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EVERY TRIATHLETE RACES AGAINST THE CLOCK BUT EVA KAPP'S BIGGEST RIVAL IS HER DIABETES.

A long-distance race is daunting, especially your first one. There's so much that can go wrong with your pacing, nutrition, or equipment, but if you're diabetic, like Eva Kapp, you also need to keep a close eye on your blood sugar.

So what do you do when you're seconds away from starting and you discover the gadget that monitors your blood sugar levels has packed up? The prudent course might be 'better safe than sorry.' If you're Eva Kapp, however, you start anyway.

Eva was diagnosed with type 1 diabetes aged five. Her pancreas is unable to produce insulin, the hormone that regulates the amount of sugar in her blood. Without insulin, Eva's body can't use glucose so it can build up to dangerous levels. To keep her blood sugar levels within healthy limits, she wears a programmable pump at all times that releases insulin through a small needle that sits under the skin around her waist.

Born in Germany, Eva now lives in Bristol where she works as a marketing manager. Despite her condition, she has always led an active life, but didn't get into tri until the end of 2010. "I thought that joining the local tri club, Bristol and District Triathletes (BADTri), would be a good way of keeping fit and meeting people," she says. "But I didn't even consider racing when I joined and never thought I'd do an iron-distance event!"

"I could barely swim a length of front crawl and it was an achievement for me to cycle for more than two hours."
Eva stuck with it and came fifth in her age group at the Bradford on Avon sprint race. By the end of 2011 she had finished her first Olympic-distance event and clocked 5hr 56mins for the 180km bike leg of the Challenge Copenhagen relay. Keen to take on a bigger challenge, Eva set her sights on the 2012 Virtuovian. Enlisting the help of coach Andy Bullock at Endurance Sports Coaching, she completed the half-iron Virtuovian in a respectable 5:22. “The Virtuovian was my first real endurance triathlon and it really encouraged me to take the next step,” So Eva took the plunge and signed up for her first long-distance race: the Elbanman, held on the Italian island of Elba in September 2013. It was a daunting prospect: “Nobody had explicitly told me that I shouldn’t do a long-distance event but, when I spoke to doctors, they didn’t have any experience of type 1 diabetics doing it. So I was pretty much left to myself to find out what it would take.”

On top of training for 20 hours a week, Eva had to work out her nutrition strategy and insulin requirements for the big race. “Every time I eat carbs I have to inject extra insulin to lower my blood sugar. Getting the balance right when exercising is tricky, as physical activity also lowers blood sugar,” she says. “So much insulin and I could fall into a coma.”

Finally, race day came and Eva found herself standing on the beach waiting for the 7am start. During the race, her insulin pump would be wirelessly connected to a continuous glucose monitor (CGM), a small device that reads blood sugar via a tiny sensor inserted under her skin. If levels got too high or low her pump alarm would alert her. “But the CGM packed in a minute before the start of the swim!” she says. “Without it I had no idea what was going on!”

To make matters worse, conditions for the 3.8km sea swim were terrible. “The swell was horrendous,” she says. “I started feeling dizzy and shaky, and I couldn’t tell whether I was just seasick or becoming hypoglycaemic. So I had half an energy gel that I’d tucked up my sleeve and forced myself to keep swimming.”

“I felt awful after the swim and started the bike so slowly that I thought I wouldn’t make the cut-off. Then, about 20km in, just as I was starting to feel human again, it started pouring with rain. Before long there was thunder and lightning.”

As if that wasn’t enough, she had to climb the 1,800m bike course over 3,000m of ascending in a torrential downpour. “I was crying with rain. Before long there was thunder and lightning.”

Eventually, the sun came out and Eva made it to T2. “I felt surprisingly strong off the bike but I knew I had to be cautious. I’d never done a full marathon so wasn’t sure whether my legs would hold out or how it would affect my blood sugar. I kept eating regularly enough to keep my sugar levels up without causing them to go too high, which would make me feel sick.”

“The doctors didn’t have any experience of type-1 diabetics doing this kind of thing. So I was pretty much left to myself”