



## **AFTER THE PROCEDURE**

Following your exam, you should drink plenty of water or other fluids throughout the day. You may resume normal activity.

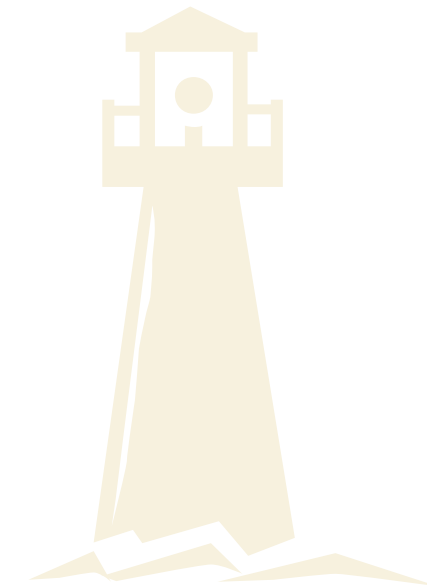
## **RADIATION SAFETY**

Advise your doctor and the technologist performing the procedure if there is any possibility you may be pregnant.

We are continually striving to ensure precautions are taken to minimize the amount of radiation used to complete diagnostic and interventional procedures.

For more information on radiation dose, ask the radiologist who performs your exam or visit the following website:

[www.radiologyinfo.org](http://www.radiologyinfo.org)



## **FOR FURTHER INFORMATION**

For more information on Diagnostic Imaging or interventional and therapeutic procedures, please visit:

[www.easternhealth.ca](http://www.easternhealth.ca)

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**POSITRON EMISSION  
TOMOGRAPHY –  
COMPUTED  
TOMOGRAPHY  
(PET-CT)**



## WHAT IS PET-CT?

### POSITRON EMISSION TOMOGRAPHY (PET)

Positron emission tomography (PET) uses small amounts of radioactive materials, called radiotracers, a special camera and a computer to help evaluate your organ and tissue functions. By identifying changes in your body at the cellular level, PET may detect the early onset of disease before it is evident on other imaging tests.

Combined with a CT scan, a PET scan can produce multimodality images of the inside workings of the human body.

## SAFETY PRECAUTIONS

Please advise your doctor and the technologists performing the procedure of the following:

- If there is any possibility that you could be pregnant or if you are breastfeeding.
- If you have allergies, or a history of allergy, to anesthetic or X-ray/CT contrast dye.
- If you have any history of kidney problems.
- Any medications that you are taking.

- If you are a diabetic. Your blood glucose will need to be monitored by your doctor to ensure it is stable leading up to the exam. The exam will be booked depending on the type of diabetes you have and the medication you are taking. **This is essential and if done improperly WILL result in the cancellation of your exam.**

## PREPARATION

Preparation for a PET-CT scan is a CRUCIAL part of the process, and in many cases, the study will be cancelled if the patient has not prepared properly. Please read the following section carefully.

- Prior to the exam, you will be required to fast for six (6) hours (water only).
- It is essential to stay well hydrated in the 24 hours prior to your exam and you will be provided 1 liter of water to drink prior to the exam.
- It is suggested that you have a low carbohydrate diet in the 24 hours prior to the exam. Please see the provided information sheet.
- No strenuous exercise in the 24 hours before the exam. This may adversely affect the exam results.
- If you have had anxiety with previous PET, CT, or MRI scans, you should discuss the need for medication with your physician prior to the exam.
- Be prepared to stay at the imaging facility for approximately two to three hours.

- Contrast (dye) may be required to assist the nuclear medicine physician to see specific parts of the body. Dyes can be taken by mouth, injection, or both. If you receive a dye injection during the scan, you may get a warm flushed feeling that will pass in a minute or two.

## PROCEDURE

The PET machine is a large piece of equipment with a hole for the body to pass through like a CT or MRI scan.

When you come to the department, the technologist will give you a questionnaire to fill out and will conduct a brief interview to ensure the study can proceed. They will then check your glucose level to ensure it is in the normal range.

An intravenous catheter will be placed and the radiotracer will be administered. You will be taken to a separate room and asked to relax and remain still (including no gum chewing) for 60-90 minutes.

The technologist will then position you on the table, and in most cases your entire body will be scanned. The technologist will be speaking with you during the exam; however, it is **very important that you remain still**. A CT scan will be obtained as well.

On occasion, children may require mild sedation or general anesthesia, this will be arranged prior to the exam. Children must be accompanied by a parent or guardian.