

**Kahoot URL:** <https://kahoot.it/challenge/02287036>

**Game PIN:** 02287036



### **Insulin pumps.**

- Insulin pumps can use rapid acting (aspart, lispro, glulisine) or short acting insulin (Regular). The pump infuses insulin SUBCUTANEOUSLY.
- Rapid-acting insulin is the most common insulin used in insulin pumps. The pumps is set to a low continuous rate (basal). This is just like what a person's natural pancreas rate would be. The pump can be programed to infuse more insulin (bolus) with meals or snacks.
- A patient will check their blood glucose before a meal and estimate the amount of CHO they are about to eat. There is a formula utilizing current BG and the CHO eaten to tell person the amount of insulin needed for a bolus.
- Patients are taught how to estimate the amount of carbohydrates (CHO) in foods based on average sized portion. These estimates can also be found on food package nutrition labels. The person will program the pump to give a bolus of insulin right before they start eating but they also need to know what their current BG is too.
- The amount of basal rate insulin and bolus amount calculations determined by the person's HCP based on their BG levels, body size and activity levels. There are recommended guidelines published by ADA, American College od Endocrinologist and others.

### **Insulin INTRVENOUS Infusion "Insulin drip"**

- Used in hospitalized patients for treatment of severe hyperglycemia.
- Mixture is 100 units REGULAR insulin in 100mL normal saline. (1 unit/mL) concentration. Regular insulin is currently only recommended insulin infusion concentration for INTRVENOUS Infusion treatment of hyperglycemia
- Frequent Blood glucose checks required also for these pts and the infusion rate will be adjusted based on the BG results. You don't want BG to drop too fast due to fluid shift, especially in the brain (may cause increased intercranial pressure)

**NOTE for HESI:** the HESI asks which insulin can be given by infusion see if the question is asking about a subcutaneous infusion or an intravenous infusion. That will impact your answer.

**HYPERGLYCEMIA:** blood glucose above 200mg/dL. One of the hidden definition slides has above 800 and that is a typo! So sorry for the error!