Blood glucose (blood sugar) monitoring comes in several forms. There are traditional “fingerstick” blood glucose meters which tell you your blood glucose at a specific moment in time. Just insert a disposable test strip into the meter, prick your finger with a lancing device, apply the drop of blood to the test strip, and voila! In a few seconds the reading appears. Some meters require such a small drop that you can obtain a blood sample from a less-sensitive body part (like the forearm). This is called “alternate site monitoring”. However, if your blood glucose is rising or falling quickly, such as after a meal or during exercise, it is usually best to prick your finger since alternate site monitoring may lag a bit and produce inaccurate results. Speak with your diabetes educator if you would like information about alternate site monitoring and meters that allow for it.

Another exciting option is continuous glucose monitoring, also called “CGM”. With CGM, a tiny sensor is worn below the skin, usually on the abdomen or arm, for about a week at a time. A transmitter attached to the sensor sends a signal wirelessly to a handheld receiver which displays the current glucose level and graphs of recent values. CGM shows more than just the current glucose level. It also shows the direction it is headed so that better decisions can be made regarding food, activity, and insulin/medications. Think of it this way: Individual glucose readings are like a photograph, whereas CGM is like a movie. Photographs can leave a lot to the imagination (and guesswork), while every scene in a movie has context and meaning. CGMs can also be programmed to alert the user (or a loved one) whenever the glucose is trending too high or too low. Definitely cool and useful technology!
BECOME A BETTER DETECTIVE:
When it comes to diabetes, nothing solves the blood glucose management puzzle like glucose monitoring data. Glucose information can help you and your healthcare team to:

- Know if your current treatment plan is doing the job
- Fine-tune medication types and doses
- Learn how different foods affect you
- See the effects of physical activity
- Identify patterns of high or low glucose levels

ADJUST ON THE FLY:
For those who take insulin and have been trained on the self-adjustment of doses, glucose readings offer the opportunity to “fix” out-of-range glucose levels. Otherwise, high readings will tend to stay high, and low readings will tend to stay low for long periods of time. Likewise, CGMs will alert you when your glucose is over or under a limit that you set. This gives you an opportunity to fix the problem in the early stages, before it has a chance to become prolonged or extreme.

PROTECT YOURSELF (AND THOSE AROUND YOU):
Both high and low glucose levels can affect your ability to safely drive a car, exercise, operate equipment, make important decisions, and simply function on a daily basis. Unfortunately, most people with diabetes may not have symptoms and therefore have a hard time knowing if their glucose is above or below the range recommended by their healthcare team purely by how they feel. Checking your glucose level before engaging in important activities allows you to take the necessary steps to ensure that you can perform at your best, and not put yourself or others at risk.