

FreeStyle Libre

PATIENT PROFILE

Male, 60-64 years old

Diagnosed with T2D
10+ years ago

History of cardiovascular
comorbidities



Image not of actual patient

CLINICAL CASE STUDY

Impact of FreeStyle Libre 2 system on chronic hyperglycemia

Case provided by

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Image not of actual patient.

Sensor is water-resistant in up to 1 meter (3 feet) of water. Do not immerse longer than 30 minutes.

This case study is intended to be used for educational purposes only. Individual symptoms, situations, and circumstances may vary.

T2D= Type 2 diabetes.

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The sensor housing, FreeStyle, Libre, and related brand marks are marks of Abbott.



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Important Safety Information

Failure to use FreeStyle Libre systems as instructed in labeling may result in missing a severe low or high glucose event and/or making a treatment decision, resulting in injury. If glucose reading and alarms (if enabled) do not match symptoms or expectations, use a fingerstick value from a blood glucose meter for treatment decisions. Seek medical attention when appropriate or contact Abbott at 855-632-8658 or [FreeStyleLibre.us](https://www.FreeStyleLibre.us) for safety info.

Initiating CGM with FreeStyle Libre 2 system



Patient History*

- **HbA1c (Nov 2020):** 10.9%
- **Baseline GMI:** 8.9%
- **Age at diagnosis:** ~20-25
- **Fasting lipid profile (FLP):**
 - Total cholesterol – 198
 - Triglycerides – 211
 - HDL – 44
 - LDL – 117
- **Diabetes therapy regimen:**
 - Metformin ER 500 mg at bedtime
 - Glipizide 5 mg in AM
- **Glucose monitoring regimen:**
 - Zero glucose testing
 - A1c measurement at the doctor's office



Why CGM?

Patient and care team concerns:

- Chronic hyperglycemia
- Patient neglecting to monitor glucose
- Retinopathy
- Neuropathy
- 4 vessel coronary artery bypass grafting
- Dyslipidemia



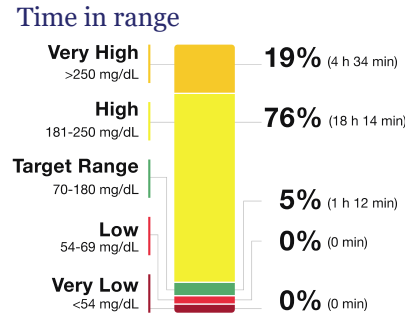
Patient Plan

- Begin using continuous glucose monitoring (CGM) with FreeStyle Libre 2 system
- Discontinue glipizide
- Initiate a low-carbohydrate meal plan

Initial Ambulatory Glucose Profile (AGP) Report*

Jan 28–Feb 10, 2021 ----- Feb 16–Mar 1, 2021 ----- Apr 12–26, 2021 ----- May 19–Jun 1, 2021

GMI	8.9%
Weight	275 lb.
Waist circumference	50.5"
Average glucose	232 mg/dL
% Time CGM is active	54%
Glucose variability	17.2%

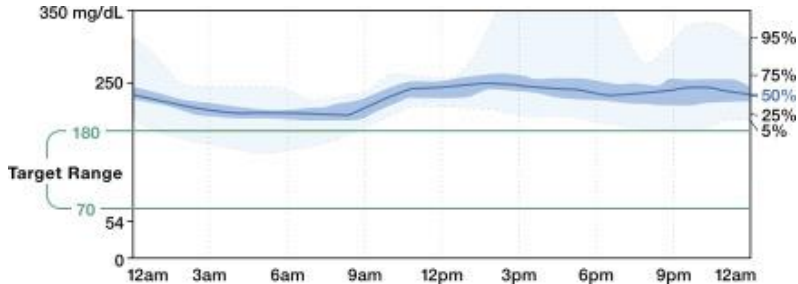


NEW INFORMATION REVEALED BY FREESTYLE LIBRE 2 SYSTEM

Chronic hyperglycemia

- 95% of time spent in hyperglycemia
- Only 5% of time spent in the target range
- High glucose variability in the afternoon and evening
- No hyperglycemia observed
- CGM active only 54% of the time

Ambulatory glucose profile



*Actual patient information.
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Initial CGM reports a more complete picture

Patient Discussion Topics

- Stress the close connection between exercise and meal plan in controlling glucose levels
- Emphasize cardiovascular risk factors, including high lipid levels and being overweight
- Reinforce the positive effects of improving lifestyle choices

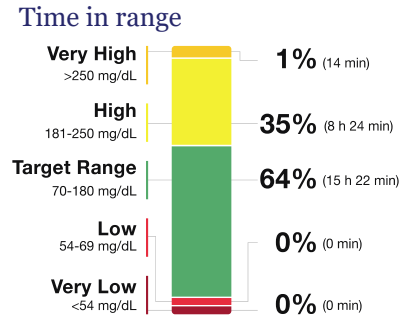
Treatment Plan Adjustments

- Suggest trying to scan with CGM more often in order to gain a more complete picture of glucose levels
- Fully commit to initiating a low-carbohydrate meal plan and regular exercise regimen

Follow-up AGP Report*

Jan 28–Feb 10, 2021 ----- **Feb 16–Mar 1, 2021** ----- Apr 12–26, 2021 ----- May 19–Jun 1, 2021

GMI	7.4%
Average glucose	172 mg/dL
% Time CGM is active	100%
Glucose variability	13.5%

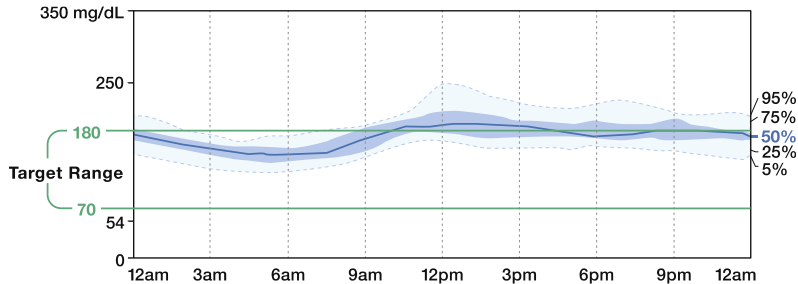


NEW INFORMATION REVEALED BY FREESTYLE LIBRE 2 SYSTEM

Reduced chronic hyperglycemia

- Patient went from never checking glucose levels to scanning ~10 times a day, which helped patient see the impact meal plan had on glucose levels
- Time spent in hyperglycemia decreased to 36%
- Time spent in the target range increased to 64%
- Variability began to decrease

Ambulatory glucose profile

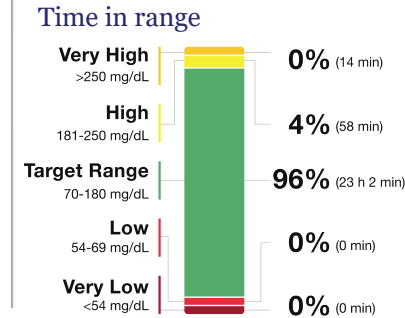


*Actual patient information.
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8-week Follow-up AGP Report*

Jan 28–Feb 10, 2021 ----- Feb 16–Mar 1, 2021 ----- **Apr 12–26, 2021** ----- May 19–Jun 1, 2021

GMI	6.8%
Average glucose	147 mg/dL
% Time CGM is active	100%
Glucose variability	13.3%

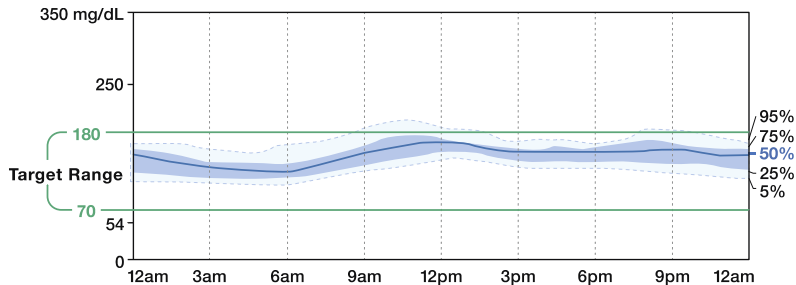


NEW INFORMATION REVEALED BY FREESTYLE LIBRE 2 SYSTEM

Near normalization of glucose

- Scanning 12 times a day
- Time spent in hyperglycemia decreased to 4%
- Time spent in the target range increased to 96%
- Variability continued to decrease

Ambulatory glucose profile



Real-world Outcomes

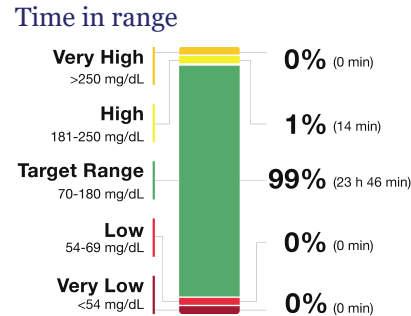
Improvements to health allowed patient to start exercising regularly

*Actual patient information.
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16-week Follow-up AGP Report*

Jan 28–Feb 10, 2021 ----- Feb 16–Mar 1, 2021 ----- Apr 12–26, 2021 ----- **May 19–Jun 1, 2021**

HbA1c	7.4%
GMI	6.3%
Weight	258 lb.
Waist circumference	46"
Average glucose	124 mg/dL
% Time CGM is active	100%
Glucose variability	15.7%

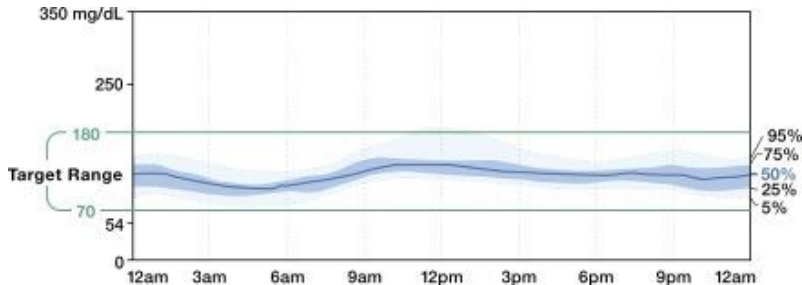


NEW INFORMATION REVEALED BY FREESTYLE LIBRE 2 SYSTEM

Almost complete resolution of hyperglycemia

- Continuing to scan 12 times a day
- Average glucose dropped by 108 mg/dL from baseline¹
- Time spent in hyperglycemia decreased to 1%
- Increased time in range to 99%

Ambulatory glucose profile



Real-world Outcomes

Patient resumed guitar lessons due to improved cognition

*Actual patient information.

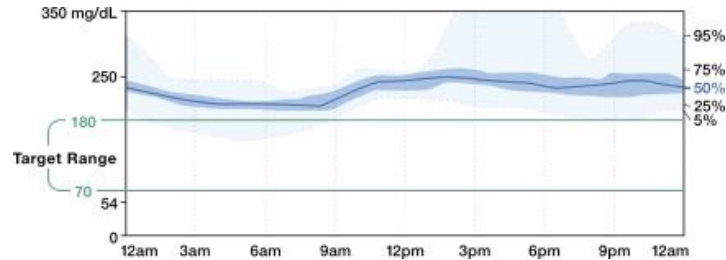
1. Data on file. Abbott Diabetes Care.

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16-week AGP Report*

INITIAL REPORT

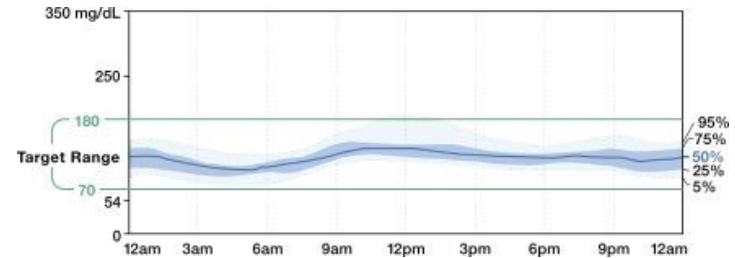
Jan 28–Feb 10, 2021



Initial report showed uncontrolled hyperglycemia likely exacerbated by patient's unwillingness to check blood glucose levels and lack of proper meal-planning/exercise

3-WEEK REPORT

May 19–Jun 1, 2021



16-week report showed almost complete resolution of hyperglycemia

*Results are consistent with real-world evidence showing stabilization of glucose within 3 to 6 months using FreeStyle Libre systems.

Resolution of hyperglycemia with FreeStyle Libre 2 system

RESULTS ACHIEVED IN A PATIENT WITH T2D WITH CARDIOVASCULAR COMORBIDITIES



Total reduction in GMI¹

8.9% baseline to 6.3% within 4 months



Time in range

From 5% at baseline



Sustained monitoring

Patient went from not scanning at all to scanning 12+ times a day with FreeStyle Libre 2 system



Promoted patient engagement

Glucose data provided by FreeStyle Libre 2 helped the patient recognize the role exercise and a new meal plan had in achieving glycemic control*



Positive outcomes

Improved overall health and modified cardiovascular risk factors including:

- HbA1c of 7.4%
- Reduced weight and waist circumference
- Lowered FLP
- Improved cognition

FLP

- Total cholesterol – 139
- Triglycerides – 120
- HDL – 40
- LDL – 77

*Based on assessment and input from patient's healthcare provider.

1. Data on file. Abbott Diabetes Care.

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