



FACT SHEET:

Surgery and hospital stays

When you have diabetes, you need to plan and take more care than usual when having surgery or a medical procedure.

Things that may affect your blood glucose levels during a hospital stay include:

- fasting (not eating or drinking)
- new or changed medications, including anesthesia
- changes in activity levels and eating patterns
- stress, anxiety or pain.

Planning and managing your diabetes before, during and after a procedure or surgery can reduce the risk and prevent complications such as infections and delayed wound healing.

Have a diabetes management review beforehand

Before you have any surgery or medical procedures, talk to your doctor, diabetes nurse practitioner or diabetes educator. Ask them to review your current diabetes management, discuss how the procedure or surgery may affect this and ask about any changes that you may need to make.

Talk to your diabetes health professionals

- Discuss how to best look after your diabetes before and after the medical procedure or surgery.
- If you are taking insulin or diabetes medication (tablets or other injectable medications), ask your doctor or diabetes nurse practitioner about what changes you might need to make to the type and doses before, during or after your medical procedure or surgery.
- Ask if you are at risk of low blood glucose levels (also known as hypoglycaemia or hypo) if you are fasting or only allowed fluids before or immediately after your medical procedure or surgery.
- Discuss your sick day action plan. A sick day action plan helps you plan how to manage your diabetes when feeling unwell. It will also help you to know when to get medical help. Your sick day action plan explains what to do with insulin injections and other diabetes medications when you are unable to eat. It also gives instructions about how often and when to increase your blood glucose checks.

- If you do not have a sick day action plan, make an appointment before your medical procedure or surgery. Your diabetes health professionals can work out a sick day action plan that is right for you if you need changes to your eating patterns or fast before your procedure or surgery, or to use once you get home.
- Ask whether you need to check your blood glucose levels more often before your medical procedure or surgery. If so, keep a record of your blood glucose levels for at least 2 weeks beforehand and bring it to your appointment so you can discuss what your target levels should be. Looking after your diabetes will help the healing process and reduce any risk of infection.
- If you do not usually check your blood glucose levels at home, ask if you need to do this when developing or updating your sick day action plan. You may need to check your blood glucose levels before and immediately after your medical procedure or surgery. If so, ask how to use the meter and how to access your blood glucose monitoring strips through the NDSS.

The NDSS is an initiative of the Australian Government administered by Diabetes Australia. Registration with the NDSS is free and open to everyone who has been diagnosed with diabetes and has a Medicare card. Through the NDSS, you can access subsidised products to help you manage your diabetes, including blood glucose strips. To find out more about NDSS registration and how to access subsidised diabetes products, go to ndss.com.au/registration, email info@ndss.com.au or call the NDSS Helpline on **1800 637 700**.

Talk to your surgeon/medical team

- Ask for a list of any special instructions you might need to look after your diabetes before the medical procedure or surgery. Give everyone involved, such as the nurses, anaesthetist and surgeons, a copy of your diabetes management plan and a list of all your medications including:
 - » how your diabetes is usually managed and how you manage when you are feeling unwell or unable to follow your usual routine
 - » any other medical conditions you have
 - » any other medications you are taking (including vitamins, herbal medicines and over-the counter preparations).
- Ask to be first or high on the list for procedures or surgery so your diabetes routine and management is disrupted as little as possible. Give the hospital staff the contact details of your doctor, diabetes nurse practitioner and diabetes educator. Larger hospitals may have a diabetes specialist health professional team to help with your care.
- Check about any driving restrictions after your procedure or surgery. You may need a relative or friend to drive you home.
- If you need an interpreter, make arrangements in advance. An interpreter service is available at no cost in public hospitals.
- If you have not been given any advice about your diabetes medications 3 days before the surgery or medical procedure then contact your diabetes health professional and ask for some advice.

The day before and day of your procedure

- Follow the instructions that your doctor or diabetes nurse practitioner gave you about how to manage your insulin and/or other diabetes medications.
- Check and respond to your glucose levels as recommended by your diabetes health professionals. This is important if you need to fast before a procedure or for surgery.

- Treat any hypos you have before your procedure or surgery, even if you are fasting. Your doctor may recommend treating hypo with apple juice or another clear fluid as this is quickly absorbed. Tell the medical staff about your hypo and how it was treated. They will decide whether your procedure can go ahead as planned.
- Remember to pack all medications or an up-to-date list of medications, sick day action plan, hypo treatment and blood glucose monitoring equipment with you.
- Your doctor or diabetes nurse practitioner may ask you to check your blood glucose levels more frequently after your procedure or surgery. There is a higher risk of a hypo following fasting, and a risk of high blood glucose levels due to anxiety, stress or pain.
- Once you are discharged, review your medications and insulin with your doctor or diabetes nurse practitioner if your condition improves, and your blood glucose levels settle.
- If you are sick or unwell or have any side effects from the procedure or surgery, seek advice from the hospital or day surgery. Follow your sick day action plan and talk to your doctor, diabetes nurse practitioner or diabetes educator.

After your procedure/surgery

- You may be asked to take your insulin or other medication with a light meal before you go home. Follow the advice of your doctor or diabetes nurse practitioner about the dose you need to take.
- Start your diabetes medications or insulin as instructed by your doctor or diabetes nurse practitioner. You may be advised not to take certain diabetes tablets – or to take a lower dose for a couple of days.
- Contact your doctor, diabetes nurse practitioner or diabetes educator if you are not sure what to do with your medications or insulin, or if you are concerned about managing your diabetes. You can also ask the health professional performing your procedure or surgery to discuss your medications directly with your diabetes health professionals.

Important information if you use insulin

- Contact your doctor, diabetes nurse practitioner or diabetes educator for advice if you:
 - » need to fast before your procedure or surgery
 - » have ketones in your blood or urine before or after the procedure or surgery
 - » if you are unsure about how to use your sick day action plan.



- Ask your diabetes health professionals and surgeon about:
 - » adjustments to your insulin doses and other diabetes medications
 - » target blood glucose levels and how often to check blood glucose levels
 - » if you may need hospital admission and intravenous insulin and fluids or glucose while fasting.
- If you use an insulin pump and/or continuous glucose monitoring (CGM) or flash glucose monitoring (Flash GM) device:
 - » ask if it needs to be detached if you are having certain investigations, such as medical imaging
 - » check with your diabetes health professional and your surgeon whether there are any special instructions you need to follow before your procedure or surgery
 - » ask if you can continue to use your insulin pump or device during the procedure and operate it yourself (if you are given a local anesthetic)
 - » change your insulin pump line at least 24 hours before going into hospital if you will be continuing to use your it during your admission
 - » take enough insulin pump and CGM or Flash GM supplies to the hospital for the duration of your admission.
- If you cannot use your insulin pump during the procedure or surgery or the medical staff have not been trained or do not know how to operate an insulin pump, insulin may be given by injection or insulin infusion, and intravenous fluids or glucose may be started before the medical procedure or surgery



More information and support

- Go to ndss.com.au to search for the 'Living well with type 1 diabetes-what to do when you are sick' or 'Living well with type 2 diabetes-what to do when you are sick', 'Blood glucose monitoring', 'Managing hypoglycaemia' and other fact sheets.
- Go to adea.com.au to download separate guides and sick day action plans for people with type 1 diabetes who use insulin injections and those who use an insulin pump and for people type 2 diabetes who use insulin and those who do not to manage their diabetes.

Notes



Top tips

- Before you have any surgery or procedures, talk to your doctor, diabetes nurse practitioner or diabetes educator. Ask them to review your current diabetes management, discuss how the procedure or surgery may affect this and ask about any changes that you may need to make.
- If you do not have a sick day action plan, make an appointment before your procedure or surgery. Your diabetes health professionals can work out a sick day action plan that is right for you if you need changes to your eating patterns or fast before your procedure or surgery or to use once you get home.
- Ask your surgeon or medical procedure team for a list of any special instructions you might need to look after your diabetes before the procedure or surgery. Give everyone involved, such as the nurses, anesthetist and surgeons, a copy of your diabetes management plan and a list of all your medications.
- Ask to be first or high on the list for procedures or surgery so your diabetes routine and management is disrupted as little as possible.
- Your doctor or diabetes nurse practitioner may ask you to check your blood glucose levels more frequently after your procedure or surgery. There is a higher risk of a hypo following fasting, and a risk of high blood glucose levels due to anxiety, stress or pain.
- If you are sick or unwell or have any side effects from the procedure or surgery, seek advice from the hospital or day surgery. Follow your sick day action plan and talk to your doctor, diabetes nurse practitioner or diabetes educator.

The NDSS and you

Whether you have just been diagnosed with diabetes, or have been living with diabetes for a while, the NDSS provides a range of support services, information, and subsidised products to help you manage your diabetes, stay healthy and live well. For access to more resources (including translated versions), or to find out more about support services, go to ndss.com.au or call the NDSS Helpline on **1800 637 700**.

This information is intended as a guide only. It should not replace individual medical advice and if you have any concerns about your health or further questions, you should contact your health professional.