

Positron Emission Tomography (PET/CT scan)

A PET/CT scan uses a radiotracer to measure important body functions such as blood flow, oxygen use, and sugar (glucose) metabolism. This helps doctors diagnose, stage, and monitor your response to treatment for your disease.

The entire appointment will take about 2 to 3 hours, but you will only be in the scanner for 20-40 minutes.



Before the Scan



Six hours prior to your scheduled arrival time, do NOT eat or drink anything, other than plain, unflavored water.

Eat a high protein, low carbohydrate, and low sugar meal if allowed. If this is not possible, follow your normal diet, but restrict extra calories from desserts or sodas.

For example, you can have 2 eggs, bacon, or sausage for breakfast. For lunch/dinner you can eat 8 oz. grilled steak, ½ baked or broiled chicken, 8 oz. salmon fillet, with a green vegetable (broccoli, asparagus), sautéed mushrooms, or salad.

- **DO NOT** eat bread, pasta, potatoes, rice, or fried foods. Avoid fruits, juices, and sweets of any kind. We recommend you drink plain water before the exam.
- **NO** mints, gum, coffee, tea, soda, or throat lozenges.
- Take prescribed medicines as long as they are **NOT** in liquid or chewable form. Do **NOT** take any medications that may contain sugar.
- Patients with diabetes: Call your ordering physician for special instructions. You may have to wait to take your diabetic medicine at a specific time prior to or after your PET scan.
- **DO NOT** exercise 24 hours before the exam. This affects how the radiotracer works.

Tell the nurse or technologist if you are:

- diabetic or taking diabetic medications (e.g. Metformin, Insulin, Humalog, Novolog)

- pregnant or breastfeeding
- over 400 pounds
- taking steroids
- claustrophobic
- unable to lie on your back
- recently receiving a high density contrast procedure such as a barium swallow, upper gastrointestinal series (UGI), small bowel series, or barium enema (BE) exam

Procedure

- Check in at the receptionist desk. You will be asked to complete a medical history questionnaire and update your list of medicines.
- A nurse or technologist will call you back to the clinic area and ask you to remove any jewelry or clothing containing metal. Scrubs or gowns are provided and lockers are available to secure your personal items.
- Family members are not allowed back in the PET clinical areas.
- Your height and weight are taken. Also, your blood glucose (sugar) level may be checked before you are given the radiotracer injection.
- An IV line will be started and the technologist will inject a very small quantity of the radiotracer. The injection is painless and allows the PET scanner to “see” where sugar metabolizes in your body. There are no known side effects.
- After the injection, you will wait by yourself in a localization room for 60 to 90 minutes as the radiotracer is absorbed by your body.
- During the scan, you will lie on your back on a padded table, which moves into a large doughnut-shaped scanner. It will begin at your head and move toward your toes.
- The scan usually lasts between 20 to 40 minutes depending on the type of test ordered.

After the Scan

The radiotracer remains in the body for a short period of time. It is eliminated primarily through the kidneys and bladder. You should drink plenty of fluids after the exam to flush your system. Please let the technologist know if you will be around children under the age of two or flying home that day. You will be given additional instructions.

Your scan will be read by a radiologist and the results will be reported to your physician.

If you have questions or concerns, please contact your ordering physician.