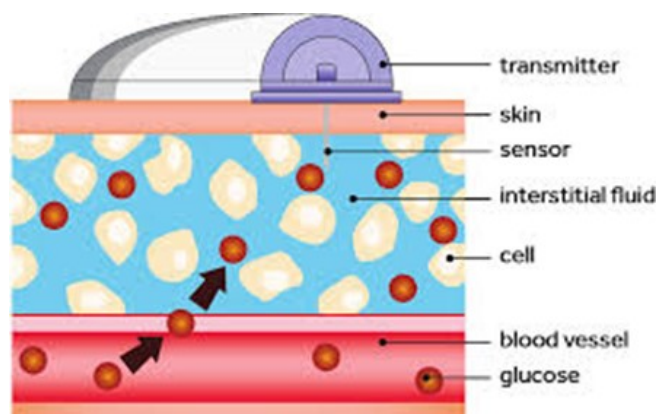


introduction to continuous glucose monitors

Your child's diabetes doctor feels that your child is a good candidate to get a Continuous Glucose Monitor (CGM). CGMs help decrease the number of finger sticks needed, and can help improve diabetes control when used correctly. CGMs make you more aware of what your child's glucose is doing between meals and while they are sleeping. Some CGMs can alarm when the glucose is too low or too high. It also has arrows showing if your child's glucose level is going up or down.

parts of the CGM

CGMs measure the glucose in the fluid between the cells (called interstitial fluid) underneath the skin. The CGM system includes a sensor, sometimes a separate transmitter piece, and a receiver. Sometimes a smart phone can be used as the receiver with the use of an app. The sensor is the disposable part that is inserted under the skin. The sensor has to be changed every 7 to 14 days.



Picture provided by medtronicdiabetes.com

sensor placement

Each brand of CGM has approval through the Federal Drug Administration (FDA) for sensor placement in certain locations. Dexcom has approval for the belly and upper buttocks. Freestyle Libre has approval for the back of the upper arm. Medtronic Guardian has approval for the belly.

troubleshooting

1. Glucose "lag time"
 - a. Glucose moves from the blood vessel to the interstitial fluid, so there can be a 5-15 minute delay between a change in glucose in the capillaries (finger stick glucose) and the interstitial fluid (CGM glucose).
2. Reading not accurate
 - a. If your child's symptoms do not make sense or do not match the CGM glucose reading, you should check a finger stick blood glucose (BG). If able to calibrate the system, do so at that time.
3. What to do if the sensor comes out early
 - a. Call the sensor manufacturer. They will send you a new sensor to replace the one that came out early. Place a new sensor if one is available. If not, you will need to do finger sticks until the new sensor arrives.
 - b. We can provide suggestions that may help future sensors stick better. There are specific tapes and adhesive available online or through a mail order company that can help with this.

apps

Depending on the CGM you get, you can download apps on your smart device to see the CGM readings. Other caregivers can possibly “follow” the CGM results from another smart device.

downloading

If you would like the diabetes doctor to view your child’s CGM readings, you can download the results.

1. Some CGMs need downloaded, some do it automatically.
2. Call the diabetes doctor to ask them to view the results.

For more specific information on each CGM, please visit the websites below:

- Dexcom: www.dexcom.com
- Freestyle Libre: www.freestylelibre.us
- Medtronic Guardian: www.medtronicdiabetes.com/products/guardian-sensor-3

This handout is for general information only and should not be considered complete. For more specific information, please ask your child’s health care provider.

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