PET Scan

PET stands for Positron Emission Tomography. A PET scan is useful in finding the source of many of the most common cancers. This scan looks at cell activity to see how your body is working. Your doctor uses this to help diagnose and treat your disease.

How does it work?

A PET scanner takes pictures of how your body uses a small amount of radioactive material called a tracer. The tracer is put into your blood through a vein. The tracer goes to areas in your body that have a lot of cell activity. The amount of radiation you get is very small. For these pictures you will need to be flat on your back and lie still. The amount of time your scan will take depends on which part of your body is scanned.

Why do I need it?

PET scans are done for many reasons. They are used to see if you have an injury or an illness such as cancer, epilepsy, memory loss or heart disease. It can show the amount of a disease. A PET scan may be done during treatment to see how your body responds. It may also be done after your treatment to check your results.
What are the risks with the PET scan?
The amount of radiation you receive during the scan is very small and will not harm you. If you are pregnant or breastfeeding you should tell your doctor before having a PET scan. Side effects from this scan are rare.

How do I prepare for a PET scan?
- **Talk to your doctor about all the medicines you take.** Some medicines may need to be stopped before the scan.
- **If you have had chemotherapy in the past 2 to 3 weeks, you may not be able to have the scan.** Let your doctor know if you have had chemotherapy recently.
- **Do not smoke for at least 6 hours before your scan.**
- **Do not eat any food, candy, chewing gum, or cough drops or drink anything other than plain water for at least 6 hours before your PET scan.** You will be asked to drink some water before your scan to keep you hydrated. If you need to take any medicines, take them only with water.
- **Do not exercise and only do light activities during the 24 hours before your scan.**
- **Arrive 30 minutes before your appointment.** You should plan to be at this appointment for 2 to 3 hours. It is important to be on time for your appointment, so you can get the radioactive tracer at the right time. The tracer only works for a short period of time.

Here are three important things to know if you have diabetes:

1. There must be at least 6 hours between the time you take your blood sugar medicine or insulin, and when you have your PET scan. Your scan will be scheduled so that you can still take your medicine on time.
2. If you have diabetes, you will need to control your blood sugar. Your blood sugar level needs to be less than 200 at the time of your scan. This is because the blood sugar in your body can affect the radioactive tracer. If you take insulin, bring it with you to your PET scan.
3. Call the PET scan office if your blood sugar levels are over 200 the day of your scan. The number to call is (614) 293-6920.
What should I bring for a PET scan?

- Bring a photo ID.
- Bring information about your health such as, a list of your medicines, any supplements that you take, allergies or health conditions you have, or any treatments you are getting.
- Bring your health insurance information with you.
- Bring all the medicines you will need to take during your appointment. Make sure you bring enough medicine, in case there is a delay or a longer wait time.
- Bring your own medicines for pain, anxiety or fear of being in a closed space (also called claustrophobia). We will tell you when you can take them before your scan.

What happens during the PET scan?

You will be asked about your health, medicines and allergies. You may fill out some paperwork. Your blood sugar will be checked to make sure that it is below 200.

A PET scan tech will tell you about your scan and answer any questions you may have.

You will be asked to use the bathroom before your scan. Once the scan starts you will not be able to move.

An IV will be put in your arm or hand. Next the tracer and saline (sterile salt water) will be given through your IV. You will be given a bottle of fluid to drink that has a medicine called **contrast** in it. This process can take 60 to 80 minutes. You will need to remain relaxed and quiet during this time.

During the scan you will lie flat on your back and need to stay still. The table will move you to different positions in the scanner. The scanner detects the radiation given off by the tracer. It takes pictures of how the tracer moves in your body. It takes 15 to 25 minutes for all of the pictures to be taken. Your scans will be looked at before you leave to be sure all the pictures that are needed have been taken.
What happens after the PET scan?
There are no side effects from the scan. The only side effects would be from medicines you might choose to take for pain, anxiety or claustrophobia. If you take any of these medicines, make plans for someone to drive you home after your scan.

When will I receive the results of the PET scan?
Your results will be available within a few days. Your doctor will discuss the results with you and may give you a copy of them.

Where do I go for my appointment?
Your appointment is scheduled at:

- **The James Cancer Hospital**, 460 West 10th Ave, Columbus, OH. Report to the Ground Floor to register and you will be told where to go for your PET scan.
- **University Hospital**, 410 West 10th Ave, Columbus, OH. Report to Radiology Outpatient Registration on the 2nd floor of Doan Hall.
- **Martha Morehouse Medical Plaza**, 2050 Kenny Road, Columbus, OH 43221. Report to the Pavilion building, first floor registration.

Where do I call with questions about my PET scan or to change my appointment?
Please call if you have any questions or if you are not able to keep your appointment. The telephone number for the PET scan office is (614) 293-6920.

*Partially adapted with permission from information shared as a courtesy by Duke University PET Facility.*