



Sabine Hančl



Sabine Hančl was diagnosed with Type 1 diabetes in 1963 when she was nine years old. She has a life-threatening allergy to synthetic human insulin and therefore depends on animal insulin for her treatment.

Her parents took her to the Children's hospital on a Sunday afternoon because she had been feeling unwell for some time. She had been drinking lots of water, losing weight, feeling increasingly tired and not eating very much. When her blood glucose was measured, it was very high. At that time Type 1 diabetes was a very rare condition in children and the hospital was unfamiliar with the appropriate treatment so they consulted with the University of Düsseldorf and immediately treated her with insulin.

How things have changed! Picture of insulin vial

For the first few days after diagnosis, Sabine was given salted water gruel and soup to eat, lots of mineral water and tea to drink. A laboratory assistant came to her bed several times a day to measure her blood glucose and during the doctors' rounds it was patiently explained to her why she would always require insulin injections. Before she was discharged, her mother learned how to boil and assemble the glass syringe, inject her with insulin and calculate her diet.

At that time, people with Type 1 diabetes were treated with one daily fixed dose of long-acting insulin. Sabine says, *"I eventually learned how to inject insulin and calculate my diet on my own, which gave me more freedom. I was particularly proud at being able to assemble the syringe, draw up the insulin and inject myself. We only received five needles per quarter in those days and so I sometimes had to file down parts of a needle that did not feel smooth."*

The most important development

Like many of people who have lived a long time with Type 1 diabetes, for Sabine the most important change in diabetes care was the development of self-monitoring of blood glucose. This was first with

test strips, later with strips and glucose meters and now with the FreeStyle Libre sensors. The latter has been most important for Sabine because it has given her much more freedom, allowed her to manage her diet more flexibly and intensify her insulin treatment to achieve blood glucose results close to the norm.

The most difficult time in her life

While self-monitoring was the most significant development in managing her diabetes, for Sabine, the most important of all is that animal insulin remains available because of her life-threatening allergy to synthetic human insulin, including analogue insulins because they are made from synthetic human insulin.

In 2001, Sabine's allergy to human insulin was ignored and she was mistakenly given two units of human insulin in a clinic. She went into severe anaphylactic shock with respiratory arrest. After this, she had a large tattoo on her right forearm with an allergy notice and this has proved to be very helpful. Over the years, Sabine has fought battles with the various authorities to maintain supplies of animal insulins for herself and other people that need them. She has done a tremendous job for many years.

However, animal insulin is no longer available in Germany so it has become increasingly difficult for her and others, to access it. She obtains animal insulin from the UK and recently experienced issues as a result of the UK's withdrawal from the EU. Thankfully, in January 2021 animal insulin was exempted from the list of medicines banned for export to the EU from the UK. Nevertheless, for Sabine and others living inside and outside the UK who need animal insulin, the ongoing supply of animal insulin is a worry that never quite goes away.

Person-centric treatment of Type 1 diabetes

Looking back over the years, Sabine says that the treatment of people with Type 1 diabetes has focussed on education and self-care and it is many years since the only person who determined her treatment and checked her blood glucose was her doctor. Today, people with Type 1 diabetes have independence and a freedom that wasn't there when she and my daughter were diagnosed. We also remember with gratitude, that if Banting and Best had not made their insulin discovery, they and many others would not be alive today.