

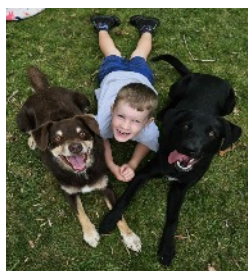
# Logan's Story

*By Laura Waite*

When Logan was 2 years old, he became very unwell, over the course of a few days he lost his appetite, became irritable and tearful, he had an unquenchable thirst day and night and lost a frightening amount of weight. On 16th August 2019, Logan was rushed into hospital, in a life threatening condition called Diabetic Ketoacidosis. Unbeknownst to us, Logan's body had stopped producing insulin - a substance that is vital to life. Here Logan's Type 1 journey began...

Life changed for our entire family that day, from then on it would become a routine of weighing and measuring every single crumb of food that passed Logan's lips, working out the mathematical equations of how much insulin he needed, based on how many grams of carbohydrate was in his food, not just meals but snacks, and even drinks. I still remember standing in the kitchen on the children's ward adding food onto a plate - one pea at a time ensuring I was calculating the right amount of insulin to deliver.

Logan started off his diabetes journey using insulin pens - these are reusable injections with cartridges of insulin holding up to 100 units, the needle was changed for every injection and boy... did we get through a lot of needles! Logan not only had to be injected when he ate, but also multiple times in between to correct high blood glucose levels, in all sometimes Logan had to endure up to and around 15 injections a day - into his tiny arms and legs.



Logan used to call these "county pens" because, once the needle was in, we were taught to count to 10 before pulling it out, thus making sure all the insulin had been delivered. We counted

together, 1...2...3... and this helped Logan distract himself from the reality of the pain he felt.

On top of the injections for insulin, we also had to check Logan's blood sugar levels every hour throughout the day, and every 2-3 hours throughout the night (sometimes more if we were concerned). This involves... you guessed it! MORE needles, pricking his tiny fingers to obtain drops of blood to feed into a machine, and anxiously await the result. Logan took all of this in his stride, and from day one his bravery and courage to battle this cruel disease was astonishing.

After a year of relentless injecting, Logan was approved for an insulin therapy pump, this is a device that is connected to Logan 24/7, and

delivers him insulin subcutaneously through a cannula which we change at home every 3 days. These cannulas are situated on Logan's tummy, lower back and thighs and Logan wears the pump on special belts (that his Auntie cleverly crafts) around his tummy. Logan can only have his pump disconnected for up to 1 hour per day, so this means he sleeps with it on all night, its only ever taken off to charge for short periods, or when he goes swimming. This was a true breakthrough for Logan as it meant he only had to endure one needle to insert his cannula, every 3 days. Of course there are occasions still where we need to manually inject Logan - for pump failure or when he's really poorly and what's known as being 'insulin resistant'.

Everything can affect how high, or low Logan's blood sugars are - his mood, how much or little he



eats, hydration, exercise and illness. A simple cold can send Logan's blood sugars soaring, whilst his body tries to fight infection. When Logan contracted chicken pox in 2022, he spent a week in critical care at Poole Hospital, hooked up to drips and wires.

A normal childhood illness made impossible to manage due to his autoimmunity.

Further down the line in Logan's journey, another new piece of equipment was offered - a "CGM", continuous glucose monitor. This is a device that is inserted into Logan's arm, and sends blood sugar levels to a mobile device every 5 minutes. This was another exceptional leap in our efforts to make this as comfortable, and as easy for Logan as we could. It doesn't eliminate the need to finger prick completely, as again these devices do fail and can't ever be 100% accurate all the time. But it certainly meant there wasn't a need to draw blood from Logan every hour or two throughout the day and night, it also meant we could see patterns in Logan's levels therefore we became better at predicting high and low blood sugars.

Now Logan is older, I ask him what it feels like to be "high" and "low". He says, "when I'm high I feel thirsty and hungry! And it makes my head feel swimmy and achy. When I'm low, I feel sick and dizzy".

Prolonged high blood sugar has major health implications for people with diabetes. It can cause permanent damage to parts of the body such as the eyes, nerves, kidneys and blood vessels. Low blood sugars can induce seizures and in some cases, can be fatal.

Logan has routine appointments at the hospital every 3 months. This is to obtain blood to check

Logan's haemoglobin A1c test. This test is used to evaluate a person's level of glucose control. The test shows an average of the blood sugar level over the past 90 days and represents as a percentage. He is also weighed and has his blood pressure checked. There is the most fantastic team of diabetes nurses who have held our hands throughout the last 5 years, we call them - Logan's Angels.

Starting school was a huge step in Logan's life - even without the added complications that diabetes brought. Hillside have made every effort to train their staff, and I must make a particular mention to Mrs Morrell, who has supported Logan and been administering his insulin and meticulously checking his blood sugar levels throughout the last 3 of his now 4 years at school. Her skill and compassion, and her wonderful relationship with Logan has surpassed any and all expectation we had, when we know all too well how trying this disease is! And for that, she really does deserve the highest thanks.

But its not ALL doom and gloom! Logan is a happy, intelligent, sociable and funny little boy. He is thriving in every aspect of life, he loves football and currently plays for an incredible team "the dragons" under 8s for Verwood Town FC. He has recently excelled in his ability within the team and has been awarded the role of team captain.



He loves to swim, dance, ride his mountain bike and go off on long adventures with his two dogs, Duke and Dash. He loves animals, and has many friends. Logan enjoys his learning at Hillside... his favourite subject is Maths! (That will come in handy!)

Logan's life is not restricted, he makes sure of that as do we! His diabetes does not define him, but unfortunately it is a life long, life threatening condition that he will have to manage forever. For now, he's just enjoying being a normal 7 year old boy ... well not quite normal I suppose, we call him our warrior!

Know the signs of type 1 diabetes... the 4 T's: Tired Toilet Thirsty Thinner. If you ever have concerns, I urge you to visit your GP... diabetes is so much more manageable now than it used to be, and I can assure you it certainly doesn't hold Logan back!