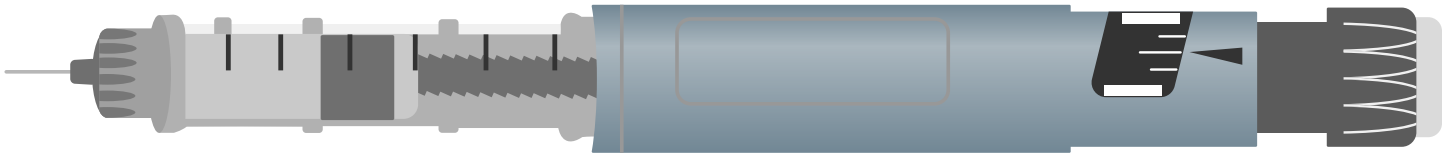


SMART PENS



A smart pen is an insulin-injection device that includes memory features to keep track of your insulin doses, remind you to take your insulin, and (if paired with a continuous glucose monitor) help you analyze your blood-glucose patterns and manage your diabetes.

These devices, which are approved by the United States Food and Drug Administration (FDA), are used to give a mealtime insulin dose (Novolog, Humalog, Fiasp) from a cartridge that you load into the smart pen each month. The pens pair with a smartphone app to calculate insulin doses. One smart pen will last an entire year without batteries or charging.

Why might I want to talk to my care provider about getting a smart pen?

Smart pens eliminate the guesswork around doses and help you remember to take your

mealtime insulin. Mealtime dosing reminders can be set to remind you to take your insulin “bolus” dose at each meal.

If you “count carbohydrates” and use that information to determine your premeal insulin dose, you can pre-program your pen with your insulin-to-carbohydrate ratio, sensitivity (correction) factor, blood-sugar target, and/or active insulin time (“insulin on board”) and the app will do the math for you. The device will also recommend less insulin if your blood sugar is below your target, helping to keep you safe! You can even take small ½-unit increment doses.

Even if you don’t carbohydrate count, fixed mealtime insulin doses can be preset.

Insulin can also be given based on your carbohydrate estimation of a meal (low, medium, or high carbohydrates).

- The pen can remind you to take your long-acting insulin daily.
- The pen will remind you of your active insulin time, so you don't give insulin doses (bolus doses) too close together and can prevent hypoglycemia.
- The pen will track the temperature of the insulin so you know if the insulin has been exposed to temperatures that might affect its stability.
- The pen will remind you when to change the cartridge so you are not using insulin that has expired or become less efficient.

You can use a smart pen with a continuous glucose monitor in order to give yourself even more information to help self-manage your diabetes. For example, these technologies can tell you how much time during the day that your glucose values are in the desired glucose range ("time in range"), which is an important measure of your diabetes control, along with glucose readings and A1C measures. The use of both devices can guide you in your daily glucose management, including determining insulin doses and showing you the impacts of daily self-care decisions.

How do I know if I will be able to use a smart pen?

You should be comfortable using phone apps and you will need to pair your phone and pen. You must be willing and committed to check blood sugars at mealtimes and log them into the app or use a continuous glucose monitor that is compatible with your smart pen. All your blood-sugar data, patterns, and trends can then be easily be shared electronically with your doctor.

If you just want help remembering to take your insulin doses, a smart pen provides an electronic way to keep records of your dosing so others, including family and/or health care providers, can monitor how you are doing with your insulin treatment.

If you think you might want to learn more about smart pens and see if one would be right for you, start by talking to your doctor or a diabetes educator. They can discuss the options with you, direct you to other sources with more information, and help you learn how to use these devices to improve your health and your care.