



Nuclear medicine department

## **PET/CT information for diabetic patients**

### **PET/CT scans in people with diabetes**

When you have a PET/CT scan you are given an injection of a radioactive sugar called 18-F fluorodeoxyglucose (18-F FDG). This special form of glucose is taken up by cells in the body, in the same way as normal glucose, from your blood.

Diabetes can affect PET/CT scans in two ways:

- If your own blood glucose levels are high, the 18-F FDG will not be taken up as efficiently and the scan will be adversely affected.
- If your insulin is high, this will also affect the scan results because the insulin encourages your own normal tissues and organs to take up the radiotracer and again the scan will be adversely affected.

Because blood glucose levels are so important for PET scans, all patients coming for a PET/CT scan will have their blood glucose measured before the radiotracer injection.

Ideally, your blood glucose level should be between 4 and 10 (millimoles per litre) before the scan. If the level is more than 12.5 mmol/l, the scan would usually need to be re-scheduled.

### **Having a PET/CT scan when you have diabetes**

If you have diabetes you should always let the scanning department know about this before your appointment day.

You will then be given advice on how to prepare for the scan – what and when to eat and what diabetic medications to take. You will also be given advice on what food and medications you should bring in with you when you come to the scanning department for your appointment.

The schedule of your scan may be guided by your recent blood glucose levels and whether you tend to have very low early morning glucose levels.

The amount of radioactive glucose you are given for the scan is not enough to affect your diabetes.

## Summary

- **Blood glucose** levels are very important in PET/CT scans.
- If you test your blood glucose at home and it is regularly over 10mmols/l please contact your GP or practice nurse or your usual diabetes care provider for advice. Take this leaflet with you.
- Tell the scanning department in advance of your appointment that you have diabetes and what treatment you take for this.
- Follow the advice given by your scanning department about eating and taking medication before and after your scan.
- The diabetes specialist nurse at The Christie NHS Foundation Trust can be contacted for further advice if required mobile 07990 530161.

This patient information leaflet is part of the management of patients with diabetes or at risk of developing diabetes policy  
version 2 December 2015



The Christie Patient Information Service February 2016  
CHR/NM/1140/20.01.16 Version 1 Review February 2019  
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Details of the sources used are available, please contact [patient.information@christie.nhs.uk](mailto:patient.information@christie.nhs.uk)