

St. Luke's Imaging Services Patient/Family Information

F-18 FDG PET/CT Scan

What is PET/CT?

PET is a unique imaging system that measures metabolism (glucose) to help doctors evaluate how well organs and tissues are functioning.

CT provides the anatomical information –the structure detail of bones, organs and tissues.

How it works

Your body is primarily made up of oxygen, hydrogen, nitrogen and carbon. These are naturally occurring elements known as the "basic building blocks of life." In a PET study, these elements are made radioactive and then attached to other compounds used to fuel your body, like sugar or fats. This radioactive compound, or tracer, is then given to you by an injection in your arm. Once these tracers are inside your body, the PET scanner is able to show how organs and tissues are using them. The radioactive tracer used for this exam is FDG, or Flourine-18 Deoxyglucose. After the PET images are obtained, CT images of the same areas are done. These two different image sets are then fused together and displayed. This new set of images allows the doctor to view an area for both function and structure. The combination of images greatly increases the doctor's ability to pinpoint areas of increased glucose.

Special Note

Before the exam, please tell your doctor if you may be pregnant or if you are nursing

Let the scheduler know if you have any of the following:

- Claustrophobia
- If you need pain medication for the exam
- Diabetes
- Any previous exams at another location
- Latex sensitivity/allergy

Patient Preparation

Non-Diabetic Patients

- 24 hours before your exam, eat a high protein, low sugar, low carbohydrate meal. You may eat any meat, eggs, green leafy vegetables. **Avoid** potatoes, pastas, cereals, breads, corn peas, carrots, fruits and sugars.
- Avoid ALL caffeine and sugar for 24 hours prior to your appointment
- Avoid alcohol and nicotine products for 12 hours prior to your appointment
- NO strenuous physical activity or exercise for 24 within 24 hours of your appointment.
- NO gum or mints for 6 hours prior to your appointment
- Regular Medications may be taken with water
- DO NOT eat or drink anything (except water) 6 hours prior to your appointment
- Drink about 4 glasses of water 2 hours before your appointment.

Diabetic Patients

- DO NOT eat or drink anything (except water) 4 hours prior to your appointment
- Oral hypoglycemic medications should NOT be taken within 6 hours of your exam. You may take your usual dose of oral diabetic medication the day before your exam.
- Insulin should NOT be taken within 6 hours of your exam. Take your usual insulin dose the day before your exam.
- 24 hours before your exam, eat a high protein, low sugar, low carbohydrate meal. You may eat any meat, eggs, green leafy vegetables. **Avoid** potatoes, pastas, cereals, breads, corn peas, carrots, fruits and sugars.
- Avoid ALL caffeine and sugar for 24 hours prior to your appointment
- Avoid alcohol and nicotine products for 12 hours prior to your appointment
- NO strenuous physical activity or exercise for 24 within 24 hours of your appointment.
- NO gum or mints for 6 hours prior to your appointment
- Regular Medications (except diabetic medications and insulin) may be taken as prescribed with water
- Drink about 4 glasses of water 2 hours before your appointment.

What to bring

Please bring your current medication list with you.

If you are prescribed a sedative by your Doctor, you will need someone to drive you home.

What to wear

Wear loose, comfortable clothing without metal if possible. Leave jewelry at home if possible. You may wear your hearing aids, glasses and dentures. You may be asked to remove these for the scan.

Is PET/CT safe?

Yes. PET/CT provides special information about your condition in a non-invasive manner. As with any medical procedure, there is some risk involved. There is a low level of radiation exposure with the tracer, but it is in the body for only a short period of time and has no known side effects.

What will I experience during the Exam?

The exam takes about 3 hours from start to finish. At the beginning your PET/CT exam, a small amount of radioactive material (FDG-18) will be injected into one of your veins through an IV, which has been inserted in your arm or hand. There are no side effects from the injection.

Typically, you will wait 90 minutes after the injection for the material to travel through your bloodstream.

During this waiting period, you will be asked to remain quiet and refrain from talking.

During your PET/CT scan you will be asked to lie very still for extended periods of time. This may result in stiffness or fatigue. Since each PET study is different, the staff will go over your particular procedure with you in detail so you will know exactly what to expect. We will make every effort to make you comfortable during the procedure.

You should allow two to three hours for the procedure although you will not be in the scanner for the entire time.

When will I know the results?

The radiologist will review and interpret the scan shortly after the exam is completed. A written report will be sent to your doctor. Your doctor will discuss these results with you. Please allow your physician the time needed to review these results.

Outpatient Instructions

Please register at the Outpatient Registration desk at the West Entrance of St. Luke's Hospital. After
registering, testing will be done in the Imaging Services department on the second floor of the hospital.
Please use the elevators past registration on the left.

Name	 	
Exam date/time		