

Diabetes Technology

A quick guide for people just diagnosed with diabetes. Learn about what diabetes technology is, how it can help you, and how to use it to thrive with diabetes.

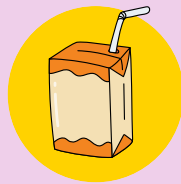
TIME COALITION
IN RANGE



What is diabetes technology?

Diabetes technology includes continuous glucose monitoring (CGM), Automated Insulin Delivery (AID) systems, and even smart pens!

Using diabetes technology, specifically CGM and AID systems, can help...



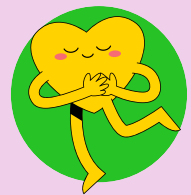
Decrease low
blood sugars



Lower A1C



Reduce
fingersticks



Improve
quality of life

Continuous Glucose Monitoring (CGM)

CGM gives you readings of your glucose levels (blood sugar) and gives you real-time information on how your glucose levels are changing. Instead of pricking your finger multiple times a day, you place the CGM on your body once every 7-15 days, depending on the sensor you use.

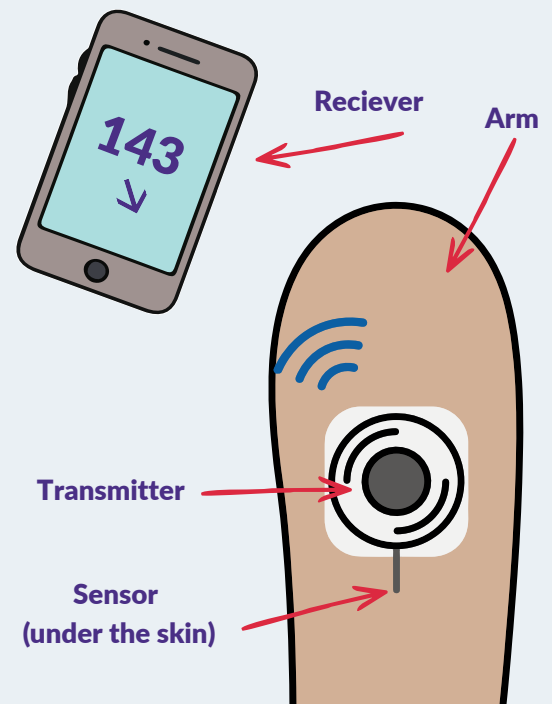
Using a CGM can make a big difference in your life. It gives you alarms when your glucose is rising or dropping, so you can avoid emergencies and spend less time stressing about where your glucose is going, and more time living your life. It can also give you insights into your glucose levels over certain periods of time—from the past 3 hours to the past 3 months!

How it works:

The CGM has a sensor, transmitter, and receiver (usually a smartphone). The sensor is placed under your skin through an applicator—lots of people say it feels like a fingerprick! Every few minutes, the sensor tests the glucose in the interstitial fluid (fluid in the spaces around your cells).

The sensor then tells your transmitter, which is placed on top of the skin, the amount of glucose in the fluid.

Then, the transmitter tells your phone—which is where you see your glucose level!



Pro-tip:

Even if you use CGM, make sure you have a blood glucose meter at home, just in case you need it!

Time in range...

CGMs also provide different metrics that help you understand your glucose levels—they can tell you the entire story of your glucose. You can access these metrics on the phone app where you read your glucose number, or (depending on the brand) an accompanying app.

Time in range is one of the most useful metrics CGM provides. It tells you the percentage of time each day you spend in your target range! Unlike an A1C, which is tested every 3 months, time in range provides data in real-time and allows you to identify patterns and take action quicker, instead of waiting for months.

International guidelines suggest spending 70% of time (about 17 hours) between 70mg/dL - 180 mg/dL. While research has shown that benefits can come from this range, you should feel empowered to use what range is realistic and works for **you**. High and low glucose values are **expected and a part** of diabetes; think of them as just a piece of information, not a failure on your part



Pro-tip:

Time in range can help your mental health—remember, every day is a NEW day and new chance to thrive.

Glucose Levels

26%
above
range

Above 180 mg/dl

70%
in range

70-180 mg/dl

4%
below
range

Below 70 mg/dl

Automated Insulin Delivery (AID) Systems and Smart Insulin Pens

An AID system is an insulin pump that's run by an algorithm that automatically adjusts how much insulin you're receiving based on CGM readings. Users still input "mealtime blouses", but the pump does your calculations for you! AID systems are very smart and take some of the decision burden about dosing off of you. For instance, it will suspend giving you insulin if you're trending down, and will provide small correction doses when your glucose is high!

Smart Insulin pens are "caps" that you can put on your insulin pen. They record the exact time and dose of each injection, recommend doses based glucose, and send notifications for missed doses or if a dose was taken too early. This technology can take some of the burden of dosing calculations off of you, lower A1C, and more. If you're interested in learning more, speak with your healthcare team!

Tips & Tricks

There are lots of resources across the internet made for helping **you**. A few of our favorites are linked below, along with some questions you can ask your healthcare team during appointments.

Questions to ask your healthcare team:

- Can we look at my time in range?
- What is one thing I can focus on until our next appointment?
- Can we look at my lows and talk about what changes we can make to avoid them?

Resources:

- [Time in Range Coalition's CGM guide](#)
- [Pink Panther Books for understanding diabetes](#)
- [Learn more about time in range](#)

