

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. This may mean it will have to be repeated on another day.
- 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 12.5mmol/l, the scan would usually need to be re-scheduled.

## Having a PET-CT scan when you have diabetes

Although the amount of radioactive glucose you are given for the scan is not enough to affect your diabetes, you should always let the scanning department know you are diabetic 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.

## 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. (call **0161 446 3942** or **3946**)
- Follow the advice given by your scanning department about eating and taking medication before and after your scan.



This patient information leaflet is part of the management of patients with diabetes or at risk of developing diabetes policy.  
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If you need information in a different format, such as easy read, large print, BSL, braille, email, SMS text or other communication support, please tell your ward or clinic nurse.

We try to ensure that all our information given to patients is accurate, balanced and based on the most up-to-date scientific evidence. If you would like to have details about the sources used please contact [patient.information@christie.nhs.uk](mailto:patient.information@christie.nhs.uk)

For information and advice visit the cancer information centres at Withington, Oldham or Salford. Opening times can vary, please check before making a special journey.

Contact The Christie Hotline for  
urgent support and specialist advice  
**The Christie Hotline: 0161 446 3658**  
Open 24 hours a day, 7 days a week

