A positron emission tomography (PET) scan is used to look at organs such as the heart and brain. It can also look at body tissues like lymph nodes.

PET scans show how your organs or tissues function chemically. This helps your doctor diagnose problems and make a treatment plan for you.

PET scans are often done to help diagnose or manage certain conditions, including:
- coronary artery disease
- brain tumors
- cancer
- seizure disorders
- memory problems
- stroke
- infection
- brain diseases, such as Alzheimer’s, Huntington’s, or Parkinson’s.

What should I do before my PET scan?

It is important to prepare for your PET scan. If you don’t follow the instructions carefully, the test may not be accurate and you may need to repeat the scan.

- Don’t eat or drink (except plain water) for at least 4 to 6 hours before the scan. Do not chew gum or use mints either.
- You should drink plenty of plain water (two 8-ounce cups).
- If you use insulin, eat and take your normal dose of medicine 4 to 6 hours before your scan.
- If you use an insulin pump, put it on “sleep mode” 4 hours before your scan.

- Don’t do any strenuous activities or exercise during the 24 hours before your scan.
- If you are having a Cardiac PET scan, you will need to be off the medicines Theophylline and Aminophylline 24 hours before your scan.
- If you are having a Cardiac PET scan, do not eat or drink anything with caffeine in it for 12 hours before your scan.
- Make sure your doctor knows if you are (or could be) pregnant, or are breastfeeding.

What will happen during my PET scan?

During the scan, you will lie on a cushioned table. The table slides into a large tunnel-shaped scanner. If you are claustrophobic (afraid of being in closed spaces), tell your doctor or nurse. You may be given a sedating medicine to help you relax.

- First, you will have an IV (intravenous) tube inserted into your arm. This tube will deliver a radioactive substance (tracer) into your vein. The radioactive substance is safe.
- While your body absorbs the tracer, you will rest in a reclining chair for about one hour.
- Once the tracer is absorbed, the scan can be done. You must lie still on the cushioned table for 30 to 45 minutes. Only move when you are told to do so.

What happens after the procedure?

- If you were given a sedative, you must have a friend or family member drive you home.
- Over the next several hours, drink plenty of clear fluids (two 8-ounce cups) to help flush the radioactive material out of your body to reduce radiation exposure.