



# Cascade Medical Imaging, LLC

## PATIENT INFORMATION & INSTRUCTIONS FOR YOUR Positron Emission Tomography (PET) EXAM

**IMPORTANT INFORMATION FOR:** \_\_\_\_\_ **to PREPARE YOU FOR YOUR PET SCAN:**  
Patient Name

- ✓ You are scheduled for a PET scan @ CASCADE MEDICAL IMAGING, LLC (St Charles Medical Center Campus)  
2500 NE Neff Road, Bend, Oregon 97701

Time: \_\_\_\_\_

Date: \_\_\_\_\_

- ✓ Be sure to read the important prep instructions on the other side of this paper.
- ✓ Please arrive promptly @ the MRI suite, lower level, North entrance of the SCMC campus @ the above time
- ✓ If you have any questions **OR** cannot make your scheduled appointment time you must call the Cascade Medical Imaging schedule line and let us know at least 24 hours in advance. The FDG dose that you will be given is purchased by us at a cost of \$500 and flown in from Portland. If you do not give us proper notice to cancel your appointment we will need to charge you \$500 to cover this expense. Our telephone number is: **(541)382-9383**

### **WHAT IS PET IMAGING?**

PET imaging is a diagnostic procedure used in Nuclear Medicine to visualize metabolically active tissues using sugar (glucose) molecules labeled with the radiopharmaceutical FDG (Fluorine-18). The labeled glucose is incorporated into the actual cell and once the cell has metabolized the glucose, the low-level radioactivity can be detected by the PET scanner and then generate images used for diagnosis and treatment. PET scan results show the areas of abnormal glucose metabolism and exactly where the areas are located.

### **WHAT IS CELL METABOLIZATION?**

All living cells utilize glucose to live and make the building blocks of life. Some cells metabolize glucose faster than others. Abnormal cells are hyperactive and divide quickly, and therefore metabolize FDG (Fluorine-18) faster than normal cells. On a PET scan, abnormal cells appear "hot" and significantly more prominent than normal cells.

### **IS THE RADIATION FROM A PET SCAN DANGEROUS?**

No. The quantity of radiation is low and the FDG (Fluorine-18) radiopharmaceutical has a short half-life (110 minutes). The FDG (Fluorine-18) degrades quickly so that **no** detectable radioactivity is present after several hours. In addition to the radioactive decay of FDG (Fluorine-18), the remaining FDG (Fluorine-18) is excreted in the urine. This means FDG (Fluorine-18) demonstrates both physical decay (positron emission) and biological decay (excretion in urine).

There are several types of radioactive decay and PET scans detect positron emission radiation. Family members are **not** at risk for exposure since greater than 90% of the radioactivity has left the body or decayed before the patient has left the Nuclear Medicine Department.

**PLEASE READ THE OTHER SIDE OF THIS PAPER FOR IMPORTANT PREP and EXAM  
INFORMATION**

## **PREP INSTRUCTIONS FOR YOUR PET SCAN:**

- If you are not diabetic:** Do not eat or drink anything for **6** hours before your exam, except water. You may take your medications as prescribed.
- If you are diabetic and you take oral diabetic medication and your PET appointment is in the morning:** Do not eat or drink anything for **6** hours before your exam except water and non-diabetic medications. Do not take oral diabetic medications.
- If you are diabetic and you take oral diabetic medication and your PET appointment is in the afternoon:** You may have a light breakfast and take your morning medications including oral diabetic medication then do not eat or drink anything except for water **6** hours before your exam.
- If you are a subcutaneous insulin dependent diabetic:** Your appointment should be scheduled for late morning or afternoon. You may not eat or drink anything except for water **4** hours before your exam. Please have your last insulin injection **2** hours prior to your exam.
- Colon and Lymphoma exam patients only:** For optimal results it is very important that your bowel be thoroughly cleansed. Please pick-up an Evac-Q-Kwik kit from Central Oregon Radiology Assoc., P.C. and follow the **two-day** instructions.
- Cardiology exam patients only:** Please eat a full meal high in carbohydrates 30 minutes before your scan. Diuretic and oral fluids should be limited to small quantities. Diabetic patients should stay on their normal regime.

**IF ANYTHING IS EATEN BEFORE THE EXAM (except cardiology exam patients), THERE IS A SIGNIFICANT DECREASE IN THE ABSORPTION OF THE FDG RADIOPHARMACEUTICAL. THIS WILL DECREASE THE AMOUNT OF RADIOACTIVITY UPTAKE IN THE ABNORMAL CELLS AND WILL GENERATE A SUB OPTIMAL SCAN.**

### **HOW LONG IS THE EXAM?**

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| <b><u>Whole Body PET imaging:</u></b>              | Patient should allow 2.5 hours for appointment |
| <b><u>Whole Body PET imaging for Melanoma:</u></b> | Patient should allow 3.5 hours for appointment |
| <b><u>Brain PET Imaging:</u></b>                   | Patient should allow 2 hours for appointment.  |
| <b><u>Cardiac PET imaging:</u></b>                 | Patient should allow 3 hours for appointment.  |

You should be able to hold still approximately 45 minutes for the imaging portion of your appointment.

**BE SURE TO ARRIVE ON TIME @ CASCADE MEDICAL IMAGING, LLC FOR YOUR APPOINTMENT**

### **There are two stages of the PET exam:**

- 1.** You will receive an injection of the Radiopharmaceutical FDG (Fluorine-18), after which you must wait between 30 and 60 minutes for your body to metabolize the FDG. You will be resting comfortably during this time. If a support person comes with you to your appointment they will not be able to be with you during the actual scan time. You will be asked to empty your bladder right before the technologist begins your scan.
- 2.** You will be taken into the scanning room and asked to lie down on a table that passes slowly through the PET scanner. The scanner resembles a CT machine. You should expect the scan to last approximately one hour. The room is kept very cold so please wear sweats with no metal or buckles, etc.

### **WHAT TO EXPECT AFTER YOUR PROCEDURE:**

You may resume your normal diet immediately following the procedure. You should drink additional fluids for several hours after the scan. There are no physical restrictions after the procedure.

### **HOW LONG BEFORE YOU GET RESULTS?**

The exam is usually read within 24 hours. The results will be sent to your doctor who will discuss them with you. Call your doctor three days after the exam or as otherwise directed.

Thank you for choosing Cascade Medical Imaging for your PET scan. If you have any questions or concerns please call our scheduling department @ (541)382-9383

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