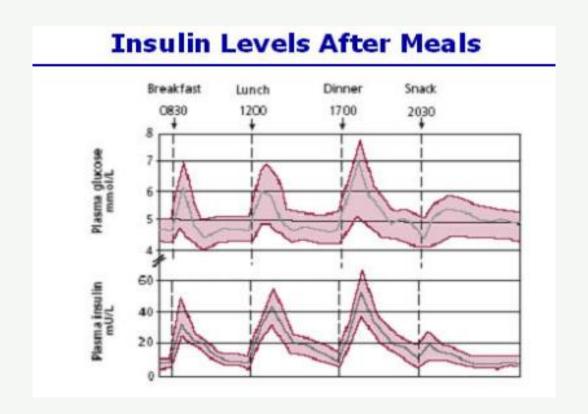
HELP ME! I NEED TO START INSULIN





BLOOD SUGAR vs. INSULIN







TYPES OF INSULIN

Туре	Brand Name	Onset (length of time before insulin reaches bloodstream)	Peak (time period when insulin is most effective)	Duration (how long insulin works for)
Rapid-acting	Humalog Novolog Apidra	10 - 30 minutes	30 minutes - 3 hours	3 - 5 hours
Short-acting	Regular (R)	30 minutes - 1 hour	2 - 5 hours	Up to 12 hours
Intermediate- acting	NPH (N)	1.5 - 4 hours	4 - 12 hours	Up to 24 hours
Long-acting	Lantus Levemir	0.8 - 4 hours	Minimal peak	Up to 24 hours





WHO TO START INSULIN ON?

- Type 2 diabetes
 - 2 meds or more
 - 1 med (metformin) and an abnormal HA1C
 - All type 2 DM will likely need it before the end of pregnancy





HINTS

- NPH and regular are cheap (\$20-40)
- Novolog and Humalog are expensive
- Insurance companies only pay for either Humalog or novolog
 - Not generic
 - No substitution
- Rapid acting improves HA1C by 1% over regular
- Do not use the insulin mixes
 - More hypoglycemia





CALCULATE THE DOSE

- Weight in Kg X 0.7 units = total insulin dose
- Divide total insulin dose by 3
- Give 2/3 in the morning and 1/3 at night
- Morning dose is 2/3 intermediate and 1/3 short acting
- Evening dose is ½ intermediate and ½ short acting
- If using rapid action, add the short acting together and divide by 3 and give 1/3 at each meal.
 - May change a little if one meal is larger than others.





EXAMPLE

- 100 kg x 0.7 = 70
- $70 \div 3 = 23$
- 46 in the morning (2/3)
 - 30 NPH: 15 regular
- 22 at night (1/3)
 - 11 NPH: 11 Regular
- If using rapid acting insulin
 - $26 \div 3 = 9$
 - 9 units with each meal 9:9:9
 - 8:8:12





PATIENT EDUCATION

- Uncontrolled diabetics will be extremely tired
 - 2-3 weeks
- Hypoglycemia signs and symptoms
 - How to correct
- Have patient to call nurse in 3-4 days
- See patient back in 1-2 weeks
- Clear insulin: rapid or short acting
- Cloudy insulin: Intermediate or long acting



