

### What is a PET/CT scan?

- PET/CT is an advanced medical imaging technique, combining Positron Emission Tomography (PET) with Computed Tomography (CT).
- PET/CT combines the fine anatomical detail of CT with PET's ability to detect changes in cell function. This combination allows for earlier and more accurate detection of disease than either CT or PET scan alone.
- A PET/CT scan helps your physician diagnose a problem, determine the best approach to treatment or monitor your progress.

#### How does PET/CT work?

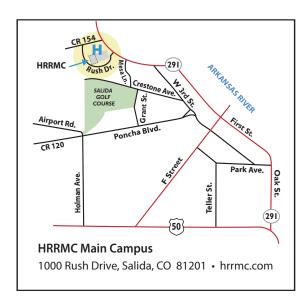
PET/CT scans are used primarily for diagnosing, staging and evaluating treatments for cancer patients.

- Cancer cells grow at a very fast rate.
- Growing cells use glucose as a primary source of energy. The faster cells grow, the more glucose is consumed.
- A form of glucose called FDG, which emits particles called positrons, is injected before a PET/CT study is done.
- The FDG molecules are consumed more in fast-growing cancer cells than in normal cells, resulting in concentrations of FDG, and positrons, in areas of cancer.
- A PET/CT scanner detects where positrons are being emitted from within a patient and provides images that map the locations.
- PET FDG mapping is combined with CT image's structural detail in order to identify both the presence of disease and its precise location.



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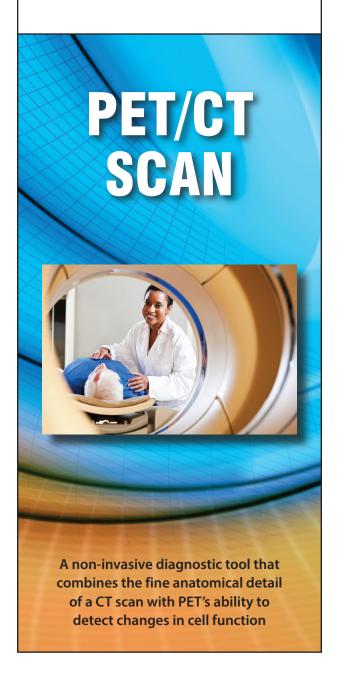
To schedule a PET/CT scan with a doctor's order, call 719-530-2396.



#### Your PET/CT Scan is scheduled for:

Date:			
<b>-</b>			





# **Preparing for your PET/CT scan**

- For 6 hours before your test, do not eat or drink (except water). Do not even chew gum.
- Your last meal before the scan should be high in protein and low in carbohydrates.

#### For example:

*Dinner:* steak, baked chicken, fish, cheese, asparagus, broccoli, mushrooms. <u>No</u> pasta, potatoes, rice or bread.

*Breakfast*: eggs, bacon, sausage. <u>No</u> breakfast should be eaten if you have an appointment before noon. This is important for accurate results.

- Before your procedure, inform your physician and the technologist performing your exam of any medications you are taking, including vitamins and herbal supplements. Also inform them of recent illnesses or medical conditions and if you are allergic to any foods or drugs.
- Continue to take any medication prescribed by your physician.
- If you have been advised to take your medications with food, eat no more than a few soda crackers 6 hours prior to your exam.
- Avoid caffeine, sugar, tobacco and heavy exercise for 24 hours prior to your exam.
- If you have diabetes, discuss this with your physician and call the HRRMC Medical Imaging Department at 719-530-2318 two days (48 hours) before your scan.
- If you are, or think you may be pregnant, or
  if you are breastfeeding, tell your doctor and
  the technologist. Generally, PET/CT is not
  performed on women who are pregnant.

#### **Arrive on time**

Please arrive 30 minutes before your scheduled appointment.

If you must cancel or reschedule, please do so at least 24 hours before your appointment so that the injection can be canceled in time from the supplier from Denver.

## What to bring and wear

### Bring with you:

- Insurance cards
- Previous CT scans, x-rays and prior PET/CT exam reports
- Medical history
- · Pathology reports
- Wear warm, comfortable clothes, since the scanner room is cool. Blankets are also available.
- Avoid clothes with heavy buckles or metal components.



## **Undergoing the PET/CT Scan**

During a PET/CT scan, a very small dose of a radioactive chemical, called a radiotracer, is intravenously injected into your arm.

You will sit quietly for about 45 minutes while the radiotracer travels through your body and is absorbed by the organs and tissues being studied.

You will then lie on an exam table that slides into and out of the tunnel of the PET/CT scanner. The scanning process lasts about 30 minutes.



# After your scan

- · You can leave immediately.
- Your activity will not be restricted. You may drive if you wish, resume your normal diet, exercise and take all prescribed medications.
- As an extra precaution, avoid getting close to an infant or anyone who is pregnant for eight hours immediately following the scan.
- The PET/CT scan will be reviewed by a radiologist who will send a report to your doctor.
- Your doctor will contact you about the results of your PET/CT scan.

