

PET/CT Cardiac Inflammation Scan

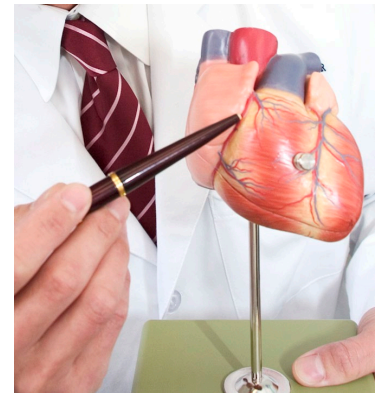
How to prepare and what to expect

*This handout gives special instructions for patients who are having a cardiac PET/CT scan. **You must follow these instructions before your scan.***

What is a PET/CT scan?

PET stands for *positron emission tomography*. CT stands for *computed tomography*. This *cardiac inflammation scan* will use both PET and CT scans to give your doctor information about your heart.

This scan will show if areas of your heart are inflamed. One of the many causes of heart inflammation is *sarcoidosis*.



Your scan will show if there is inflammation in your heart muscle.

Tracer Injections

You will receive 2 injections of a *radioactive tracer* for this scan:

- The 1st injection will show the blood flow to your heart muscle and help us take clear pictures of your heart.
- The 2nd injection will show inflamed areas. It is very rare to have allergic reactions to these tracers.

A PET/CT camera will take 2 types of pictures:

- The **PET scan** shows where the tracer has collected in your body.
- The **CT scan** provides detailed pictures of your heart tissues and structures.

How do I prepare for the scan?

- Call the Nuclear Medicine Clinic at 206.598.4240 before the day of your scan if:
 - You feel you cannot lie flat on your back for 2 hours. (You will need to do this for this scan.)
 - It is hard to place an *intravenous* (IV) line in your arm.
- **Starting 2 days before your scan:** Do **not** take any liquid or lollipop medicines. You may take all other non-liquid medicines. Call us if you have any questions.

- Do **not** exercise for 24 hours before your scan.
- You **MUST** follow the important food and drink instructions on page 3 of this handout starting the day before your scan.
- *If you were assigned female at birth:* Tell your provider if you are pregnant or breastfeeding, or if there is any chance you could be pregnant.

Food and Drink Before Your Scan

For this scan, you **must** strictly follow the directions on page 3. If you do not or cannot follow the diet, we will need to reschedule your scan.

The reasons for the diet restrictions are:

- All cells in your body need energy. Healthy heart muscle cells use *glucose* (sugar) as their main source of energy. When you do not eat foods that provide your body with glucose, healthy heart muscle cells start to use fat as their fuel supply instead of glucose. But, inflamed heart muscle cells cannot use fat for fuel. Inflamed cells can only use glucose as their main source of energy.
- When you follow the diet restrictions, you deprive your body of glucose. Your healthy heart muscle cells will then start to use fat for energy. Any inflamed heart cells will use glucose for energy.
- For the part of this scan that looks for inflammation, radioactive glucose is injected into your vein. Only the inflamed areas of your heart will take up this radioactive glucose. The pictures we take of your heart will show where the radioactive glucose is.

The Entire Day Before Your Scan

You **MUST** follow food and drink instructions starting the day before your scan. The boxes on page 3 list what to eat and drink:

- The **entire day before** your scan (Step 1)
- Starting **12 hours before** your scan (Step 2)

Call us at 206.598.4240 if you have questions about what you can and cannot do before your scan.

The food and drink instructions on page 3 are VERY important. If you eat or drink any foods that are not listed, call us at 206.598.4240 to reschedule your scan.

DIET STEP 1

You **MUST** start your diet at midnight the day before your scan and you must eat high-fat meats and/or fish at least twice on that day.

Do **NOT** eat any carbohydrate foods.

THE ENTIRE DAY before your scan, eat **ONLY** proteins and fats.

Eat **ONLY**:

- Plain meat (beef, steak, pork, chicken, or lamb), fish, and eggs. You may cook the meat in oil, if you wish. **NO** bacon, deli meats, or other processed meats.
- **VEGANS**: Eat **ONLY** plain tofu that has been cooked in oil (added fat is needed).

“Plain” means **NO** sauces, seasonings, dressings, or breading.

Drink **ONLY**:

- Water or plain black coffee. **NO** milk, cream, sugar, or other sweeteners.

Medicines:

- **NO** chewable, liquid, or lollipop medicines. Take all other medicines with water.

DIET STEP 2

Follow these instructions starting **12 hours** before your scan.

Starting **12 HOURS** before your scan:

- Do **NOT** eat anything.
- You may drink water or plain coffee. **NO** milk, cream, sugar, or other sweeteners.
- Do **NOT** take any chewable, liquid, or lollipop medicines. You may take all other medicines with water.
- *If you have diabetes*: Starting 6 hours before the study, do **NOT** take insulin or other diabetes medicines.

IMPORTANT!

- You **MUST** eat proteins and fats the day before your scan. Do **NOT** fast.
- Do **NOT** eat or drink anything that is not listed above.

We must reschedule your scan if you do not follow these instructions exactly.

The Day of Your Scan

- Wear comfortable clothes.
- **Please arrive on time.** The exact timing of this scan is very important. If you are more than 20 minutes late, we may need to reschedule your scan.
- Plan to be at the hospital for up to 2 to 2½ hours for this scan.
- Come to the Nuclear Medicine Clinic on the 2nd floor of UWMC - Montlake. From the 3rd floor (main level):
 - Take the Pacific elevators down to the 2nd floor.
 - Follow the signs to Radiology.
 - Check in at the Radiology front desk.

What to Expect

When you arrive at the Nuclear Medicine Clinic:

- A technologist will explain what to expect during your scan.
- *If you were assigned female at birth:* Tell the technologist if there is any chance you could be pregnant.

Here is what you can expect:

- An *intravenous* (IV) line will be started in your arm.
- We will check your blood sugar.
- The nuclear medicine technologist will inject the tracer.
- The technologist will use a PET/CT scanner to take pictures of your heart. This will take about 20 minutes. These images will show us how much blood reaches your heart.
- After these first images are taken, you will be injected with another radioactive tracer. You will need to remain lying on your back during this time between scans.
- More images of your heart will be taken 1 hour later. These images will take about 20 minutes.

Questions?

Your questions are important. Call your doctor or healthcare provider if you have questions or concerns.

UWMC - Montlake Imaging Services: 206.598.6200

UWMC - Montlake Nuclear Medicine: 206.598.4240

Who reads the scan? When will I get the results?

A nuclear medicine doctor or nuclear cardiologist, or both, will read your scan. Within 3 days, they will send your results to your provider who referred you for this scan. Your provider will then share your scan results with you. You and your provider will then decide the next step, such as treatment for a problem, as needed.

You may also read your results on your MyChart page. If you need copies of your images on disc, call 206.598.6206.