



## Nuclear Imaging Department

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### Patient Information Handout Metabolic PET Brain Imaging

#### What is Amyloid Brain Imaging?

Metabolic PET imaging is a special type of scan used to detect chemical and functional changes in the brain that aren't visible on other imaging modalities, such as MRI. This is made possible by injecting a small amount of radioactive medication called a tracer. For Metabolic PET imaging, the tracer used is FDG (*F18 fluorodeoxyglucose*), which acts like sugar in the brain. Since the brain consumes a large amount of sugar, called glucose, the FDG tracer goes to regions of the brain, which are then imaged using a PET scanner.

**\*You must fast for at least 6 hours before your appointment. Medications taken with water are allowed.  
Please arrive at least 30 MINUTES EARLY to your appointment\***

**\*If you are breastfeeding, please plan to interrupt breastfeeding for 4 hours after the scan\***

#### Before the Exam

##### 1. Precautions

- If you are breastfeeding, please plan to stop breastfeeding for 4 hours after the scan. During this time, breastmilk should be collected and discarded. It is advisable to collect milk before the scan that can be used to feed your baby after the scan.
- Notify us immediately if you are pregnant, or if you have had a prior allergic reaction to FDG (*F18 fluorodeoxyglucose*).
- You should avoid having more than one nuclear imaging procedure performed within 48 hours of each other. If you have another scan scheduled, please notify us immediately.

#### What to Expect During the Exam

##### 2. Preparation

- Please arrive at least 30 minutes early for your scan.
- You must fast for a minimum of 6 hours prior to the scan. Medications with water are allowed. For afternoon appointments, a low-carbohydrate breakfast is acceptable if the 6-hour fasting rule is followed. Take your normal medications as prescribed unless instructed otherwise by your physician.

- We will measure your blood glucose level prior to your scan, using a finger-prick glucose monitor. If your blood glucose levels are too high or too low, we may need to reschedule your scan.
- Wear comfortable clothing without metal zippers or snaps.
- If you are unable to lie still for at least 10 minutes, please inform us.

### **3. During the Scan**

- A small amount of a radioactive tracer, called FDG (*F18 fluorodeoxyglucose*), will be injected into your arm vein.
- After the injection, you will rest quietly for about 45 minutes while the tracer circulates through your body.
- You will then be positioned on the PET scanner, where the camera will take images of your brain. The scan itself usually takes 10 to 15 minutes.
- You will need to lie still during the imaging portion for the best results.

### **4. After the Exam**

- If you are breastfeeding, please stop breastfeeding for 4 hours.
- You can resume your other normal activities right away.
- Drink plenty of fluids to help flush the tracer from your body.
- There are no restrictions on being around family or friends after the test.

## **Safety**

- The tracer used in this exam contains a very small amount of radiation, which will naturally leave your body within a day.
- Please notify us if any of the following apply on the day of your scan:
  - You are pregnant or think you might be pregnant
  - You are breastfeeding

## **Results**

- A board-certified nuclear medicine physician or radiologist will review your images.
- The results will be sent to your referring doctor, who will discuss them with you.

## **Frequently Asked Questions**

### **1. Will it hurt?**

- A small needle stick is needed for the injection, which may be slightly painful.

### **2. Is it safe?**

- Yes. The radiation exposure is very low and is not expected to cause side effects. Like other needle sticks, there may be some injection-site redness, pain, or swelling after the injection is given. In very rare cases, patients may have an allergic reaction to FDG. If you have any questions, ask your doctor.

### **3. How long will I be at the imaging center?**


- Expect to be at the imaging center for up to 1.5 (one and a half) hours.

## **Contact Us**

If you have questions before your exam, please contact us:

**The Neuron Clinic – San Marcos**

**Nuclear Imaging Department**

 **(760)281-3662**

 **838 Nordahl Road Suite 200, San Marcos, CA 92069**