Diabetes and Surgery
Patient Passport
Please do NOT lose this leaflet, it is essential for your surgical journey.

Patient Information Leaflet
If you require a translation or an alternative format of this leaflet please call PALS on 01296 316042
How diabetes affects your surgery

How can diabetes affect my operation?

Diabetes can affect the body’s ability to heal after an operation. Before you have your operation it is important to have the best possible control of your diabetes. This will give you the best outcome and a quicker recovery from your operation.

This leaflet aims to explain the steps you can take to improve your diabetes control and what to expect before, during and after your operation.

Please take this leaflet to your pre-operative assessment appointments and with you to hospital on the day of your operation. It provides important information for you and medical staff.

What are the risks of poorly controlled diabetes and surgery?

Research shows that people with poorly controlled diabetes have increased risk of complications after their surgery. This can include slower wound healing, infections and prolonged hospital stay.

Before your operation you will need an HbA1c blood test which shows how well your diabetes is controlled. This will usually be performed by your GP practice nurse. If your HbA1c level is too high, the risks of surgery can outweigh the benefits. In order to make the surgery safe for you to have it may need to be postponed or cancelled until your diabetes is well controlled.
What can I do to improve my diabetes control?

• Be a Healthy Weight
• Have Well controlled Blood Pressure
• Make sure you have had your HbA1c checked within the last 6 months
• Please discuss with your practice nurse if you need help with any of these issues

• Attend pre-operative appointments to review your diabetes control and make any adjustments needed to your medication or lifestyle

What happens during pre-operative clinic appointments?

Before your operation your diabetes control will be assessed by a hospital doctor or nurse, either by telephone or in person.

They will advise you about your HbA1c blood test, weight and blood pressure control results. If these are too high they will give advice such as diet and exercise, smoking cessation and medication changes. This advice is to make your operation safer for you. It is very important that you follow the advice.

What changes will be made to my medication?

Often, medication needs to be stopped or the dose changed before surgery. For example, blood pressure medication may be omitted the day before surgery and diabetes medications may need to be omitted or reduced in dose the day before surgery.

These changes are made on an individual basis. It is important you understand what medication you normally take and what changes are being made before surgery.

On the next page is a section for you or your Healthcare Professional to record your medication changes.
**Medication I should continue taking as normal**

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<th>Dose</th>
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**Medication I should take at a reduced dose**

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<th>New Dose</th>
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**Medication I should stop before surgery**

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<th>Medicine</th>
<th>Dose</th>
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The day of your surgery

How long should I fast before my operation?

If your operation is in the morning:
• Do not eat food after 2 am on the day of the operation.
• Please note drinks with milk in them and fizzy drinks such as lucozade count as food.
• Please continue to drink water if you wish. Have a final 1-2 glasses of water at 6am, it is vital you do this.
• Do not drink anything after 6am.

If your operation is in the afternoon
• Do not eat food after 7 am on the day of the operation.
• Please note drinks with milk in them and fizzy drinks such as lucozade count as food.
• Please continue drinking water and have a final 1-2 glasses of water at 11am, it is vital you do this.
• Do not drink anything after 11 am.

How will fasting affect my blood glucose?

Many people worry that fasting for an operation will cause low blood glucose. However fasting before surgery is essential to reduce the risk of aspiration on stomach contents into the lungs. You should monitor your blood glucose closely, up to hourly, during this time.

If you have episodes of low blood glucose or ‘hypos’, bring glucose tablets, glucogel or a non fizzy sugary drink with you to hospital. It is not advisable to use your usual fizzy drinks or juice.

Your blood glucose will be measured before the operation. If it is low, you will be advised how many glucose tablets to take. If you do not have any glucose tablets, the hospital will provide you will glucogel to increase your blood glucose to a safe level.

If you feel unwell, or think your blood glucose might be low, let the hospital staff know and they can measure your blood glucose.
What should I bring to hospital?

**Bring this leaflet.**
- Bring your normal medications in their original packaging (you may also find it useful to bring or take a photo of your prescription list on your phone).
- If you inject insulin make note of the number of units you inject and at what time.
- All equipment required including your insulin injection device, needles.
- Glucose tablets if you get low blood glucose.
- Blood glucose monitor and test strips if you use one at home.
- Your diabetes specialist’s name and contact details.
- Change (coins) if you use the hospital car park.

**After your operation**

**How do I manage my diabetes after the operation?**
Many people find that their blood glucose is higher or lower for several days after their operation. This is common because of the stress of surgery and changes in your activity level. You may need to adjust your insulin/oral medication, see the next section for details.

It is very important to keep your diabetes well controlled after surgery, aim for blood glucose readings less than 12mmol/L.
If you have any concerns about you blood glucose readings after surgery please contact your practice nurse or GP at your surgery. If you have Type 1 diabetes with access to the helpline, you may also call this for advice.

It is important to follow advice about your diabetes medication. **Keep your discharge letter safe because any changes to your medication will be documented there.**

What should I do if my glucose is high or I feel unwell?

**If you have type 1 diabetes**
Follow the sick day rules:
- Rest
- Stay hydrated: aim to sip 2.5 – 3.5 L water a day.
- See your GP if you think you have an infection as you may need antibiotics, or worried for any other reason.
- Measure your blood glucose four times a day. If your blood glucose is greater than 11.0 mmol/L then test for blood ketones.
Understanding Blood ketones

- < 0.6 mmol/L is normal
- 0.6 – 1.5 mmol/L is raised, test again in 2 hours
- 1.6 – 2.9 mmol/L means you are at risk of diabetic ketoacidosis, a serious condition, so contact your GP or diabetes team.
- Greater than 2.9 mmol/L means you have a high risk of diabetic ketoacidosis and should seek immediate medical attention.

Adjusting Insulin doses
If your blood glucose is:
- 11 – 17 mmol/L, add 2 units of insulin to each dose.
- 17 – 22 mmol/L, add 4 units of insulin to each dose.
- Greater than 22 mmol/L, add 6 units of insulin to each dose.

If you have Type 1 diabetes and know your own correction dose then please use your correction ratio.

If you start vomiting, are unable to keep fluids down, or are unable to control your blood glucose or ketone levels, you must seek urgent medical advice from your GP, Nurse, helpline if you have access to this, or call 111.

Even if you are not eating, never stop your insulin. If your blood glucose is 4.0 mmol/L or less, ensure you take your usual hypo treatment such as dextrose tables.

If you have type 2 diabetes
If you feel unwell or have symptoms of an infection, follow the sick day rules:
- Rest
- Stay hydrated: aim to sip 2.5 – 3.5 L water a day.
- See your GP if you think you have an infection as you may need antibiotics.
- Monitor your blood glucose levels more frequently if you are able.
- Contact your GP or practice nurse if your readings remain high, you feel very unwell or are not sure what to do.

Medication changes
If you take tablets or a non-insulin injection:
- If you take metformin or an SGLT2 inhibitor (dapagliflozin, empagliflozin, canagliflozin, ertugliflozin) and have diarrhoea or vomiting, you should stop this medication until you are drinking well and rehydrated.
- If you take gliclazide you may need to increase the dose or even need insulin injections for a short time.
- If you have a non-insulin injection and develop abdominal pain, nausea and vomiting, stop the injections and seek urgent medical attention.

Trend Diabetes have useful leaflets on how to manage your diabetes if you are unwell. [https://trend-uk.org/](https://trend-uk.org/)
• If you check your blood glucose and find they are persistently above 15 mmol/L, contact your GP.

If you take insulin
• Monitor your blood glucose four times a day, even if you are not eating normally. If your blood glucose is persistently greater than 11 mmol/L, you need to adjust your dose
  • 11.1 – 17 mmol/L, add 2 units of insulin to each dose.
  • 17.1 – 22 mmol/L, add 4 units of insulin to each dose.
  • Greater than 22 mmol/L, add 6 units of insulin to each dose.

• All adjustments should be reduced gradually as illness subsides.
• Contact your GP or specialist nurse if you are unsure about adjusting your dose.
• If your blood glucose is 4.0 mmol/L or less, reduce your insulin by 20% and ensure you have hypo treatments such as dextrose tablets.

References
For further information visit
https://www.buckshealthcare.nhs.uk/
https://patient.info/
https://www.diabetes.org.uk Tel: 0345 123 2399

How can I help reduce healthcare associated infections?
Infection control is important to the well-being of our patients and for that reason we have infection control procedures in place. Keeping your hands clean is an effective way of preventing the spread of infections. We ask that you, and anyone visiting you, use the hand sanitiser available at the entrance to every ward before coming in to or after leaving the ward. In some situations hands may need to be washed at the sink using soap and water rather than using the hand sanitiser. Staff will let you know if this is the case.

www.buckshealthcare.nhs.uk
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Author: C Pritchard, C Gordon, Gill Dunn
Issue date: July 2019
Review date: July 2021
Leaflet code: WZZ-Version: 1.1