

Using Flash Glucose Monitoring

Flash glucose monitoring provides diabetes management data by measuring glucose levels in interstitial fluid (the fluid around body cells). This differs from traditional blood glucose monitoring that uses finger prick blood collection to determine glucose levels in capillary

blood. Diabetes Canada suggests that it may be offered to decrease hypoglycemia in people with diabetes.¹ The table below reviews key points about how a flash glucose monitoring system (i.e., FreeStyle Libre) is used.

STEP	EXPLANATION
<p>Apply the sensor.</p> 	<ul style="list-style-type: none"> Apply sensor to the back of the upper arm using the application device. A very small portion of the sensor is inserted under the skin and held in place by an adhesive. The sensor will start to measure glucose levels after one hour. Glucose is measured from the interstitial fluid every minute. Remove and replace every 14 days. It may be replaced earlier if the resident experiences skin irritation. Rotate sensor application sites to reduce risk of discomfort or skin irritation.
<p>Scan the sensor with the reader.</p> 	<ul style="list-style-type: none"> The reader is a small, handheld device (the size of a cell phone) that is held over the sensor to gather the glucose readings and information. Scan the sensor at least every 8 hours to avoid data loss (optional, depending on treatment goals). Stores 90 days of glucose data.
<p>Interpret the sensor results.</p> 	<ul style="list-style-type: none"> Use the following information on the reader to interpret glucose results: <ul style="list-style-type: none"> A. Current glucose reading B. Glucose trend arrow shows which direction the glucose level is going C. Glucose graph shows an 8-hour history of glucose level D. Glucose message shows if the reading is in the target range

Reference for table: 2,3

References:

- Berard LD, Siemens R, Woo V. Diabetes Canada 2018 Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada: Monitoring glycemic control. Can J Diabetes 2018;42(Suppl 1):S47-S53.
- FreeStyle Libre Flash Glucose Monitoring System – Quick Reference Guide (Canada) 2017.
- FreeStyle Libre Flash Glucose Monitoring Healthcare Professional Guide 2017.