



## Type 1 Diabetes Treatments

### Alex Bickerton – Consultant in Diabetes & Endocrinology

So the treatment of type one diabetes has changed over the years and although a lot of the principles are similar, we now have more tools than we've ever had before, to manage type one diabetes. So there are an increasing range of insulins, some of which are quicker acting than in the past, some of which are longer acting and this means that people with type one diabetes have much more flexibility in terms of the sort of insulins that they can use.

In addition to that, we have over the last 20 years understood more and more, that people with type one diabetes can adjust their insulin to their food and their physical activity. So that in fact, rather than having to eat to your insulin, you can adjust your insulin around what you want to do and have a very much flexible lifestyle and the sort of lifestyle that you wish.

### Colin McGreal – Type 1 Patient

So, the regime I was having of insulin, I wake up in the morning, I have an injection, I do a blood test. I have an injection at lunchtime. I'll have a blood test on, I'll have an injection, towards the evening and I'll have two injections, one for the night and one just to get me through the early evening and that was it. That was set in stone, until I spoke to hospital. It was a doctor or whatever, consultant, who actually said, no, you can eat what you like when you like you just manage your regime to cope with what you're doing.

If you're going out to an evening meal and you anticipate having a lovely meal and even a dessert, even a drink or two, then anticipate.

So once I understood that, then it was easy. Life became, overnight, so much easier and I wasn't in this fixed method of, oh, I've got to have this injection, that injection, and that's what I've got to have. No, it's flexible. You apply the insulin regime as your life demands it more or less insulin at the time you need it.

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So historically people use syringes and needles. Those haven't been used for a very long time but there are now a variety of pens that we can be used to inject insulin. And on top of that also insulin pumps, which give a small infusion of insulin constantly and are extremely flexible as one can adjust the rate at which that insulin goes in and adjust the boluses that are larger doses that are given with meals, both in terms of the amount, but also the action of those insulins. So there is a lot of flexibility, obviously with that comes a fair amount of work.



## **Kay Johnson – Type 1 Patient**

When I was having injections, injections for many years, I tested my blood 10, 15, 20 times a day. And that's how I kept good control.

So, after about 17, 18 years, I was offered the pump. So I did three days training for the pump and it has been the best thing that's ever happened to me. It is amazing.

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On top of that, we've had increasing accuracy and number of devices for assessing what your blood sugar is. So, everyone is aware of the traditional finger prick test but nowadays we also have things called flash monitors which allow you to, monitor your blood sugar using a phone or a handset, just swiping that over a sensor that you keep in for a couple of weeks. So again, giving you a lot of information and then moving on to even more advanced technology, there are glucose sensors that you can have on you most of the time, which not only tell you what your blood sugar is doing, but also tell you when your blood sugar goes, low. So the monitoring has improved and changed. The incidence has improved and changed. And on top of all of that, the ways of delivering insulin have also progressed.

People with type one diabetes can achieve extremely good blood sugar control, but at the same time, that does require a lot of work and effort. And as healthcare professionals, we certainly understand that and are here to support people with diabetes to achieve a sort of blood sugar control that they wish.

