A Less Painful Way for Diabetes Patients to Monitor Their Blood Sugar

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The FDA just approved a new gadget named the Dexcom G5 that requires diabetes patients to do just two finger sticks each day to check their blood sugar levels. The device is the first mobile continuous glucose monitoring (CGM) system to win FDA approval to make decisions for people with either type 1 or type 2 diabetes about how much insulin they need, The Chicago Tribune reports.

For people with diabetes, monitoring blood sugar levels is crucial. In people with type 1 diabetes, the body is not able to produce enough insulin, a hormone that helps regulate glucose in the body. Those with type 2 diabetes can no longer use insulin properly. If blood sugar levels drop too low, a person with diabetes can become disoriented or pass out. Conversely, blood sugar levels that are too high can if left untreated lead to complications such as kidney damage, eye problems and heart disease.

With the Dexcom G5, folks with diabetes can be spared at least three or four finger sticks a day. The device works by relying on a small sensor wire inserted below the skin that continuously monitors blood sugar levels. A transmitter worn on the skin sends information about these levels to a dedicated receiver or directly to a patient's smartphone or tablet. If an individual's blood sugar dips too low, the receiver and mobile device send an alarm to alert the patient that there's a problem.

The FDA evaluated the results from two clinical studies before the agency OK'd Dexcom for use by people with diabetes to make treatment decisions. These studies included 130 children age 2 or older living with diabetes and reported no serious adverse events in both trials.

To be sure that the device is properly calibrated and providing correct readings, Dexcom G5 users must prick their finger once every 12 hours. Currently, the system works only with iOS-enabled devices, but Dexcom's makers said Android applications would become available next year.

Click here to learn more about other high-tech solutions for diabetes management.