

# Why do I need insulin?



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This is because, over time, the cells in your pancreas (see diagram) begin to slow down and stop making enough insulin for your body.

Insulin helps move glucose from your blood into the cells of your body, to make energy. If glucose can't get into your cells it will stay in your blood and slowly cause damage to blood vessels, nerves, your eyes, heart and kidneys. You will also lose energy.

## REMEMBER

the best blood glucose range for people with diabetes is between 4 - 7 mmol/ L ( 72 – 126 mg/L) ( before meals ).

## Types and time of action of insulins

Type of Insulin	In The Market	Starts Working	Peaks	Estimated Duration
Very - Rapid Acting	Humalog & Novorapid	15 Minutes	30 - 90 Minutes	3 - 5 Hours
	Apidra	15 Minutes	30 - 90 Minutes	40 Minutes
		10 - 20 Minutes	2 Hours	6 Hours
Rapid - acting	Humulin R, Actrapid	0 - 60 Minutes	1- 2 Hours	5 - 8 Hours
Intermediate acting	NPH	1 - 2 Hours	4 - 12 Hours	18 - 24 Hours
	Lente ( L )	1 - 3 Hours	6 - 12 Hours	16 - 24 Hours
Long - acting	Lantus	1 Hours	None	18 - 24 Hours
	Levemir	45 Minutes - 2 Hours	6 - 8 Hours	Up To 24 Hours
Premixed	NPH&Regular Mixed (50/50 or 30/70) Mixtard Novomix	30 - 60 Minuts	2- 12 Hours	Up To 18 Hours

## How do I take insulin?

Insulin cannot be put into a tablet because the acid in your stomach will destroy it. This is why you need to inject insulin. Insulin can be injected using a syringe, but most people use insulin Pens because it is very easy in detecting the dose and injection way.

## Where do I inject my insulin?

Your Abdominal wall is the best place to inject your Insulin, then the arm, then thigh and last the buttocks. It needs to be injected into the layer of fat just under the skin. It is important that every time you inject you change where you do it, by moving across your Abdominal wall. This helps stop fatty lumps from forming which would change the way insulin works.

## When and how often do I need to inject insulin?

Most people find their levels are too high when they wake up in the morning (above mmol/L 126mg/L is too high). This happens because your body makes glucose during the night, not because of what you ate the night before. To get your morning blood glucose lower, you will need to have insulin at bedtime.

A few people find that their levels are highest later in the day. These people will usually start their insulin in the morning.

## How do I store my insulin?

The insulin you are using can be kept at room temperature for one month (except "levemir" for 42 days), after this it must be thrown away.

## Do not:

- use insulin that has gone past its "expiry date"
- use insulin that has changed color or gone lumpy
- freeze your insulin or leave it anywhere that is too warm or in the sun
- use insulin cartridges that are cracked

## When to call the doctor ?

- If you have any of the following signs, call your doctor:
- you are more thirsty and have to go to washroom a lot
  - fatigue
  - blurred vision

## Follow-up appointment

Keep your follow-up appointments with your doctor.  
It is important for your doctor to monitor your progress.

## For a follow-up appointment:

**Date:**.....

**Doctor's Name:**.....

**Telephone:** 22232000

Send #1 to the mobile number 97244524 and an operator will contact you for your appointment details.

**Website:** <http://www.sih-kw.com>

## Special Instructions

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If you have any questions or concerns, call your doctor or nurse.

