
- You may not have anything to eat or drink for 6-7 hours prior to your appointment (except water up until 1 hour before your scheduled arrival time). This includes coffee, tea, sugarless and regular gum, breath mints, hard candy, etc.
- You should adhere to a high protein, low carbohydrate diet for 24 hours prior to your exam.
- Wear warm, comfortable clothing. The exam rooms are kept cool so you may want to bring a button down sweater or jacket that can be removed easily.
- On the day of the exam, please bring with you a list of medications you are taking as well as a list of previous surgeries you have had for comparison to the PET/CT scan. This includes your most recent MRI and CT scans and previous PET/CT scans. Please bring the reports if you have them or ask your physician's staff to fax them to us. Please inform the staff member scheduling your appointment if you have any special needs such as assistance walking, use of a wheelchair, oxygen, etc.

The Exam

The way we perform your Whole Body PET/CT scan depends on what your doctor specifically orders. If you are having oral and I.V. contrast, we will do the following:

- Once you arrive at one of our facilities and have registered, the technologist will check your blood sugar. The results must be in a specific range in order to get a good scan.
- Once your blood sugar has been measured (easily done with a finger stick), you will be given oral contrast to drink within a short period of time.
- One hour later you will be brought to a quiet area for the next part of the procedure. You will be screened by the technologist as to your medical and allergy history, and then an intravenous catheter will be placed in a vein. The PET injection will be given to you at this time. It contains a small amount of radioactive glucose, a simple sugar (also called FDG) that is slowly absorbed by your body. There are no side effects from this injection so you will not feel any different once you have received it.
- You will be asked to rest for approximately one hour after the FDG is administered. Because the substance in the injection is a simple sugar, it is "taken up" by all tissues in the body. By resting quietly during this uptake period, we get a more even distribution of this tracer which leads to a more accurate scan. To facilitate relaxation, a comfortable recliner, dim lights and blankets are available at this time.

- After the rest period is over you will be asked to remove any metal from your body and use the restroom. Once you have done so, the technologist will escort you to the imaging room to begin the scan.
- The CT portion of the PET/CT will be done first. You will be asked to lie still and follow breathing instructions for several sets of images. The injection of intravenous contrast will be given during the CT scan, through the same catheter that is already in place. When the CT portion of the scan is completed, the catheter will be removed. It only takes a few minutes for this first part of the PET/CT.
- The PET scan is done immediately after the CT on the same imaging table and takes 30 minutes or less for most patients. You will be asked to hold still and breathe normally during the PET portion of the scan.

If you are having a Whole Body FDG PET/CT scan without contrast (oral and/or I.V.), the procedure is the same as above except you will only receive the FDG (radioactive glucose) injection, not the iodinated contrast. The scans take approximately the same amount of time.

Brain FDG PET/CT

Preparation for the exam is the same as Whole Body FDG PET/CT. There is no oral or intravenous contrast given for this exam. Brain FDG PET/CT scans are done much like the Whole Body FDG PET/CT, but the brain is imaged rather than the body.

Whole Body NaF (Sodium Fluoride) Bone PET/CT

There is no special preparation required prior to having a Sodium Fluoride Bone PET/CT scan. You may eat normally and drink plenty of liquids prior to and after the scan. If you are on any medications, you may continue to take them, unless otherwise instructed by your doctor. Wear warm, comfortable clothing without metal fasteners. You may be asked to remove belts, jewelry or other metal objects. The remainder of the examination is performed similar to the Whole Body FDG PET/CT. There is no oral or intravenous contrast given for this exam.

Cardiac PET/CT

Please note there are 2 types of Cardiac PET/CT scans (for “perfusion” and for “viability”) and that they have different preparations. If you are unsure of which exam you are having, please contact your doctor. If you are diabetic, please inform the PET coordinator for specific instructions or contact our office at any time.

Cardiac PET/CT for Viability (FDG)

- You may not have anything to eat for 6-7 hours prior to your appointment.
- Your blood sugar level will be checked prior to your exam. You may be given insulin or a sugary drink or IV glucose to regulate your blood sugar level.
- A PET/CT technologist will insert a small IV into your arm. A trace amount of FDG, a radioactive form of glucose, will be injected through the IV. There are no side effects from this injection so you will not feel any different once you have received it.

Cardiac PET/CT scans for Viability are performed much like the Whole Body FDG PET/CT, but the heart is imaged rather than the body.

Cardiac PET/CT for Perfusion (Rubidium or Ammonia)

- You may not have anything to eat for 6-7 hours prior to your appointment.
- You may not drink any caffeine products for 24 hours prior to your exam. This includes chocolate, coffee, tea, sodas or Anacin/Excedrin. Please note that decaffeinated products contain a small amount of caffeine.
- Please wear a comfortable outfit and walking shoes.
- You may be asked to stop taking your beta blockers for 48 hours or calcium channel blockers for 24 hours prior to your exam. Please contact your doctor before discontinuing any medication prior to your exam.
- You will be screened by the PET/CT technologist as to your medical and allergy history, and a small intravenous catheter will be placed into a vein prior to the beginning of your exam.

Cardiac PET/CT scans for Perfusion are performed 2 different ways, exercise or pharmacologic, and involve 2 different parts, stress and rest. Exercise stress tests require you to walk on a treadmill to increase your heart rate. If you are unable to walk on a treadmill, a pharmacologic stress test will be performed in which a drug is used to artificially raise your heart rate. Once your maximum heart rate is achieved the PET radiotracer will be administered through the IV catheter. There are no side effects from this injection so you will not feel any different once you have received it. The imaging portion of the exam is done immediately after you receive the PET injection. The imaging portion of the Cardiac PET/CT scan for Perfusion is performed much like the Whole Body PET/CT, but the heart is imaged rather than the body. Unlike the Whole Body PET/CT, 2 sets of images are acquired (stress and rest) for comparison.