

Starting Insulin



Discovering A New Lease Of Life

When do you need insulin? Chionh Lay Keng and Angie Lee, diabetes nurse educators from Diabetic Society of Singapore, guide you through the process.

Achieving good blood sugar levels is a daily challenge for those with type 2 diabetes. High blood sugar is damaging to the cells and tissues in the body and lead to complications such as blindness, loss of a limb, kidney failure, heart attack and stroke. As such, many people dread a life with diabetes.

Most persons with type 2 diabetes need oral medication to lower their blood sugars and maintain at acceptable levels. Some may need insulin injections and may even choose to be on insulin for better control.

When Medications Fail

It is possible to control blood sugar levels for years with a good diet and exercise regime. Different oral medications (one or more) may additionally be needed. However, there are many situations or medical conditions that may render these oral tablets ineffective or no longer usable for the patient. These include:

- Acute infections or other serious illnesses
- Pregnancy
- Major surgery
- Congestive heart failure
- Kidney disease
- Liver disease
- Use of other drugs (prednisone and some psychiatric medications) that raise blood sugar
- Overeating or excessive weight gain
- Antibodies that destroy beta cells (in people with type-1, misdiagnosed as type 2)
- Progressive loss of beta cell function over many years

There are many with type 2 diabetes who experience progressive loss of pancreatic beta cell (insulin-producing cells) function. Their overworked beta cells seem to 'burn out', and drugs that were once effective can no longer hold their blood sugars at acceptable levels. The fact is that when type 2 diabetes is first found out in a person, only 50% of his beta cell function remains. According to the United

Kingdom Prospective Diabetes Study (UKPDS, a landmark study about type 2 diabetes patients published in 1998), the function will continue to deteriorate over time despite treatment with diet, exercise and oral medication.

Some indicators that suggest that insulin has become necessary are:

1. Oral diabetes medications have been increased to the maximum dosage and yet blood sugar levels are still high.
2. No improvement in blood sugar levels even after switching between different oral diabetes medications
3. Blood sugar levels remain high and symptoms appear (excessive thirst, frequent urination, weight loss despite good appetite) despite oral medication, diet and exercise.

There is no doubt that many fear the thought of insulin injections. Some of these fears like the fear of needles; hypoglycaemia (low blood glucose episodes) and weight gain can be overcome with the help of a diabetes nurse educator or your own family physician who is specialised in diabetes.

Research clearly shows that achieving good control early on and maintaining it for as long as possible helps prevent or delay diabetic complications, including nerve, kidney, eye and heart disease, from happening up to twenty years later.

Looking forward to a life of good diabetes control is not unachievable nor a far-fetched dream...if you are motivated to do so. With discipline and support from your family and healthcare providers, you can discover a new lease of life with well-controlled diabetes!

References:

Intensive blood-glucose control with sulphonylureas or insulin compared with conventional treatment and risk of complications in patients with type 2 diabetes (UKPDS 33) [published correction appears in *Lancet* 1999;354:602]. *Lancet*. 1998;352:837-53.