TYPE 1 DIABETES

THEN & NOW

The research progress that has been made for people living with type 1 diabetes (T1D) over the years is truly amazing. Our understanding of the disease, how we manage it and the outlook for the future has never been better.

INSULINS

Less than 50 years ago, insulins were derived from animals, and dosing was wildly inconsistent.

Now, synthetic insulins with a range of speeds and durations offer the precision and flexibility to better balance blood-sugar levels.

PUMPS

50 years ago, a prototype insulin pump was so large it had to be worn like a backpack. About 40 years ago, insulin pumps resembled a brick in both size and weight.

Now, compact insulin pumps fit easily in a pocket—and they've gotten smarter too.

SENSORS

Less than 20 years ago, continuous glucose monitors were available only to physicians for use in clinics.

Now, personal use of this technology is recommended in diabetes clinical guidelines. In Australia access to CGMs is fully subsidised for eligible under 21s.

CELL REPLACEMENT

Almost 30 years ago, scientists showed that a small infusion of islet cells could regulate blood-sugar levels.

Now, researchers are developing renewable sources of insulin-producing cells and ways to protect them without immune suppression to make this technology available to everyone.

BETA CELL BIOLOGY

For decades, experts believed that beta cells stopped functioning altogether within a few years of T1D onset.

Now, we know that beta cells continue to function even after decades with T1D, and it might be possible to restore insulin production by preserving or expanding these beta cells.

BIOMARKERS

30 years ago, there was no way to predict whether someone would develop T1D.

Now, there are markers to detect and track T1D well before symptoms arise, avoiding adverse events and facilitating the search for ways to slow or stop its progression.

DIABETIC EYE DISEASE

35 years ago, the risk of vision loss from diabetic eye disease was 50 percent.

Now, state-of-the-art care has cut the risk to 5 percent, and therapies to eliminate the remaining risk are in development.

JDRF IMPROVING LIVES. CURING TYPE 1 DIABETES.