

Positron Emission Tomography (PET) and Computerized Tomography (CT) Scan

Your child has been scheduled for a PET/CT scan in the Nuclear Medicine Department at Children's Hospital of Wisconsin on _____ at _____ a.m./p.m.

- Please stop at a Welcome desk for a badge and directions.
- Come 15 minutes early and check in at the Imaging (Radiology) reception desk.
- If you have questions about the time of the procedure or your child's health on the day of the procedure, please call at (414) 266-3606.

What is a PET/CT scan?

A PET scan creates pictures of organs and tissues inside the body. A tracer, called radioactive isotope is used. It will be injected into a vein at the start of the PET scan. The tracer helps find areas of high and low metabolic activity.

A CT scan creates a picture of the inside of the body with an x-ray machine.

A PET/CT scan is done at the same time on the same machine. It combines the images from the 2 scans. This scan gives a more complete image than either test can do alone. It gives the doctor a better idea of what is happening in your child's body.

Your child's doctor will talk with you about why your child needs a scan.



How do I prepare my child for the scan?

The tracer that is used for the PET/CT scan is very costly. It is very important to follow the instructions below. This will prevent wasting the tracer and having to reschedule your child's appointment.

- 24 hours before the scan, give your child foods that are
 - High in protein, such as meat and dairy,
 - Low in carbohydrates, such as starchy or sugary foods.
- Your child can take medicines in pill form with water. If a liquid medicine can wait until after the exam, please do so. Otherwise contact your doctor for a sugar free alternative. The sugar in liquid medicines can affect the test.
- If your child has diabetes, please call (414) 266-3606 for special instructions.
- Limit your child to quiet activities for 24 hours before to the scan. Have your child avoid any strenuous or physical activity.
- Please call (414) 266-3116 up to 10:00 pm the night before if you need to cancel the scan.
- **Your child cannot have any food (solids or liquids) after midnight the night before the scan.** Your child can have water until 3 hours before the scan. If your child eats after midnight, the scan may need to be cancelled.

Preparing for the scan (continued)

- Your child will need to hold very still during the scan. It takes about 45 minutes. If your child will not be able to hold still during the scan, a medicine (general anesthesia) may be needed. The medicine will help them relax or sleep.
- If your child has IV fluids running, please call (414) 266-3606 for instructions.

How is the scan done?

Before the scan:

- Your child will need to have a glucose test done on the day of the procedure. The test is a finger stick that is done in Imaging (Radiology). Your child's glucose level needs to be at or below 200 dl/gm for the tracer to be injected.
- Your child will have an intravenous (IV) line placed. Your child will be awake for the IV start. We cannot use sedation before the IV start but we can use other comfort measures. After the IV start, the tracer is injected into the IV line.
- About 45 minutes later your child will be placed in the scanner.

During the scan:

- Your child will need to hold very still during the scan. It takes about 45 minutes.
- We use a mobile service for high quality PET/CT scans for our patients. Parents may be present during the scan preparation. Because there is not a lot of room on the truck, family member may be asked to wait in the prep area. Pregnant caregivers and siblings should not come with the child.

What happens after the scan?

- Your child will be able to go home after the scan is done. There are no side effects from the scan or from the tracer that is used.
- There are no special care needs after the PET/CT scan unless your child has general anesthesia for the scan. Any special needs related to general anesthesia will be discussed by the Anesthesiology/Imaging staff.

When will I get the results of the scan?

Your child's doctor should get the results of the PET/CT scan within a week. Please call your child's doctor for the results of the PET/CT scan.

ALERT: Call your child's doctor, nurse, or clinic if you have any questions or concerns or if your child:

- Is still throwing up 4 hours after the test is done.
- Has special health care needs that were not covered by this information.

This teaching sheet is meant to help you care for your child. It does not take the place of medical care. Talk with your healthcare provider for diagnosis, treatment, and follow-up.