



BC Diabetes Foundation

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Introduction to insulin pumps

Insulin pumps are devices that pump or “infuse” insulin into the skin of a person who requires insulin for the management of their diabetes. Prior to 2020-May-31 insulin pumps had to be told what to do: they were not magic devices; pump users had to test their sugar frequently, count their carbs and program their pumps. In other words, pumps took a lot of hard work.

That all changed with the arrival of “looping” apps in late 2019 that took sugar readings from a [CGM device](#) and used them to automatically instruct the insulin pump to give just the right amount of insulin so that sugar is in a safe zone: not too high and not too low. This was the “[artificial pancreas](#)” that has been awaited for almost a century since the discovery of insulin by Canadians Banting and Best in 1922. For more information on the “artificial pancreas” see nti-article on [closed-loop](#) CGM-coupled pump systems.

There should be no rush to go to an insulin pump unless you are ready to use a [closed-loop system](#). Most diabetes specialists believe that a highly motivated, well-trained and diligent individual with Type 1 diabetes using old school multiple daily shots of insulin in combination with a [CGM/sensor](#) can get almost as good a level of diabetes control and quality of life as a similarly motivated, trained and diligent individual using a traditional non-closed loop insulin pump with CGM/sensor technology.

Most diabetes specialists recommend that insulin pumps only be considered for individuals currently using [CGM/sensor technology](#) and taking multiple daily shots of insulin. The only substitute for CGM for individuals considering an insulin pump is to do conventional finger-poke testing 10-15 times per day.

As of the date of writing [four insulin pumps are covered by BC Pharmacare](#). Eligibility for BC Pharmacare coverage is complex because of the deductible - be sure to read [the fine print](#).