

WHAT IS INSULIN PUMP THERAPY?

An insulin pump is a small medical device that administers programmed amounts of rapid-acting insulin into the body to keep blood glucose levels steady. It is an alternative to multiple daily injections (MDI) for those living with type 1 diabetes.



AN INSULIN PUMP CAN HELP WITH DELIVERING:

Basal insulin, also known as background insulin, needed for between meals and overnight whilst asleep. Basal insulin settings are programmed with the help of your healthcare team

Bolus insulin. Bolus insulin can also be administered to cover carbohydrates eaten, or to help correct high blood glucose levels

With just a few button presses, insulin pumps can deliver precise amounts of insulin to the body. One example of a pump is the t:slim X2 insulin pump.

INFUSION SETS

Most insulin pumps deliver the insulin via an infusion set. The infusion set consists of **tubing** and a small plastic or steel needle called a **cannula** that sits in the skin There are many kinds of infusion sets available. With your healthcare team's help, you can experiment to find the one most comfortable for you. You can disconnect your infusion set for short periods of time for things like contact sports or for showering, by simply unclipping at the site. Patch (or pod) insulin pumps - devices designed to adhere directly to the skin and deliver insulin via a cannula without the use of tubing - are also available in Australia.

BENEFITS OF IPT

For some people, insulin pump therapy offers increased flexibility^{1,2}, improved blood glucose levels and a beter quality of life than administering insulin via injection. Research has shown that insulin pump therapy can also help reduce the frequency of low glucose levels or hypos and increased time in range³.









HOW TO CHOOSE THE RIGHT PUMP FOR YOU

Choosing the right device for your diabetes management is an important step! Your healthcare team will be able to assist you in choosing the right insulin pump for you and your needs - whether that be integration with a continuous glucose monitoring (CGM) system, hybrid automated insulin delivery, or water-resistance for example.

Generally, it's important to consider:

1. Your diabetes management, your way

Many insulin pumps have customisable features to tailor your diabetes management to what works for you. From editable basal settings and in-built carbohydrate calculators, to alerts that help keep your glucose levels on track, it's crucial that your device has the features that you need.

2. Integrated technology

Some insulin pumps feature CGM integration. This means your CGM device can communicate with your insulin pump; show glucose readings, alert you when your levels are heading out of target range, and perhaps even deliver automated insulin corrections.



HOW TO GET STARTED

Speak to your healthcare team to determine whether an insulin pump is the right device for you and your diabetes management needs.

It's important to consider the initial and ongoing costs of insulin pump therapy. Many people purchase insulin pumps via their private health insurance, however they can also be purchased outright. There are ongoing costs of consumables such as infusion sets, insulin cartridges and insulin – consumables which are subsidised by the National Diabetes Services Scheme (NDSS) for eligible people.

References:

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- 3. Karges B, Schwandt A, Heidtmann B, et al. Association of Insulin Pump Therapy vs Insulin Injection Therapy With Severe Hypoglycemia, Ketoacidosis, and Glycemic Control Among Children, Adolescents, and Young Adults With Type 1 Diabetes. JAMA. 2017;318(14):1358–1366.doi:10.1001/jama.2017.13994

