

TC	Audio Transcript	Visual Description
00:00	- Hi, and welcome to part two of the Scanning with Meaning video series featuring the FreeStyle Libre system, the world's first flash glucose monitoring system.	On-screen titles "Hi", "PART 2 SCANNING WITH MEANING FIVE-PART VIDEO SERIES" Followed by picture of the Freestyle Libre Monitoring app , butterfly and on-screen titles "Freestyle Libre FLASH GLUCOSE MONITORING SYSTEM"
00:11	My name is Lori Berard. I'm a nurse and certified diabetes educator. In this video, we're going to talk about the difference between interstitial fluid glucose and blood glucose.	On-screen titles "Lori Berard" with picture of female nurse followed by On-screen titles "VIDEO 2 Interstitial Fluid Glucose vs. Blood Glucose"
00:22	Blood glucose monitors measure capillary blood glucose with a painful finger prick. Scanning the sensor from the FreeStyle Libre system measures interstitial fluid glucose.	Visuals of Freestyle blood glucose monitor held against finger and a person scanning the sensor on their arm.
00:34	In your body, the blood flows from the heart and goes through the arteries ending up in the capillaries. Fluid is then released into the tissue surrounding the cells. This is called interstitial fluid, and it contains glucose.	Visuals of blood flowing through arteries then going to capillaries and fluid being released into tissue cells. On-screen titles "Capillaries", "Interstitial Fluid", "Glucose"
00:48	Interstitial fluid glucose results can be different from blood glucose results because of the time it takes the glucose to move in and out of the capillary system. This difference is called the lag.	Visuals of blood flowing through arteries, capillaries and fluid in tissue cells. On-screen titles "Interstitial glucose results can be <i>different</i> from blood glucose results" Reference footnote " <b>Reference 1.</b> Siegmund T, Heinemann L, Kolassa R, Thomas A. Discrepancies between blood glucose and interstitial glucose-technological artifacts or physiology: implications for selection of the appropriate therapeutic target. <i>J Diabetes Sci Technol.</i> 2017;11(4):766-772" Final on-screen title "This difference is called the LAG"
01:00	With blood glucose monitoring, a lancet is inserted with pressure to reach the blood in the capillary.	Visuals of blood flowing through arteries, capillaries, fluid in tissue cells and lancet being inserted. On-screen titles "Capillary (blood) glucose monitoring"
01:06	With flash glucose monitoring, the sensor uses a filament inserted just under the skin where it floats in the interstitial fluid.	Visuals of blood flowing through arteries, capillaries, fluid in tissue cells then filament being inserted. On-screen titles "Interstitial (flash) glucose monitoring". "Lasts up to 14 days"

01:14	When your glucose is changing rapidly, it rises in the blood sooner than it rises in the interstitial fluid.	Visuals of blood flowing through arteries, capillaries, fluid in tissue cells, filament inserted. On-screen titles "Glucose enters the blood sooner than it enters the interstitial fluid"
01:20	Let's use a train to demonstrate the lag. Think of blood glucose as the engine on the train, and interstitial fluid glucose, or sensor glucose, as the back of the train. As carbohydrates are absorbed by the body, they enter the bloodstream first. Remember our capillary demonstration?	Visuals of train pulling two loads past mountains and forest. On-screen titles "Blood glucose = BG", "BG" sign is raised above engine on train, "Sensor glucose = SG", "SG" sign raised above back of train. Circular visual added of Capillary and artery image above the train. On-screen titles "Sensor glucose (SG) follows behind blood glucose)
01:38	On level ground, there can be very little difference in glucose levels. But when the train climbs a hill, just like glucose might after you have a meal, there's a bigger difference in those numbers. As you can see, sensor glucose still lags behind blood glucose.	Visuals Train continues past mountains. Additional visuals above train "SG 5.5" and arrow pointing to "BG 5.7" then "SG 5.6", "SG5.8" "BG 5.9" and train passing "MEAL" sign. Train ascends hill with further increase visual levels rising to "SG 6.8", "BG"7.6"
01:57	Now, after insulin or exercise, the train may start to head down the hill, but blood glucose still leads with sensor glucose lagging behind. This means your blood glucose levels may be lower than your sensor glucose level.	Visuals Train approaches "MEDICATION" and "GYM" sign. Levels fall as the train descends the hill to "SG 6.9" and BG "6.3"
02:10	That is why it's so important for you to look at all four elements of a scan: the current glucose, the trend arrow, the glucose graph, and the glucose message.	On-screen titles "Understanding your scan" Visuals Freestyle app showing A. Current Glucose, B. Glucose trend arrow, C. Glucose graph, D. Glucose message areas on the mobile device screen.
02:23	Let's have a closer look at the trend arrow. The trend arrow shows you where your glucose levels are heading: up, down, or staying steady.	Visuals focus in on B. Glucose Trend arrow pointing up and to the right showing measure "6.2 mmol/L" Arrow changes to up, then down, then right
02:34	Thinking of what we've learned from the train, trend arrows help you understand how quickly your glucose levels are changing, allowing you to act, instead of react.	Visuals zoom out to full mobile device and a circular image of train ascending the hill is shown at the right of the screen with rising Blood Glucose figures. Train passes "MEDICATION" and "GYM" then Blood Glucose falls as the train descends the hill.
02:43	Well, that was a lot to take in. Let's summarize what you learned.	Visuals three circular bullet points come into view
02:48	Glucose enters the blood first before it enters the interstitial fluid; the difference in timing is called the lag; blood glucose and sensor glucose	On-screen titles: Bullet 1 "Glucose enters the blood before entering the interstitial fluid"

	readings don't always match; and a number alone won't give you the full picture. You need to use all four pieces of information.	<p>Bullet 2 “The difference in timing is called the LAG”</p> <p>Bullet 3 “BG and SG readings don’t always match 1. (refers to footnote “<b>Reference 1.</b> Siegmund T, Heinemann L, Kolassa R, Thomas A. Discrepancies between blood glucose and interstitial glucose-technological artifacts or physiology: implications for selection of the appropriate therapeutic target. <i>J Diabetes Sci Technol.</i>2017;11(4):766-772”</p> <p>Visuals bullet points fade and Freestyle monitor app on mobile device comes into view with circular information detail “Use all of the information” visuals focus on A. Current Glucose, B. Glucose trend arrow, C. Glucose graph, D. points on mobile app.</p>
03:08	In our next video, I'll help set expectations for your first scan and explain the four elements of your scan. Until next time.	<p>On-screen titles “NEXT ON SCANNING WITH MEANING PART 3”</p> <p>Visuals Butterfly above on-screen titles “FreeStyle Libre FLASH GLUCOSE MONITORING SYSTEM”</p>
03:17	(cheerful music)	<p>Visuals Abbott logo.</p> <p>On-screen titles “life. fullest. Abbott”</p> <p>“Copyright 2020 Abbott. Freestyle, Libre, and related brand marks are trademarks of Abbott Diabetes Care Inc. in various jurisdictions. Product images are for illustrative purposes only. Other trademarks are the property of their respective owners. ADC-31647”</p>