* What is Diabetes

Also known as Diabetes Mellitus (DM), Is a disease in which the body’s ability to produce or respond to hormone insulin is impaired.

* What is Insulin

Insulin in produced in the pancreas and over time it can wear out. It is vital for your body to convert sugar out of the blood stream.

* What types of insulin is there and how is it metabolized in the body

Insulin can come in many different packaging. Premixed already in a pen form, or vials that you may have to draw up.

There are 5 main types of insulin and we need to understand how they work. So for that we will define 3 terms ONSET-start to work, PEAK- kick into full effect and DURATION-how long they stay in your body.

**Rapid-acting- HUMALONG** takes effect in 10-30minutes. Taken just before meals to blood sugar spikes. 15mins to onset, 30-90 min to peak and 3-5 hours to duration. Often taken with a long acting.

**Short-acting- Regular (R**) takes effect in 30mins to an hour. Covers you during meals and can be taken at one meal or two. It covers you a little longer than the short acting and stays with you longer too. Onset is 30 min-1hr, peaks after 2hrs-4hrs and duration is 5-8hrs.

**Intermediate-acting- NPH** (Cheapest form) takes effect in 1.5-4 hours. Can control blood sugars for about 12 hours and can be used overnight. It can offer a baseline for insulin coverage. Onset is 1-4 hours, peaks 4-12 hours.

**Log-acting-Lantus/Levemir** takes effect in 0.8 to 4 hours. Onset is 1 hour, and duration is 20-26 hours. There is no peak. This is considered to be a full day coverage and is often taken at night.

**Premixed Insulin**- combines intermediate and short acting results .It is often taken twice a day before meals. Onset is 5mins to 60min, peaks times can vary and duration is 10-16 hours.

* How do you take a blood sugar and read the results

Wash your hands

Clean the skin with an alcohol pre pad

Stick the side of the clean finger- use a fresh needle/lancet and dispose into a sharps container (coffee can, soap bottle)

Get a drop of blood and touch it to the edge of the test strip. It will pull it in.

The meter will show the results

Stop the blood and record your results.

* Warning signs for diabetics (High and low)

**High-**Increased thirst, frequent urination fruity breath or sweet smell to breath or urine, ketones in urine, weakness, stomach pains, general aches, heavy or labored breathing, loss of appetite, n/v

\*what to do- Call your PCP, Drink fluids without sugar, test blood sugar frequently

**Low-** Cold seat, faintness, dizziness, headache, pounding heart, trembling, blurred vision, hunger, irritability, not able to awaken.

\*what to do- Check blood sugar if able, take glucose tablets or liquids, wait 15min and retest. If less than 60 repeat. Don’t give anything by mouth if not conscious, call 911.

* Proper Follow-up care for diabetics

See your doctor share your results

Document what you ate on high days, if you were sick and how you were taking your insulin

Have a Diabetic emergency kit. Doctor’s info with phone#, med list, testing meter, insulin, glucose tablets. Share with family and caregivers your diabetes journey and how to best support you.

Eat a carb balanced diet and stay active.

* Know your ABC’s of Diabetes

A1c- It is your average blood sugar level over the past several months. **Below 7%**

Blood Pressure- Having DM puts you at a greater risk for other conditions like stroke, heart attack and kidney disease, it is essential to know and control your blood pressure. **Below 140/90**

Cholesterol- This is a waxy substance that is found in your blood. High cholesterol is another factor for strokes, heart attacks and other serious problems. **LDL-Below 100**