



FACT SHEET:

Flash glucose monitoring

Flash glucose monitoring (Flash GM) is a way to check glucose levels throughout the day and night without pricking your finger.

Flash GM can help you see the effects of insulin and other medicines, food, physical activity, and illness on your glucose levels. It can help you make decisions that help keep your glucose levels in a healthy range. It can also help find trends or changes in your glucose levels. You can use this information to make day-to-day decisions about how to manage your diabetes. You can also share this information with your diabetes health professionals to help make decisions about your diabetes management. Flash GM provides more information than blood glucose monitoring with a finger prick check.

In Australia, this technology is available in the FreeStyle Libre 2.

Flash GM devices have two main parts

- A. The **sensor** is a small electrode inserted just under the skin on the back of the arm. It measures the level of glucose in the fluid between your cells. A new sensor needs to be inserted every 14 days.
- B. The sensor data is sent continuously to a compatible smartphone or smart device such as a smartwatch with the FreeStyle LibreLink 2.0 application (app). This feature is not supported by the FreeStyle Libre 2 Reader where manual scanning is required.

Glucose readings can be viewed, tracked and shared in real-time. Alarms can be set to alert for high or low glucose levels. Pattern and trends can easily be used to manage your diabetes, especially around insulin, food, exercise, stress, sleeping or illness for example.

You can share your glucose data and for your diabetes health professionals to review. This can help you make decisions about changes to insulin doses or insulin pump settings as well as food choices and physical activity.

How does Flash GM devices work?

Flash GM devices are small wearable sensors that measure glucose levels throughout the day and night. A FreeStyle Libre 2 Reader can be scanned over the sensor to see the glucose level and this will also show the previous 8 hours of glucose data. But the sensor data is sent continuously when using a smartphone or smart device as the reader.

The Freestyle Libre 2 has arrows indicating whether glucose levels are rising or falling, and how quickly they are changing, or staying steady. It also has optional alarms for high and low glucose levels and signal loss.

Why use Flash GM?

Some of the benefits of Flash GM include:

24/7 readings. Flash GM allows you to see the changes to your glucose levels across the day instead of just at a single point in time. The glucose data on your reader can show patterns that may help you and your diabetes health professionals learn how different things, such as food and physical activity, affect your glucose levels. Glucose data can only be seen if there is regular scanning of the sensor. To view a full day of glucose levels you need to scan at least every 8 hours.

Trend arrows. These show if your glucose levels are steady, rising or falling and how quickly they are changing. This allows you to respond to rising or falling glucose levels before they are out of range.

Overnight monitoring. Flash GM devices measure glucose levels throughout the night without the need to wake up and do finger prick blood glucose checks. On waking up, you can scan and view your overnight glucose data.

Reduced need for finger prick checks. Flash GM might not completely replace the need for finger prick blood glucose checks, but it does reduce the number you need to do. Ask your diabetes health professional for advice about when and how often you need to do finger prick checks.

An easier way to monitor. Flash GM makes it much easier to check glucose levels, particularly for those who might find finger prick checks difficult to do. It is also easier for carers, such as for those in childcare, school, or an aged care facility.

Peace of mind. Being able to easily check glucose levels at any time with a scan can provide reassurance and reduce fear of hypos (also known as hypoglycaemia or low blood glucose level).

Data sharing. The FreeStyle Libre 2 has the option of sharing glucose data with up to 20 other people via the FreeStyle LibreLink app on the smartphone or smart device. This can be particularly useful for sharing your glucose levels with others such as friends, family, parents, or carers. You can also share with your diabetes health professionals.

Alarms. The FreeStyle Libre 2 has optional alarms for high or low glucose levels and signal loss. You can set it to sound an alarm if your glucose levels are rising too high or if you are at risk of a hypo. This allows you to act before glucose levels rise too high or drop too low. Alarms can also be very useful if you cannot always tell when you are having a hypo. The alarms can be turned off. This can be a benefit for some people who find alarms annoying or disruptive.

Smartphone compatibility. You can view the readings from the FreeStyle Libre 2 on the FreeStyle Libre 2 Reader. You can also view the reading from the FreeStyle Libre 2 on a compatible smartphone or smart device via the FreeStyle Libre app.

Integrated blood glucose and ketone meter. The FreeStyle Libre 2 Reader also works as a finger prick blood glucose and ketone meter using the FreeStyle blood glucose monitoring strips or ketone monitoring strips. This makes it easier to monitor glucose and ketone levels when needed, without having to carry a second device.

No medication interference. The accuracy of the FreeStyle Libre 2 device is not affected by medications containing paracetamol.

Can help with blood glucose management. Always wearing your Flash GM device has shown to reduce average blood glucose levels (HbA1c) and frequency of hypos.

Downsides to Flash GM

Some of the downsides to Flash GM include:

Does not completely replace blood glucose monitoring. Using Flash GM can reduce the number of finger prick checks you need to do. Finger prick checks may still be recommended in some situations. Ask your diabetes health professional for advice about when you need to do a blood glucose level finger prick check. These could be when glucose levels are changing rapidly, to confirm a hypo, when symptoms do not match the sensor reading and before adjusting or giving an insulin correction dose.

Accuracy. Flash GM devices measure glucose levels in the fluid between your cells instead of in the blood. Given glucose travels to the blood first and then to the fluid between the cells, Flash GM readings and blood glucose levels will not usually be the same. The readings may be close when glucose levels are stable. You will see the greatest difference when glucose change quickly.

Being attached. Some people do not like wearing a sensor. For example, if they are also using an insulin pump, they will have two different devices attached to their body. Ask your diabetes health professional to help you work out the best sites for wearing the sensor.

Staying attached. It can be challenging for some people to keep the sensor attached, particularly if they spend a lot of time in water and/or sweat a lot during exercise. The sensor might also be knocked off while playing or during sport. If the sensor falls out, it cannot be reused. Ask your diabetes health professional for advice about how to reduce the risk of your sensor for falling out.

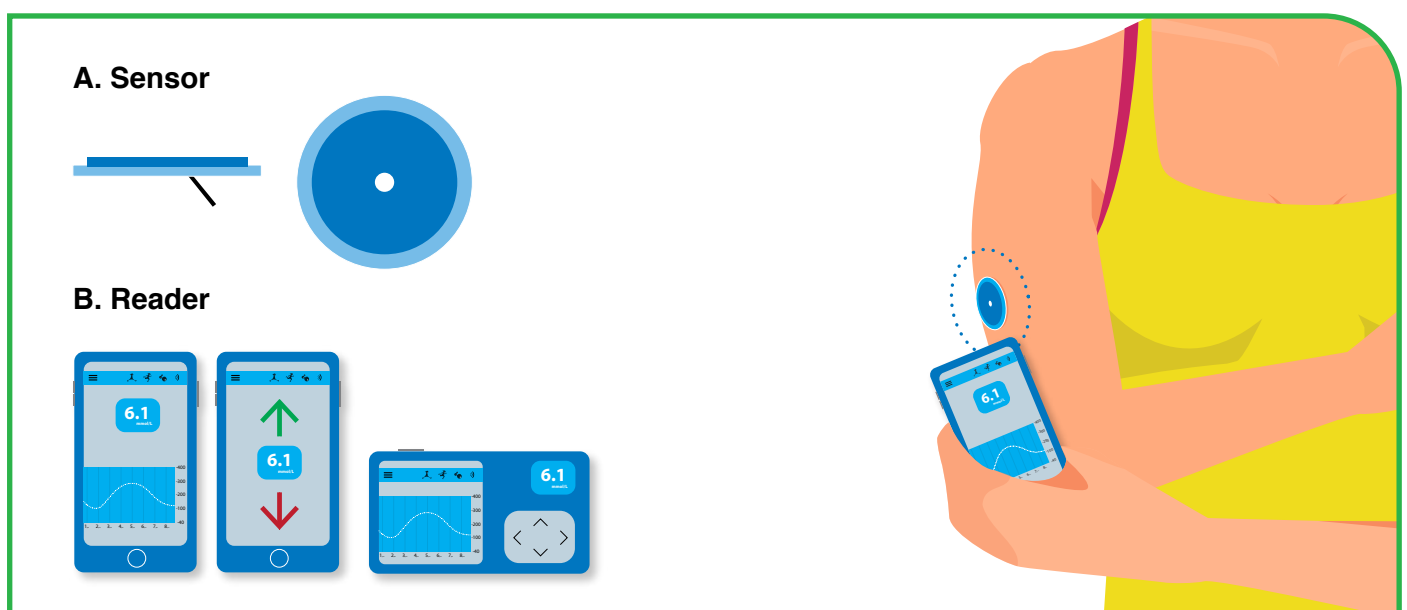
Skin reactions. Some people may experience allergic reactions, skin rashes, itching, bleeding or bruising in the area where the sensor is inserted.

Discomfort. You may have some mild pain or discomfort when inserting your Flash GM.

Information overload. It can also be overwhelming to see what glucose levels are doing all the time. It can also be overwhelming for carers if you have chosen to share your readings with them.

Alarm fatigue. Alarms can be very helpful, but if they happen often, some people can find them annoying and disruptive. The FreeStyle Libre 2 has optional alarms. Discuss using alarms with your diabetes health professional. If you choose to use alarms, they can also help you set up the alarms to best suit your needs.

No insulin pump integration. Flash GM devices do not integrate with any insulin pumps and can only be used as a standalone device.



Government-subsidised Flash GM

The Australian Government provides access to subsidised Flash GM products through the NDSS. People in the following groups are eligible to access subsidised Flash GM sensors:

Type 1 diabetes. People with type 1 diabetes

Type 1 diabetes; Pre-Pregnancy/Pregnancy/Post Pregnancy. Women with type 1 diabetes who are actively planning pregnancy, pregnant or immediately post-pregnancy

Conditions similar to type 1 diabetes; Age Under 21 Years. Children and young people aged under 21 years with conditions similar to type 1 diabetes who require insulin

Accessing subsidised Flash GM products

You need to be registered with the NDSS and meet the eligibility criteria to access products. Go to ndss.com.au/cgm to find out more about how to access subsidised Flash GM sensors.

Your diabetes health professional will need to fill out and sign the Continuous and Flash Glucose Monitoring Access Form for your eligibility group. These forms include a list of the health professionals who can confirm eligibility in each group.

- Go to ndss.com.au/forms#cgm to download the form and find out how to submit it.
- Once your application has been approved, you will receive an email or a letter from the NDSS explaining how to start accessing your subsidised Flash GM sensors.
- You can then start to order Flash GM sensors through your community pharmacy (also known as an NDSS Access Point), just like you can order blood glucose monitoring strips, insulin pen needles and/or insulin pump consumables.



Non-subsidised Flash GM

- Flash GM sensors are considerably more expensive than finger prick blood glucose monitoring supplies.
- If you are not eligible to access subsidised products through the NDSS, the cost of Flash GM is around \$2,500 per year. This is a lower cost than CGM devices but higher than regular finger prick blood glucose monitoring. Most private health insurance companies do not cover Flash GM devices.



More information and support

- Go to ndss.com.au/about-diabetes/resources/find-a-resource/cgm-device-summary-and-compatibility-chart/ for an up-to-date list of subsidised CGM products and their compatibility with insulin pumps and smartphones.
- Go to ndss.com.au/cgm or email info@ndss.com.au to find out more about access to CGM Initiative. You can also call the NDSS Helpline on **1800 637 700** for more information or to speak to a diabetes health professional.
- For more information about FreeStyle Libre 2, go to freestylelibre.com.au.



Top tips

- Discuss all the pros and cons with your diabetes health professional before deciding if Flash GM may be right for you.
- Your diabetes health professional can help you to decide if Flash GM is right for you.
- Work with your diabetes health professionals to get the most out of Flash GM. They can help you to learn how to use and interpret the information you get so that you can use it to make decision about how to manage your diabetes.
- Flash GM provides more information than blood glucose monitoring with a finger prick check. It can help you keep your glucose levels in a healthy range.

Notes

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.