YOU CAN DO IT

WITHOUT LANCETS[1]

GET STARTED

Your Guide to the FreeStyle Libre 2 System

FreeStyle Libre 2
FLASH GLUCOSE MONITORING SYSTEM

life. to the fullest.®

Abbott

Images are for illustrative purposes only. Not actual patient or data.
1. Scanning the sensor does not require lancets.

ADC-31905 v1.0 12/20.

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Welcome to the FreeStyle Libre family!

FreeStyle Libre 2
FLASH GLUCOSE MONITORING SYSTEM

To the newest member of the FreeStyle Libre 2 family,

As the #1 sensor-based glucose monitoring system worldwide[1] the FreeStyle Libre system has liberated millions of people with diabetes from the burdens of finger pricks[2]. We are excited to have you join us on our journey to revolutionise glucose monitoring.

We hope you enjoy your new FreeStyle Libre 2 system.

This booklet is designed to cover the basics of the FreeStyle Libre 2 system. For more in-depth information, we recommend you complete the online training at **www.FreeStyleLibreAcademy.co.uk**

Images are for illustrative purposes only. Not actual patient or data.
1. Data on file, Abbott Diabetes Care. Data based on the number of users worldwide for the FreeStyle Libre system compared to the number of users for other leading personal use sensor-based glucose monitoring systems. **2.** Finger pricks are required if your glucose readings and alarms do not match symptoms or expectations.

Meet the FreeStyle Libre 2 system

Images are for illustrative purposes only. Not actual patient or data.

Check your glucose with a painless,[1,2] 1-second scan instead of finger pricks.[3] Understand how your body responds to treatment, food, and exercise. See patterns and trends and customise optional, real-time alarms for lows and highs. Share insights with Healthcare Professionals. Get the complete picture of your glucose levels, not just a moment in time.

1

Applicator

Used to apply the sensor.

2

Sensor

Circle sensor worn on the back of the upper arm.

Has a thin, flexible filament that is painlessly[1,2] inserted just under the skin.

3

FreeStyle LibreLink app

Use your smartphone to scan and see data.[4]

The FreeStyle LibreLink app is FREE to download.

GET IT ON Google Play

Download on the App Store

4

FreeStyle Libre 2 reader

A handheld reader used to scan and see data.

Images are for illustrative purposes only. Not actual patient data.
1. Data on file, Abbott Diabetes Care. In a study conducted by Abbott Diabetes Care, most users agreed that getting glucose readings from the sensor was less painful than getting glucose readings from finger pricks (n=119). **2.** Haak, Thomas., et al. Flash glucose-sensing technology as a replacement for blood glucose monitoring for the management of insulin treated type 2 diabetes: a multicenter, open-label randomized controlled trial. Diabetes Therapy 8.1 (2017): 55-73. **3.** Finger pricks are required if your glucose readings and alarms do not match symptoms or expectations. **4.** The FreeStyle LibreLink app is only compatible with certain mobile devices and operating systems. Please check the website for more information about device compatibility before using the app. Use of FreeStyle LibreLink requires registration with LibreView.

3 steps to apply sensor

Sensors stick better when you wash, clean, and dry your arm before application.

1 Wash, clean, and dry

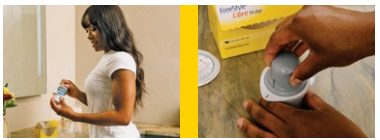
Select a site on the back of your upper arm that stays flat during normal activity. Clean skin with **non-moisturising, fragrance free soap** and water. Use an alcohol wipe to clean the skin and **let air dry** before proceeding.

2 Prep applicator

Open sensor by peeling back the lid. Unscrew cap from the sensor applicator. Line up marks on the sensor applicator. Press down firmly and then lift.

3 Apply

Apply the sensor to the back of your upper arm by pressing firmly. Listen for the click. Wait for a few seconds and pull back slowly, leaving the sensor on the skin.



Parent Tip. Because kids have smaller arms, it can be challenging to find a new sensor application spot. Switching arms each time may help in preventing discomfort or skin irritation.

Get support and information at **FreeStyleDiabetes.co.uk**

Tips to help keep your sensor in place

Easy does it

Be careful not to catch your sensor on a doorway, car door, seat belt, or furniture edges.

Pat dry

After a shower or swim, take extra care when toweling off to avoid catching or pulling off your sensor.

Dress for success

Try to give your sensor room to breathe by wearing loose-fitting clothing and lightweight material.

Contact sports and heavy exercise

Be sure to select a site on the back of your upper arm that will minimise the risk of knock-off.

Slow down

When dressing or undressing, be careful that you don't catch your undergarments on the sensor.

Hands off

Try not to play, pull, or touch the sensor while wearing it.

Before you apply the sensor:

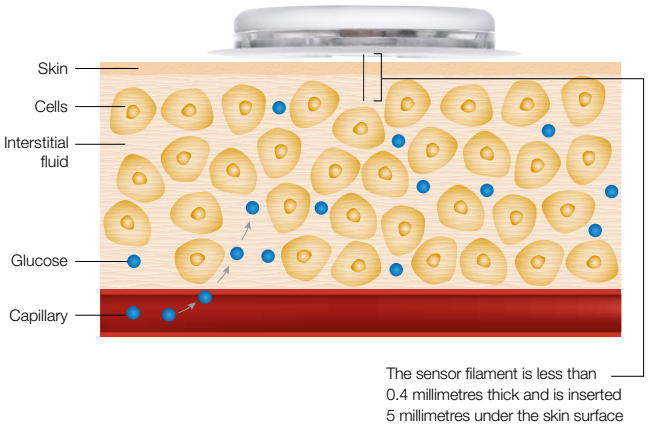
- Be sure to choose an approved application site—the back of your upper arm.
- Do not use body lotion or cream where you'll apply the sensor as they may leave an oily residue on your skin.
- Do shave any excess arm hair as it can get caught between the sensor adhesive and skin.

Understanding the system

When you apply the FreeStyle Libre 2 sensor to the back of your upper arm, a thin filament is inserted under the skin.

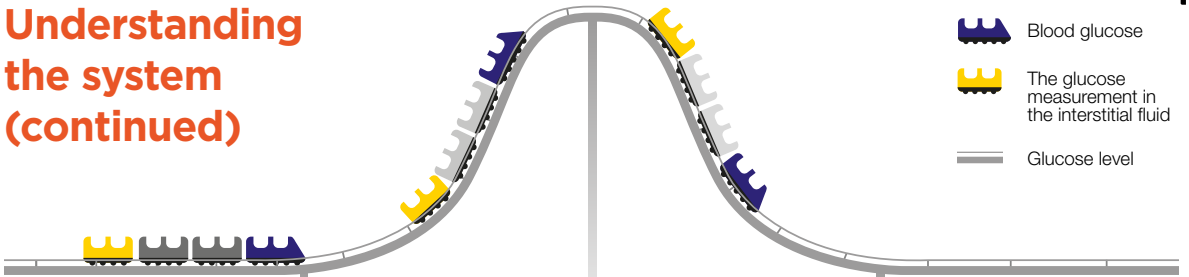
It does not reach the blood stream but, instead, it measures changes in the glucose just below the surface of the skin in the area around the cells, called the interstitial fluid. This is a special fluid that surrounds your cells, feeding them.

The sensor is designed to stay on the body for up to 14 days and is water-resistant for up to 30 minutes during a bath, shower or swimming in up to 1 metre (3 feet) of water.



Images are for illustrative purposes only.

Understanding the system (continued)



When blood glucose levels are **stable**, the glucose measurement displayed by the FreeStyle Libre 2 system in the interstitial fluid, is **similar** to blood glucose.

When blood glucose levels **increase**, the glucose measurement displayed by the FreeStyle Libre 2 system in the interstitial fluid may be **below** the blood glucose reading.

When blood glucose levels **decrease**, the glucose measurement displayed by FreeStyle Libre 2 system in the interstitial fluid may be **higher** than the blood glucose reading.

Question: Why are FreeStyle Libre 2 sensor readings sometimes different from a finger prick Blood Glucose test?

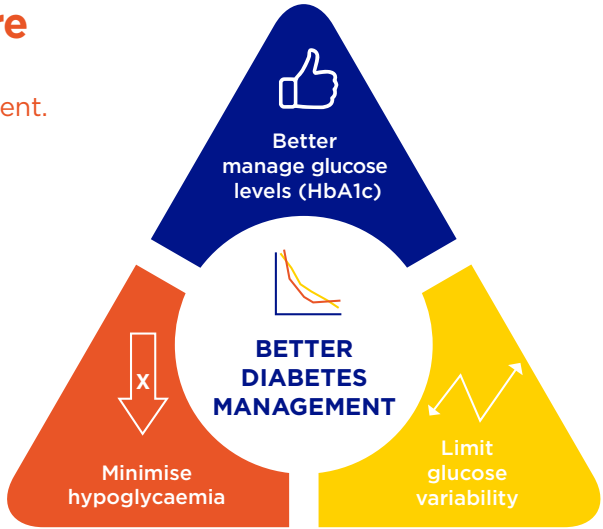
Blood Glucose and Sensor Glucose are closely related but not identical. The glucose measured by the FreeStyle Libre 2 sensor has made its way from the blood into the interstitial fluid under the skin of the upper arm. This takes a little time and so the Sensor Glucose reading always lag behind a finger prick blood glucose reading by about 2.1 minutes for children and about 2.4 minutes for adults[1]. When your glucose levels are stable then the two readings may be very similar. If glucose levels are rising or falling, then the two readings may be different. This is completely normal and to be expected, particularly after meals, after taking insulin or when you've been exercising. Although the readings may differ slightly, the FreeStyle Libre 2 system is accurate[1] and safe to dose insulin from your scanned glucose result.

1. Alva S, et al. Accuracy of a 14-Day Factory-Calibrated Continuous Glucose Monitoring System With Advanced Algorithm in Pediatric and Adult Population With Diabetes. Journal of Diabetes Science and Technology. September 2020. doi:10.1177/1932296820958754.

The Triangle of Diabetes Care

The Triangle of Diabetes Care shows three goals for optimum diabetes management.

The Triangle of Diabetes Care developed by Dr. Ramzi Ajjan Associate Professor and Consultant in Diabetes and Endocrinology at the University of Leeds.



You can do this!

As you gain confidence using the FreeStyle Libre 2 system routinely, you'll see how straightforward it is to monitor your glucose and take your diabetes management to the next level.

You can learn more about this and how to get the most from the FreeStyle Libre 2 system by completing the learning modules in the FreeStyle Libre Academy at **www.FreeStyleLibreAcademy.co.uk**

Driving

The DVLA (Driver and Vehicle Licensing Agency) has permitted the use of Flash Glucose Monitoring systems for the purpose of driving with Group 1 drivers.

Drivers using the FreeStyle Libre 2 system must get a confirmatory finger prick glucose level in the following circumstances:

- If their glucose level is 4.0mmol/l or below.
- If they have symptoms of hypoglycemia.
- If their readings are not consistent with their symptoms.
- If they have become hypoglycemic or have indication of impending hypoglycemia.

Flash Glucose Monitoring systems are not legally permitted for the purposes of Group 2 drivers.

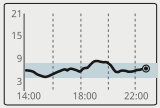
For more information, please visit
www.gov.uk/diabetes-driving

Scanning and collecting your data

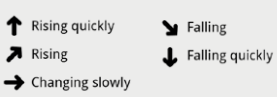
Data typically generated following the 1-second scan of your phone over the sensor.

Current glucose reading:
Based on the most **recently updated** glucose value (1 minute)

8-hour history:
The graph is made up of 15-minute readings stored over the last 8 hours (15 minute)



Trend arrow:
The trend arrow shows the direction glucose is heading along with rate of change



Higher rates of scanning associated with improved glucose measures.[1,2] Regular scanning can help you learn about your glucose levels in different situations.

With regular scanning you can learn about how diet, exercise, stress, insulin, medication and other activities affect your glucose levels.

The more data you can collect by scanning your sensor, the clearer will be the view of your glucose levels, helping you make decisions about your glucose management. This means scanning at least once every 8 hours to retrieve your complete glycaemic picture.

Images are for illustrative purposes only. Not actual patient or data.

1. Dunn, T., et al. Real-world flash glucose monitoring patterns and associations between self-monitoring frequency and glycaemic measures: A European analysis of over 60 million glucose tests. Diabetes Research and Clinical Practice; 137(2018) 37-46. **2**. Lang, et al. Expanded Real-world Use Confirms Strong Association between Frequency of Flash Glucose Monitoring and Glucose Control. Advanced Technologies & Treatments for Diabetes Meeting. Berlin. February 20-23, 2019. Diabetes Technology & Therapeutics, Volume 21, Supplement 1, 2019.

Learn from your data

Access reports on the FreeStyle LibreLink app.

HbA1c values are useful because they measure your average glucose level over the past three months. It's helpful to look back at how you are managing your diabetes. But a normal HbA1c doesn't mean your glucose is within your target range today. It doesn't show your highs and lows or how your glucose levels change throughout the day. This is where **Time in Range** can help.

Time in Range is the percentage of time your glucose values stay within your target glucose range. You work with your Healthcare Professional to determine a target range goal. Your progress is then tracked in a **Time In Target** report.

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It’s easy to set alarms on your phone[1]

The FreeStyle Libre 2 system has optional alarms for patients who need them. Alarms are off by default and can be customised. Alarms feature preset tones, a vibration option, and adjustable volume.

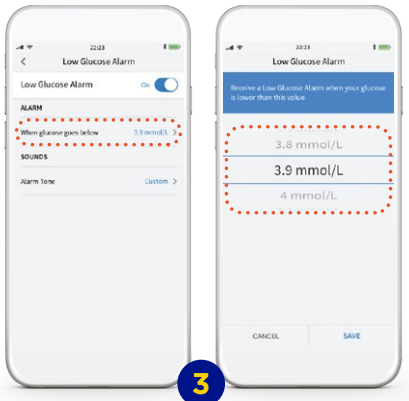
Tap Alarms
in the **menu**

Touch **Low Glucose Alarm** and turn on alarm
(alarms are off by default)

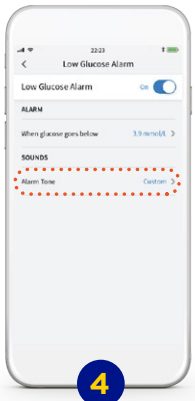
Signal loss alarm[2] is automatically turned on when glucose alarm is turned ON

Images are for illustrative purposes only. Not actual patient data.
1. The FreeStyle LibreLink app is only compatible with certain mobile devices and operating systems. Please check the website for more information about device compatibility before using the app. Use of FreeStyle LibreLink requires registration with LibreView. **2.** Signal Loss Alarm: Notifies you when your sensor has not communicated with the App for 20 minutes and you are not receiving Low or High Glucose Alarms.

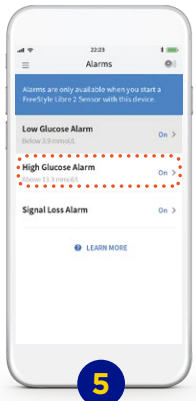
To receive alarms on your phone you need to start your FreeStyle Libre 2 sensor with the phone and turn on your Bluetooth before starting the sensor. Your phone should be within 20 feet of you, and unobstructed at all times. If your phone is out of range of your sensor, you may not receive glucose alarms.



Scroll to select **Low Glucose Value**[1]



Touch **Alarm Tone** and make your tone choice



Set your **High Glucose Alarm** using the same steps[2]

Images are for illustrative purposes only. Not actual patient data.
1. Work with your healthcare professional to determine your alarm settings. **2.** The Low Glucose Alarm setting can range between 3.3 mmol/L and 5.6 mmol/L. The Low Glucose Alarm can't be set below 3.3 mmol/L. The High Glucose Alarm setting can range between 6.7 mmol/L and 22.2 mmol/L. The High Glucose Alarm can't be set above 22.2 mmol/L.

It’s easy to set alarms on your FreeStyle Libre 2 reader

Touch the **settings**[1] symbol

Touch **Alarms** then **Change Alarm Settings**

Turn on Alarm (alarms are off by default)

Images are for illustrative purposes only. Not actual patient data.

1. Please see the FreeStyle Libre 2 User’s Manual for complete instructions.

It’s easy to set alarms on your FreeStyle Libre 2 reader (continued)

Use arrows to set **Low** and **High Glucose Alarms**[1]

See your current **Alarm Settings**

Signal loss alarm is automatically turned on the first time a glucose alarm is set

Adjust **Sound & Vibration**

Images are for illustrative purposes only. Not actual patient data.

1. 3.9 mmol/L is the default Low Glucose Alarm level and can be set between 3.3-5.6 mmol/L. 13.3 mmol/L is the default High Glucose Alarm level and can be set between 6.7-22.2 mmol/L.

Trend arrows

Using the table on the following page, you can work with your Healthcare Professional to identify what to do in each situation.

Trend Arrows open a window to let you see in which direction your current glucose is heading, based on the glucose data stored on your sensor.

You can use your current glucose and the Trend Arrow together to decide whether you need to take a corrective dose of insulin as per your Healthcare Professional's advice. With the Trend Arrows showing where your glucose is heading, you can make more informed decisions about what to do next.

		Below target	Target range	Above target	High glucose reading[1]
Glucose value range		<3.9 mmol/L	.....	>10.0 mmol/L	>13.3 mmol/L
↑	**Glucose is rising quickly** (more than 0.1 mmol/L per minute or more than 3.0 mmol/L in 30 minutes)	Treat Hypoglycaemia and scan again in 15 minutes			
↗	**Glucose is rising** (between 0.06 and 0.1 mmol/L per minute or between 2.0 mmol/L and 3.0 mmol/L in 30 minutes)[2]				
→	**Glucose is changing slowly** (less than 0.06 mmol/L per minute or less than 2.0 mmol/L in 30 minutes)[2]				
↘	**Glucose is falling** (between 0.06 and 0.1 mmol/L per minute or between 2.0 mmol/L and 3.0 mmol/L in 30 minutes)[2]				
↓	**Glucose is falling quickly** (more than 0.1 mmol/L per minute or more than 3.0 mmol/L in 30 minutes)				

1. If >13mmol/L or unwell check for ketones. **2.** Levels have been rounded where applicable for ease of comprehension and simplicity. Table adapted from Ajjan et al. Optimising use of rate-of-change trend arrows for insulin dosing decisions using the FreeStyle Libre flash glucose monitoring system. Diabetes and Vascular Disease Research, 2019 16 (1). pp. 3-12.

Digital health tools

Images are for illustrative purposes only. Not actual patient data.

Digital health tools that work together for seamless diabetes management

The FreeStyle LibreLink app and the LibreLinkUp app are available for Android and iPhone

GET IT ON Google Play

Download on the App Store

1. The FreeStyle LibreLink app is only compatible with certain mobile devices and operating systems. Please check the website for more information about device compatibility before using the app. Use of FreeStyle LibreLink requires registration with LibreView. **2.** The LibreView website is only compatible with certain operating systems and browsers. Please check www.libreview.com for additional information. **3.** The LibreLinkUp app is only compatible with certain mobile device and operating systems. Please check www.librelinkup.com for more information about device compatibility before using the app. Use of LibreLinkUp and FreeStyle LibreLink requires registration with LibreView. The LibreLinkUp mobile app is not intended to be a primary glucose monitor: home users must consult their primary device(s) and consult a healthcare professional before making any medical interpretation and therapy adjustments from the information provided by the app.

The FreeStyle LibreLink app

Mobile app designed to work with your FreeStyle Libre 2 Sensor.

Use the FreeStyle LibreLink app instead of, or in combination with the FreeStyle Libre 2 reader.[1]
If you start a FreeStyle Libre 2 sensor with the FreeStyle Libre 2 reader, remember that you will only get alarms from the FreeStyle Libre 2 reader. The App can only issue alarms if you use it to start a FreeStyle Libre 2 sensor.

Phone displays the current glucose reading, trend arrow, high and low glucose alarms, and up to 8-hours of glucose history.

The large, high resolution, touch sensitive display enable a rich user interface.

Easy to add notes to track food, insulin use, exercise, and other events.

Connect to healthcare professionals and caregivers with LibreView[2] and LibreLinkUp[3].

FreeStyle LibreLink

Images are for illustrative purposes only. Not actual patient data.
1. Patients choose which device they want to receive alarms: FreeStyle Libre 2 reader or FreeStyle LibreLink app. They must start their FreeStyle Libre 2 sensor with that selected device. Once the patient scans their FreeStyle Libre 2 sensor with that device, they can receive alarms only on that device. The FreeStyle LibreLink app is only compatible with certain mobile devices and operating systems. Please check the website for more information about device compatibility before using the app. Use of FreeStyle LibreLink requires registration with LibreView. **2.** The LibreView website is only compatible with certain operating systems and browsers. Please check www.libreview.com for additional information. **3.** The LibreLinkUp app is only compatible with certain mobile device and operating systems. Please check www.librelinkup.com for more information about device compatibility before using the app. Use of LibreLinkUp and FreeStyle LibreLink requires registration with LibreView. The LibreLinkUp mobile app is not intended to be a primary glucose monitor: home users must consult their primary device(s) and consult a healthcare professional before making any medical interpretation and therapy adjustments from the information provided by the app.

LibreView

LibreView

Welcome to an easy way to view your glucose data online.[2]
Register FREE today at **www.LibreView.com**.

Do you have a FreeStyle Libre 2 reader or use the FreeStyle LibreLink app?

FreeStyle Libre 2 reader

You can download the data at home, simply by connecting your FreeStyle Libre 2 reader to a PC with your yellow cable.

FreeStyle LibreLink app

Data captured with the FreeStyle LibreLink app is uploaded wirelessly and automatically[1] to LibreView[2].

If you start a FreeStyle Libre 2 sensor with the FreeStyle Libre 2 reader, remember that you will only get alarms from the FreeStyle Libre 2 reader. The App can only issue alarms if you use it to start a FreeStyle Libre 2 sensor.

Images are for illustrative purposes only. Not actual patient data.
1. The user must be connected to the internet in order for their glucose data automatically upload to LibreView. **2.** The LibreView website is only compatible with certain operating systems and browsers. Please check www.libreview.com for additional information.

Don't have a FreeStyle LibreLink account? Set up your LibreView account

Sign up

- Sign up and confirm via your verification email.
- Click on **Sign up.**
- Choose the LibreView account for patients and follow on-screen instructions.

Upload data

- Connect your FreeStyle Libre 2 reader.
- Press to **Begin Upload.**
- Follow the instructions on the screen to finish installation.
- To ensure all data is captured upload your FreeStyle Libre 2 reader at least once every 90 days.

Your LibreView clinic code:

Looking at your data

GLUCOSE PATTERNS INSIGHTS REPORT

After accumulating five or more days of data, the FreeStyle Libre 2 system can start to show your readings differently in the Glucose Patterns Insight report.

This report builds a detailed view of your glucose fluctuations and activities that affect them.

They offer you and your healthcare professional the chance to see your diabetes from different points of view, giving you more information to manage your diabetes.

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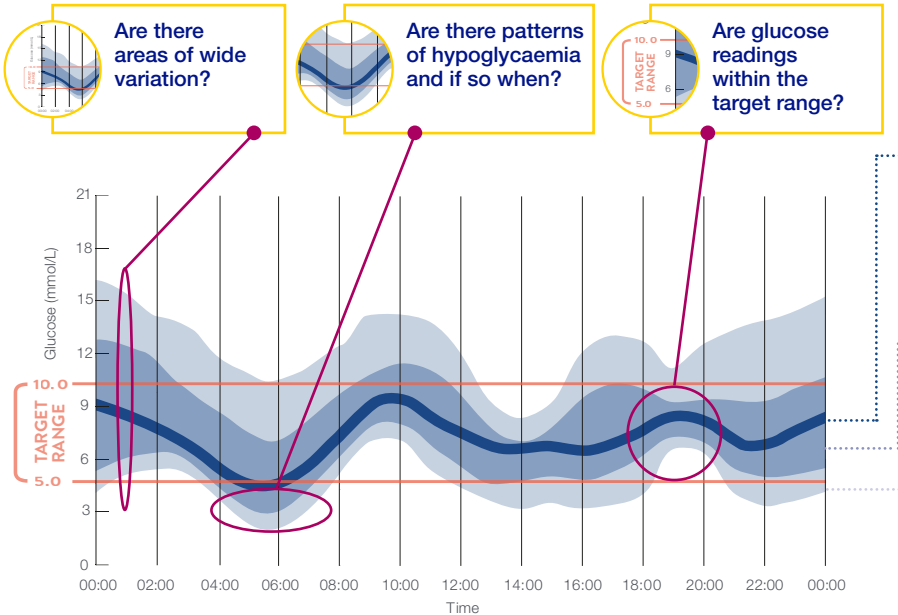

Median: This line shows the glucose reading in the very middle of all the readings collected at each time period. The median gives an idea of how glucose levels change throughout the day.

The 25th-75th Percentile shows the middle 50% of all the readings taken in each time period.

The 10th-90th Percentile show the middle 80% of readings, excluding the highest 10% and the lowest 10%.

Percentiles: These areas on the graph show how glucose readings around the median point can vary each day, helping you to see how consistent the glucose patterns are over time.

You can learn more about this and how to get the most from the FreeStyle Libre 2 system by completing the learning modules in the FreeStyle Academy at **www.FreeStyleLibreAcademy.co.uk**

Images are for illustrative purposes only. Not actual patient data.

How can the Glucose Patterns Insights report help make glucose information clearer?

Based on the concept of the Modal Day, glucose data, collected over several days or weeks, are analysed as if they occurred within a single 24 hour period and plotted in a series of bands around the median. Where Modal Day analysis can sometimes be time-consuming and problematic, AGP is designed to be quick to generate and easy to interpret.[1,2]

Ambulatory Glucose Profile (AGP) provides a comprehensive view of your changing glucose levels over time, thus allowing you and your healthcare professional to see patterns and adjust therapy accordingly.

1. Evans, Mark., et al. Ambulatory Glucose Profile (AGP): utility in UK clinical practice. The British Journal of Diabetes, 17.1 (2017): 26-33. **2.** Bergenstal, Richard M., et al. Recommendations for Standardizing Glucose Reporting and Analysis to Optimize Clinical Decision Making in Diabetes: The Ambulatory Glucose Profile (AGP). Diabetes Technology and Therapeutics, 15.3 (2013): 98-211.

Download today

FreeStyle LibreLink

View data anytime[1], anywhere[2] with the FreeStyle LibreLink app[3]

Data captured with the FreeStyle LibreLink app is uploaded wirelessly and automatically to LibreView.[4]

GET IT ON Google Play

Download on the App Store

LibreView

A easy way to view your glucose data online

See the complete glycaemic picture using a secure, cloud based diabetes management system.[4]

Scan the QR code or visit
LibreView.com

Images are for illustrative purposes only. Not actual patient data.
1. 60-minute warm-up period required when applying the sensor. **2.** Sensor is water resistant in up to 1 metre (3 feet) of water. Do not immerse longer than 30 minutes. Not to be used above 10,000 feet. **3.** The FreeStyle LibreLink app is only compatible with certain mobile devices and operating systems. Please check the website for more information about device compatibility before using the app. Use of FreeStyle LibreLink requires registration with LibreView. Automatic upload requires a wireless internet connection or mobile data connection. **4.** The LibreView website is only compatible with certain operating systems and browsers. Please check www.libreview.com for additional information.

We're here for any questions or queries about your FreeStyle Libre 2 system

We're here for you. If you would like more information or have additional questions about the FreeStyle Libre 2 system, please contact our Customer Service Team or visit our website for more information and useful resources.

Customer Service

0800 170 1177

Mon–Fri (excl. bank holidays)
8:00am–8:00pm and Sat 9:00am–5:00pm

instagram.com/FreeStyleDiabetes

facebook.com/FreeStyleMeters

twitter.com/FreeStyleDiabetes

youtube.com/FreeStyleUKIreland

FreeStyle Libre 2
FLASH GLUCOSE MONITORING SYSTEM

For more tips and product information:
www.FreeStyleDiabetes.co.uk

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