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Learning to Trust Diabetes Technology

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Learning to **TRUST** DIABETES TECHNOLOGY



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Diabetes technology has evolved greatly since I was diagnosed with type 1 diabetes in 2001. As a scared kid who knew nothing about diabetes, the thought of having some device constantly pumping insulin into me was a terrifying concept. →

For many years, I didn't embrace the technological advancements that were helping so many. When I started college in 2010, I was using a Humulin N and Humalog mixed insulin regimen that was not ideal for a college student without a set eating schedule. It took meeting some of my fellow peers with diabetes at the Students With Diabetes conference in 2011 who used insulin pumps and continuous glucose monitors to realize the impact that this technology could have on my life.

I started my journey into diabetes technology that following summer, in 2012, with the Omnipod insulin pump. I chose it over other pumps because of its unique tubeless system. Thanks to switching to the pump, and embracing the technology as a solution to my diabetes instead of another problem to deal with, for the first time since my diagnosis I was finally able to meet my goal A1c of less than 7.0!

Relationship between A1C and eAG	
A1C %	eAG mg/dL
6	126
7	154
8	183
9	212
10	240
11	269
12	298

Source: Adapted from American Diabetes Association. Standards of medical care in diabetes—2014. *Diabetes Care*. 2014;37(Supp 1): S14-S80, table8.

But with this new device came some concerns. The insulin pump helped me to better control my blood sugars than my previous regimen of multiple daily injections, but it also brought with it a greater concern for low blood sugars. I needed some way to monitor this better, and guard against dangerous and debilitating lows. This is when I started using my second major piece of diabetes technology, and the one that has allowed me so much peace of mind over the last few years: My Dexcom continuous glucose monitor (CGM).

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My CGM is an amazing device that allows me to not have to always wonder if my blood sugar has gone too high or too low. Not only can I see what my numbers are in near real time, I can also see whether they are trending up, down, or holding steady. I can sleep easily at night knowing that should my blood sugar drop too low, my CGM will alarm with loud beeps and vibrations telling me to wake up and treat the low accordingly.

At work and school, I can go about my normal business thanks to these pieces of technology. They are more than just tools to help me survive. They are a part of me and have become essential to helping with my day-to-day aspect of living with diabetes. I sometimes joke about being a cyborg because of how much I associate my “robot parts” with my everyday existence, but in some ways it is true, because I am able to trust these machines to help me stay alive, healthy, and capable of doing more than I feel like I could without them.

I look forward to a future of bionic pancreases and closed-loop systems that will take that peace of mind one step further. With these devices expected over the next few years, I see hope for those of us with diabetes. The technology that we use today will continue to get better, and will make living with diabetes easier. For the first time since I was diagnosed, I can imagine a future where the worries of growing up with diabetes can be dramatically minimized thanks to technology, and all of us with diabetes can live with greater certainty of how we are going to manage such a disease for as long as we have, and as long as it takes. ■