

Diabetes & the effects of exercise on your sugar levels following amputaion

Do you have Diabetes?

Do you take Insulin or other medication for your Diabetes?

Are you attending rehabilitation in a physiotherapy department?

If you answered YES to all the above questions the following information is for you:-

The increase in activity working with the physiotherapists or prosthetists can cause your blood sugar levels to drop quickly. If they go below 4mmol/l this is called a 'hypo'. You are at more risk of a hypo when you are attending rehabilitation.

To have an artificial limb fitted and to learn how to use it will involve using more energy than you have been used to while using a wheelchair.

For some of you it may have been a long time since you were walking, for others it may only have been a few weeks but the effect of walking in the parallel bars may still make you feel like you have run a mile.

To get the most out of your visit to the Prosthetic department your blood sugar level needs to be under control.

How to prevent blood sugar problems with rehabilitation

Hypos can happen up to 36 hours after strenuous or prolonged physical activity, so you might need to adjust your medication or carbohydrate intake to compensate.(e.g. consider a bed time snack).

For planned exercise, reducing your insulin would be the preferred choice, while additional carbohydrate would be needed for unplanned exercise. Your diabetes healthcare professional will be able to help with what works best for you.

Do not inject insulin into your leg if you are going to be walking or exercising the leg muscles within the next 12 hours (muscle use increases the rate the insulin is absorbed)

Do not attend for your appointment if you are unwell. Please contact the centre if you are unable to attend.

Be aware that anxiety or worrying about the rehabilitation process can make your blood sugar levels drop more than you would expect.

Remember that the DVLA states that you must not drive for 45 mins after a hypo has been treated.

Your blood glucose levels should be reading between 9 and 10 before starting your physio/prosthetic session (until your therapist advises you differently i.e. after we know how you react to the exercise)

Bring appropriate food with you. Avoid chocolate and fatty foods as they can cause you to gain weight.

Check your blood sugar levels before and after your treatment session. This will be done using a blood glucose monitor in the department to ensure readings are correct as the machine is calibrated daily.

Blood Sugar Levels

If less than 6mmol/l - take 20g of carbs

If less than 9mmol/L - take 10g of carbs

10mmol/L and above - no extra needed.

More than 13mmol/L - discuss with your therapist

15mmol/L and over - the senior therapist will review your symptoms and

discuss the cause with you. You may not be able to participate in rehabilitation. Your BM readings may need to be discussed with your diabetic specialist nurse.

How can you recognise when your blood sugar is getting too low?

You may feel some of these symptoms:-

Short tempered or cross

Shaky

Sweaty

A bit confused

Heart beat racing or slow

Difficult to concentrate

Feel hot

Feel sick

Feel hungry

Eyesight blurred

Confirm it by testing your blood sugar levels with a monitoring kit in the department

If it is below 4mmol/l you are having a 'hypo'

What do you do if you have a hypo?

Immediately treat with a 15–20g of a short-acting carbohydrate such as:

- 200ml full sugar fizzy drink such as cola or lemonade
- 200ml of fruit juice
- Lucozade (only 100ml)
- five sweets, e.g. jelly babies
- 4 teaspoons of sugar in warm water

Check your blood sugar again after 10-15 minutes and if still low repeat the treatment. Once returned to above 4mmol/l take 10-20g carbohydrate (see below)

Follow-on treatment

To prevent your blood sugar levels dropping again, you will need a follow-on snack

(10g–20g of a longer-acting carbohydrate) such as:

- half a sandwich or slice toast
- Fruit (banana, apple etc.)
- a large bowl of cereal or 1 weetabix
- 2 digestive biscuits
- 200ml of milk or 1 yoghurt (15g)
- the next meal if due

You are on open access to the amputee department in the Disablement Services Centre (DSC) at the Cumberland Infirmary. This means that you can phone to make an appointment yourself rather than being referred by another health professional.

Please discuss any concerns regarding your diabetes and rehabilitation with your prosthetic/physiotherapy team at DSC or your local physiotherapy team

Contact details:

Niki Tebbutt
Senior Prosthetic Amputee Physiotherapist, Disablement Services Centre
Cumberland Infirmary Tel: 01228 814783

You may find these websites useful:

www.diabetes.org.uk

www.dafne.uk.com

www.cumbriapartnership.nhs.uk/cumbria-diabetes

DVLA. Assessing fitness to Drive. 2015

Confidentiality

‘The Trust’s vision is to keep your information safe in our hands.’

We promise to use your information fairly and legally, and in-line with local and national policies. You have a right to understand how your information is used and you can request a copy of the information we hold about you at any time.

For further information contact the [Subject Access Coordinators](#)
SACCIC@ncuh.nhs.uk or SACWCH@ncuh.nhs.uk

Feedback

We appreciate and encourage feedback, which helps us to improve our services. If you have any comments, compliments or complaints to make about your care, please contact the PALS team (Patient Advice and Liaison Service) on 01228 814008 between 10.30 and 4.30 Monday to Friday or email PALSCIC@ncuh.nhs.uk.

If you would like this factsheet in another language or format, for example Braille, large print or audio the PALS team will be able to assist you (contact details above)

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