

Submission for Diabetes Product Review – Insulin Pumps

My daughter was diagnosed with Type 1 Diabetes in July 2010. She was six. At this point she was on a twice daily injection routine. As a result of this we had to have a really strict routine. Bed times and getting up times needed to be regular. Injection times had to be the same every day. If not her blood glucose levels would suffer.

Meal times had to be strict. Breakfast was 7:30 – 3 serves of carbohydrate (45grams), piece of fruit at 10am, morning tea at 11:00 (1 & ½ serves), lunch at 1pm (3 serves of carbohydrate), afternoon tea was 3:30pm (1 serve), dinner at 5:30 (3 serves) and supper at 7:30 (1 serve). If a meal was late it was likely she would have a hypo. The carbohydrate serves had to be consistent. If she was not hungry she still had to eat. If she was still hungry she couldn't have any more carbohydrates than the routine amount. All of these routines were to maintain blood glucose levels within the limits of an extremely inflexible twice day insulin injection regime. Can you imagine a 6 year old child asking if she can have some more pasta for dinner because she is still hungry and having to tell her "No because you have Type 1 Diabetes"?

Older primary school aged children who can inject themselves at school can sometimes manage with 3 – 4 insulin injections a day allowing a little more flexibility. However a 6 year old can't do that. I would have had to stop working and attend school at lunch time every single day.

Activities all had to be arranged around meal times. If we were invited out for dinner it had to be at 5:30. If dinner was not ready by this time I had to have alternatives on hand and feed my daughter before everyone else. This did terrible damage to her self esteem and reinforced the notion that she was different.

My daughter did the pump start program in April 2012. The increase in flexibility this has given my daughter and our family has been fantastic. My daughter is now 9. She can sleep in on weekends if she wants to. Meal times can be much more flexible. We don't need to eat at 5:30. If she is not hungry she doesn't need to eat her whole lunch; she can just enter the amount of carbohydrates that she wants to eat in her pump. If she is still hungry she can eat some more.

My daughter plays in a basketball team. Training time is at 5:15pm. Previously this would have been a problem as dinner was 5:30. For basketball she has activity food before hand and can alter her basal insulin rate before and after to allow for the increase in activity level. The flexibility of changing basal rates to allow for activity has been a real bonus with insulin pump use.

However the most important aspect of her insulin pump has been improved management of her diabetes. Her Hb1Ac before pump start was 8.5. Her Hb1Ac 3 months later and 2 months after pump start was 7.5 and has maintained or improved since this. We are still fine tuning bolus and basal rates. We are obviously still aiming for it to come down further. It makes it so much easier to manage her diabetes. My daughter regularly tests her blood glucose levels during the day to make corrections as required. As an 8 year old she managed this with absolute ease. I was surprised.

I believe it is extremely important that every child with Type 1 Diabetes whose specialist believes that they could manage an insulin pump effectively have the choice to access one. The difference in quality of life for my daughter and our family has been terrific.