

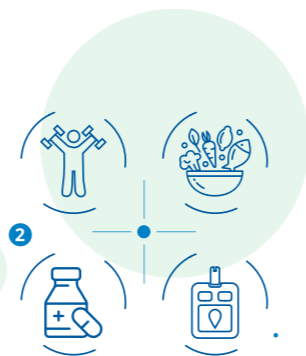
9. WHAT I NEED TO KNOW WHEN I AM ON INSULIN?

Hypoglycaemia or low blood glucose (glucose level under 70 mg/dL)⁶ can occur when people are on insulin. It is good to check blood sugar if one experience such symptoms, but if glucometer is not available it is good to treat it as hypo.



Signs and symptoms of Hypoglycaemia:
An irregular or fast heart beat, fatigue, sweating, shakiness, hunger and irritability. It usually happens when people do not eat properly, or one has taken incorrect or wrong dose of insulin.

Hypoglycaemia needs to be treated immediately and mild to moderate **hypo can be treated easily at home. One needs to eat or drink 15 grams of easily digestible carbohydrates**, such as: half a cup of juice or regular soda, 1 tablespoon of honey or 3 or 4 pieces of hard candy.



One can win over diabetes by following all the 4 pillars of diabetes management – Diet, Exercise, Medicine and Monitoring. These 4 need to be balanced by proper diabetes education.



Also, it is good to understand that medical requirements change on continuous basis for people with diabetes, so it is always good to remain in touch with your doctor.

10. CAN A PERSON WITH DIABETES LEAD A HEALTHY AND PRODUCTIVE LIFE?



Yes. **People with diabetes can live healthy and productive lives** if the condition is diagnosed early and managed effectively.

REFERENCES:

References: 1. Mukhtar, Y., Galalain, A., & Yunusa, U. (2020). a modern overview on diabetes mellitus: a chronic endocrine disorder. *European Journal of Biology*, 5(2), 1 - 14. <https://doi.org/10.47672/ejb.409>. 2. Bagust, A. and Beale, S. (2003) Deteriorating Beta-Cell Function in Type 2 Diabetes: A Long-Term Model. *QJM: An International Journal of Medicine*, 96, 281-288. <https://doi.org/10.1093/qjmed/hcg040>. 3. Tandon, Nikhil et al. "Forum for Injection Technique and Therapy Expert Recommendations, India: The Indian Recommendations for Best Practice in Insulin Injection Technique, 2017." *Indian journal of endocrinology and metabolism* vol. 21,4 (2017): 600-617. doi:10.4103/ijem.IJEM_97_17. 4. Bahendeka, S., Kaushik, R., Swai, A.B. et al. EADSG Guidelines: Insulin Storage and Optimisation of Injection Technique in Diabetes Management. *Diabetes Ther* 10,341–366 (2019). <https://doi.org/10.1007/s13300-019-0574-x>. 5. Mathieu C, Gillard P, Benhalima K. Insulin analogs in type 1 diabetes mellitus: getting better all the time. *Nat Rev Endocrinol*. 2017 Jul;13(7):385-399. doi:10.1038/nrendo.2017.39. Epub 2017 Apr 21. PMID:28429780. 6. Ibrahim M, Baker J, Cahn A, et al. Hypoglycaemia and its management in primary care setting. *Diabetes Metab Res Rev*. 2020; 36(8): e3332. <https://doi.org/10.1002/dmrr>. Wiley Online Library CAS PubMed Web of Science@Google Scholar

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This does not replace medical advice. For more information reach out to your registered healthcare provider.

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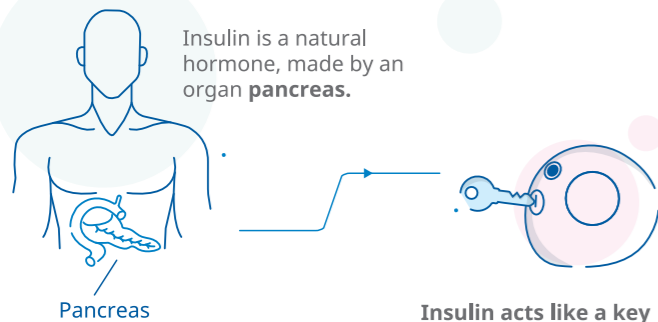


WHAT IS INSULIN

“Managing your diabetes is science, it is not an art”



1. WHAT IS INSULIN?

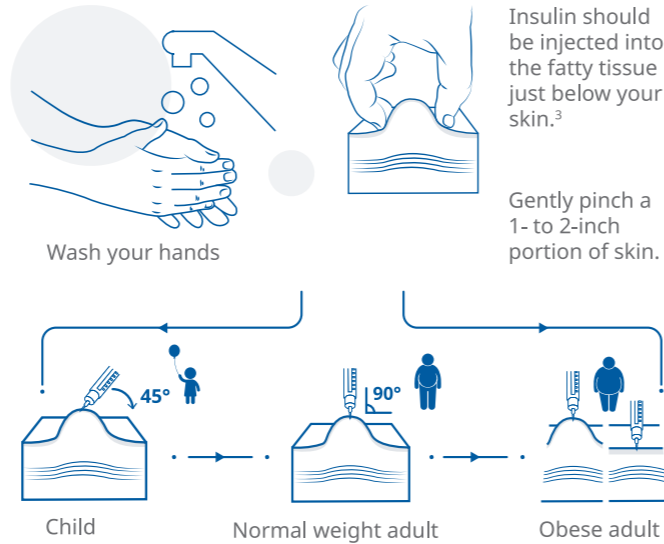


Insulin is a natural hormone, made by an organ **pancreas**.

Insulin acts like a key which opens the door of cells for glucose to enter where it is used for energy.

Insulin resistance causes the body to either not create enough insulin or to produce less, which leads to diabetes and the need for insulin supplements.

3. HOW TO TAKE INSULIN?

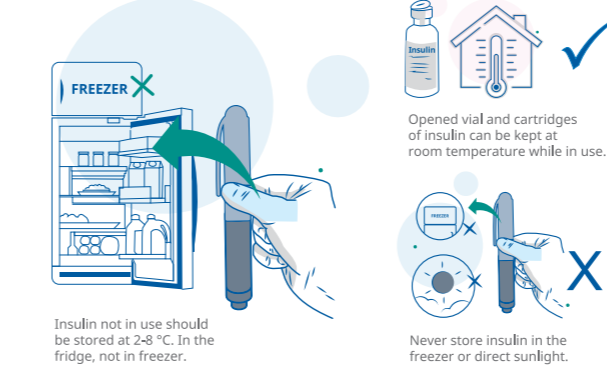


Insulin should be injected into the fatty tissue just below your skin.³

Gently pinch a 1- to 2-inch portion of skin.

Wait for 6 seconds before you take the device out.

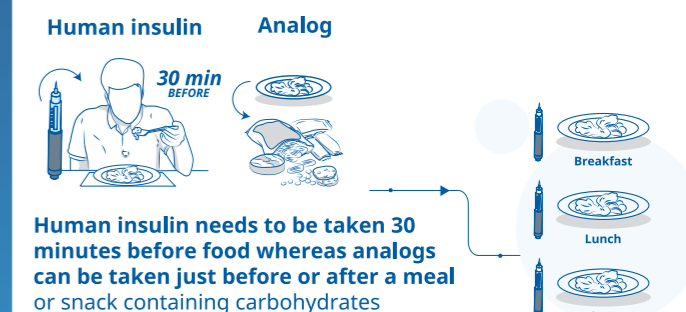
5. WHERE TO STORE INSULIN?



Insulin not in use should be stored at 2-8 °C. In the fridge, not in freezer.

Insulin should be maintained in cold chain to guarantee its full effectiveness. Insulin not in use should be stored at 2-8 °C⁴ in the fridge, not in freezer. Opened vial and cartridges of insulin can be kept at room temperature.

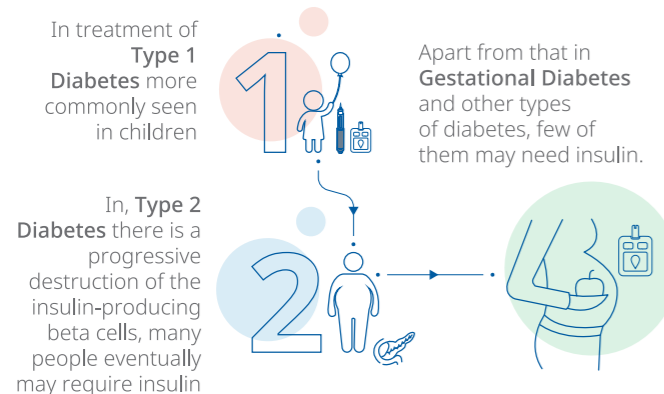
7. WHEN SHOULD INSULIN BE TAKEN?



In basal bolus regimen, 3 or more doses of short acting & 1 or more dose of long acting insulins are taken **Most people with type 1 diabetes follow this regimen**

Only your doctor can decide about the insulin regimen you may need as per your lifestyle.

2. WHO NEEDS INSULIN FROM OUTSIDE?



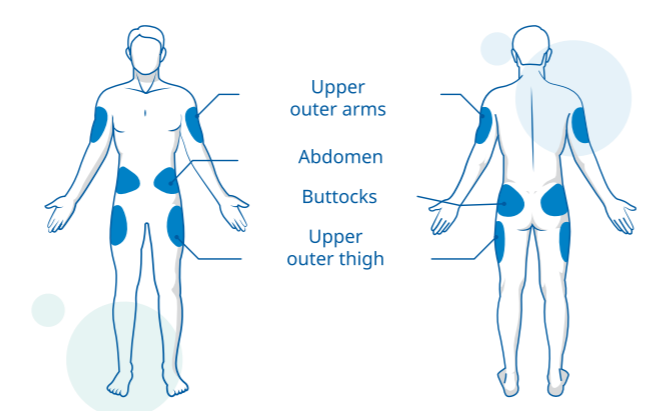
In treatment of **Type 1 Diabetes** more commonly seen in children

Apart from that in **Gestational Diabetes** and other types of diabetes, few of them may need insulin.

In, **Type 2 Diabetes** there is a progressive destruction of the insulin-producing beta cells, many people eventually may require insulin

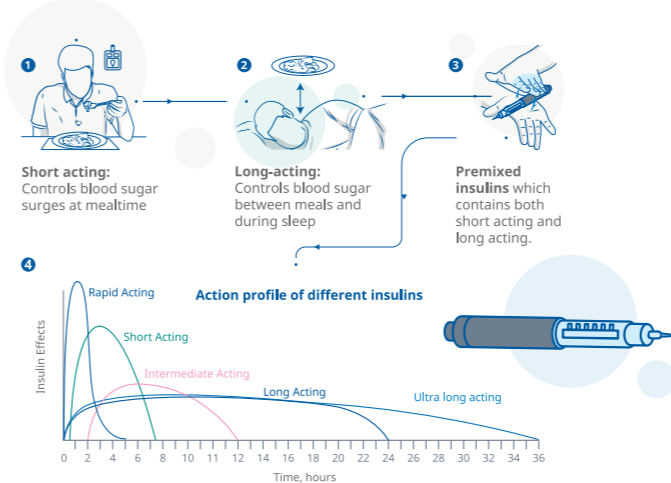
Your doctor is the right person to judge what you need to manage diabetes, since diabetes should be adequately managed

4. WHERE TO TAKE INSULIN?



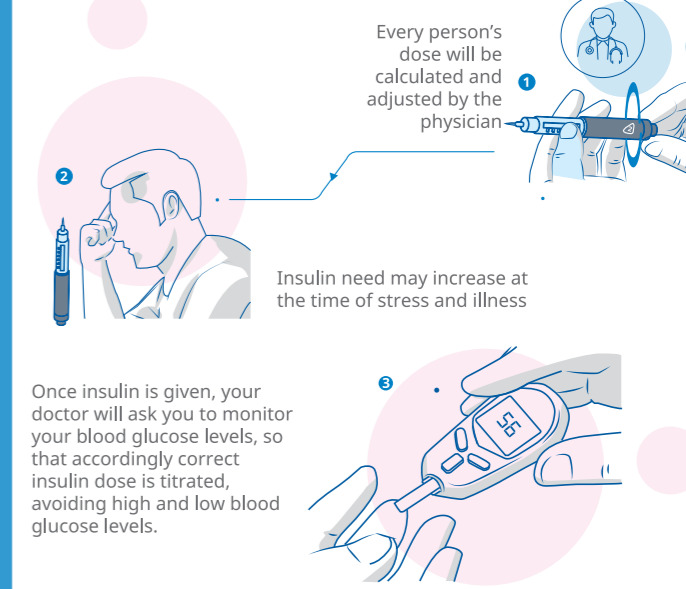
While injecting in the abdomen area, stay at least 2 inches away from navel area. It is good to rotate within each injection site. Keep each of your injections at least two finger's width from the last injection.³ Most of the people with diabetes take their insulin themselves.

6. WHAT ARE DIFFERENT TYPES OF INSULIN?



Insulin analogues have more predictable action profile rather than human insulin⁵. Your doctor can help you find the best insulin for you.

8. WHAT TO EXPECT WHEN YOU TAKE INSULIN?



Every person's dose will be calculated and adjusted by the physician

Insulin need may increase at the time of stress and illness

Once insulin is given, your doctor will ask you to monitor your blood glucose levels, so that accordingly correct insulin dose is titrated, avoiding high and low blood glucose levels.