What is time-in-range?

Time-in-range is the percent of time that your blood sugar stays between 70-180 mg/dL. This is helpful when using a continuous glucose monitor (CGM), for example a Dexcom or a FreeStyle Libre.

![Graph showing target glucose range]

Why is time-in-range such a useful tool in improving blood sugar control?

It doesn’t matter if you are injecting insulin or relying on your body’s own insulin, there will be a delay in that insulin getting that sugar out of your blood, and this is completely normal and expected. By focusing on time-in-range vs. perfect blood sugars, you can account for this delay and make adjustments in a more reasonable way than over-focusing on highs and lows.
If using finger sticks to determine time-in-range, consider this formula: 

\[
\text{# finger sticks in range/# total finger sticks x 100 = % time-in-range}
\]

The greater percent time-in-range, the more improvement you will see with your A1c level!

\[\text{More time-in-range = better blood sugar control}\]

Tips & More

The goal percent for time-in-range is 70%.

**What does that mean?** For about 17-24 hours each day your numbers would ideally be between 70-180 mg/dL.

If using finger sticks to determine time-in-range, consider this formula: 

\[
\text{# finger sticks in range/# total finger sticks x 100 = % time-in-range}
\]

Reviewing reports from your CGM or finger sticks can be helpful for identifying problem areas.

For example, if you are seeing your blood sugar is elevated daily two hours after lunch maybe consider decreasing portion sizes or adding a protein source to that meal. It is normal for your blood sugars to rise after a meal, but the goal is to be under 140 mg/dL two hours after eating. This is just one strategy that might help.

**Looking into getting a continuous glucose monitor?**

Check with your insurance company and primary care physician or endocrinologist for options.

**If using Medicare you must do one of the following:**

- Use an insulin pump
- Take multiple insulin injections per day
- Test your blood sugar at least 4 times per day