You are scheduled for a research PET (positron emission tomography) scan. A PET scan uses small amounts of radioactivity to take detailed pictures of different areas inside the body. These scans are performed as part of research studies done at the National Institutes of Health.

**What does PET mean?**

The letters “P E” stand for positron emission. This is the scientific term for the type of radioactivity attached to the compound you will be given. “T” stands for tomography. Tomography means that the radioactivity can be detected at many angles as you move through the scanner. By using many angles, the scanner can make detailed pictures of sections of your body.

**How does PET differ from other scans, like CT?**

Computerized tomography (CT) shows the shape and structure of your body’s organs and tissues; PET shows how they work. Because of this, PET scans can often find changes in the body’s tissues before changes can be seen in their structure.

**Preparation**

A member of your health care team working with the study’s primary investigator will contact you before your scan.
Preparation depends on the research study you take part in. Generally, you may expect one or more of the following:

► not to eat, drink, smoke, or take medication anything on the morning of the scan.

► to arrive well before your scan is scheduled. This gives the staff time to prepare you.

► Depending on the research study you take part in, you will have one or two intravenous (I.V.) lines inserted. Also, an arterial line may be inserted to take small blood samples during the scan. These samples help researchers understand the scan.

► If you are a woman of childbearing age, you will be asked to give a urine or blood sample to test for pregnancy. You will also be asked to sign a card in the Nuclear Medicine/PET Departments stating that you are not pregnant or breastfeeding a child.

Procedure

What happens during the scan depends on the type of study you take part in. Ask a member of your health care team for specific information.

After the procedure

► You may resume your usual routine. Continue to drink plenty of liquids for the rest of the day. You may drink any kind of liquid after the scan—you are not limited to water.

► If you were sedated, do not drive yourself home—have someone else drive you. Even if you plan to take a taxi or other public transportation, please arrange for someone to go with you.

► If you had an arterial line inserted, a member of your health care team will explain special measures you need to take after it is removed.

Special Instructions

If you have more questions about your research PET scan, please feel free to ask. Your nurse or any member of your health care team can assist you.