Diabetes: Insulin - the basics

Insulin is a hormone that your body naturally produces. Starting insulin does not mean you are a failure – it may be the best way to control your blood sugars.

**How do you feel about taking insulin?**

**How to care for insulin:**

- Unopened bottles and pens should be stored in the door of the refrigerator and are good until the expiration date
- Read package insert to verify how long your insulin is stable at room temperature
- In general insulin pens that you are using can be kept at room temperature 7-42 days depending on the type of insulin - discuss with your pharmacist
- Avoid extreme temperatures – less than 36°F or greater than 86°F
- Remove pen needle right after injection

**Site Rotation:**

- Absorption is affected by body part, scar tissue, temperature, length of needle and physical activity.
- Sites: abdomen, buttocks, arms, legs (outside hip area), even those love handles.
- Always inject into fat tissue, not muscle - can you pinch an inch?
- Be sure to rotate site slightly around area with each shot and from side to side.
- Stay two finger widths away from belly button.
- Using the same site too often can cause scar tissue and poor absorption of insulin, making blood sugars unpredictable.
- Check sites for scar tissue by feeling for lumpy, hard spots under skin.
Ways to take insulin

**Fixed dose:**
- Set amount of insulin at each meal
- Does not take into account blood sugars or food eaten
- Requires consistent carbohydrate intake and meal times

**Sliding scale:**
- Insulin dose based on blood sugars only
- Does not take into account food eaten
- Requires consistent carbohydrate intake for best results

**Basal / Bolus:**
- Insulin dose based on your current blood sugar and the amount of carbohydrate intake
- You can vary the amount of carbohydrates eaten and still maintain good blood sugars
- More closely mimics the pancreas
- Allows more flexibility in meal timing and meal content
- Requires good carb counting and record keeping to maintain over time

**Insulin Pump:**
- Small insulin delivery device most often used by patients with type 1 diabetes and patients whose body no longer makes insulin
- Uses rapid-acting insulin only
- Provides a background basal rate (replacing your long-acting insulin) every few minutes via a small tube called an infusion set that is manually inserted every 3 days at home
- Requires diligent monitoring and manual entry of meal time and correction insulin using pump buttons