



## PET/CT ~ Patient Information

Positron Emission Tomography is a non-invasive technology that helps doctors visualize how your cells and/or organs absorb glucose, the very basic component our cells use for energy. By monitoring glucose metabolism, PET pinpoints cancer cell activity. In cancer, changes in your body's chemistry occur before a tumor mass actually forms. As a result, PET can often identify the presence of disease earlier than a test that looks for a tumor mass, enabling your physician to make an early diagnosis.

By combining PET and CT into one single exam, PET/CT revolutionizes cancer care by providing detailed information for diagnosis, treatment options and follow-up. It delivers vital data to locate the primary tumor site, grade the degree of malignancy, determine tumor staging, develop precise radiation treatment plans and monitor treatment success.

### How does PET/CT work?

PET imaging involves the injection of a radioactive tracer. The most commonly used is FDG, which is similar to glucose, the sugar in your diet. The FDG is taken up by cells in your body using sugar and is detected by the PET scanner. The PET pinpoints cellular activity, and the CT provides the exact anatomic location within the body.

### Is it safe?

Be assured that PET/CT exams are a safe and effective diagnostic procedure. The radioactive component of FDG (Fluorine-18) decays very quickly and won't remain in your system long. Also, the FDG is excreted through the kidneys and urine, so continue to drink fluids after the scan and void frequently. Within a few hours it is no longer significantly radioactive so there is no reason to avoid interacting with other people once you've left. To be extra safe, wait a few hours before getting too close to an infant or anyone who is pregnant.

### Why do I need this exam?

Your PET/CT exam results may have a major impact on your physician's diagnosis of a potential health problem, and, should a disease be detected, how a treatment plan is developed and managed.

### How should I prepare for the exam?

- Maintain a high protein, low carbohydrate/sugar diet the day before your test.
- Nothing to eat six hours prior to your exam. This includes candy, chewing gum, cough syrup/drops.
- Drink only plain water before your test. No flavored water, coffee, tea, soda or dietary supplement drinks.
- It is important to arrive on time. The FDG dose is ordered specifically for you and may not be usable if you are late.
- Plan to be here 2-3 hours.
- Bring a list of current medications. You may take your usual medications with water on the day of the exam (unless you are diabetic).
- Avoid strenuous exercise/activities for 24 hours prior to your test. No running/walking on the morning of the test.
- Wear warm, comfortable clothing, preferably without a lot of metal buttons/snaps/zippers.
- Please contact us if you are: diabetic, claustrophobic and/or pregnant/breast feeding for special instructions.

### What happens during the exam?

An IV line will be started in a vein in your arm. A sample of your blood will be drawn so that we can check your blood sugar. Next, you will receive the injection of the FDG (you will feel no reaction from this). You may also be given an oral contrast (Gastroview) to drink. Following the injection, you are asked to rest quietly for 45-60 minutes while the FDG circulates through your body. Relaxation optimizes the scan by reducing muscular uptake (no reading, writing, talking). Following the uptake phase you will be asked to use the restroom to empty your bladder and then you will proceed to the scanner for imaging.

Imaging includes the acquisition of both CT and PET images. The entire sequence can range from 30-60 minutes depending on the images needed. You may be asked to position your arms above your head for the scan. You are asked to breathe normally and remain as still as possible during the acquisition of images. The technologist is monitoring your scan from a control room and can be contacted should you need anything.

### What happens after the exam?

You may leave as soon as your exam is completed. Unless you have received special instructions, you may eat and drink immediately. If your physician has prescribed any anti-anxiety medication, please arrange to have someone drive you home from your exam. Otherwise, you may drive, resume normal activity and exercise, and take all prescribed medications. Your scan will be reviewed by our radiologist and the results will be sent to your physician. Once your physician has reviewed the results, he/she will contact you to inform you of your test results.

### Insurance Coverage

Many insurance companies cover the cost of PET scans. Medicare currently covers only specific types. Medicare patients with indications not currently approved may be entered into the National Oncologic PET Registry (NOPR). CMS is providing coverage for PET scans performed for non-covered cancer types/indications under a new program known as "Coverage with Evidence Development" (CED). If you are concerned about the cost, please check with your doctor or directly with your insurance carrier.

### Food Suggestions:

Meat: beef, chicken, fish, pork, deli meat. Avoid breaded or battered meats.

Vegetable: broccoli, cabbage, cauliflower, tomatoes, olives, squash, spinach, celery, cucumbers, asparagus, mushrooms, bell peppers, onions.

Salad: with cheese, bacon, hard-boiled eggs, vinegar and oil.

Breakfast: eggs, bacon, sausage, omelet, slice of toast.

Others: peanut butter, nuts, tofu.

AVOID: dietary supplement drinks (Ensure, Boost, Instant Breakfast), breads, pasta, potatoes, rice, chips, carrots, corn, fruit, desserts, yogurt, soda.

### Appointment Information:

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Please check in 30 minutes prior to scheduled appointment. If you are unable to keep your appointment, please provide us with 24 hours notice.