no 'LAG'

	onset	peak	duration
rapid-acting Insulin LISPRO Insulin ASPART Insulin GLULISINE	**5-15 minutes**	**1 hour**	**3-5 hours**
short-acting Humulin S Actrapid 'Short Acting'	**30-60 minutes**	**2 hours**	**5-8 hours**
intermediate-acting Humulin NPH Novolin NPH	**2-4 hours**	**4-10 hours**	**10-16 hours**
long-acting Lantus (Glargine) Levemir (Detemir) Long	**2-4 hours**	**4-12 hours**	**20-24 hours**
ultra-long-acting Degludec (Tresiba) Tresiba Travels Far	**2-4 hours**	**8-12 hours**	**24 hours+**

osce toolbox

(IN-sulin is a hormone that helps glucose get IN-side cells)

fewer nocturnal hypoglycemic events compared to other long-acting insulins!

INSULIN REVIEW

ENDOCRINOLOGY

basal and bolus injections of insulin

osce toolbox

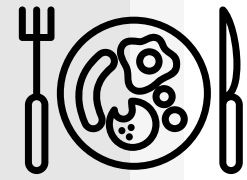
basal insulin ensures a steady level of insulin all day

it helps keep blood glucose levels stable overnight and between meals

basal is usually long-acting or intermediate-acting & typically requires injections once or twice daily

bolus insulin is taken during meal times to provide a quick-acting surge of insulin

prevents post-meal spikes



bolus is usually rapid-acting or short-acting

insulin pumps, mixtures & storage

Insulin solutions should **not be frozen**, and unused vials should be **stored in the fridge** while current vials can be kept at room temperature.

Injection sites should be **rotated** to prevent complications such as **infection and lipohypertrophy.**

Insulin pumps **continuously infuse** a background amount of insulin via a **cannula** and **can deliver boluses in response to food.**

They are loaded with a single type of **rapid or fast-acting insulin** and **provide both basal and bolus insulin doses.**

Insulin mixtures are **pre-mixtures** of **intermediate/long-acting insulin** and **short/rapid-acting insulin.**

They **improve compliance** by providing both basal and bolus components in a **single injection,** convenient for patients who require both types of insulin.

INSULIN REVIEW

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