First calculate total daily dose of insulin

Body weight in kgs / 2

- **e.g;** an 80 kg person will require roughly about 40 units / day.

INSULIN DOSAGE

- 0.6-1.0 units/kg body weight (ideal body weight)
- Divide this dose into tds if soluble insulin OR into bd if 70/30 insulin (humulin) used
- Additional 0.3 units/kg body weight added if infection, sepsis or DKA present
- Insulin to be given 30 minutes premeals if 30:70 or soluble insulin and 30-45 min premeal if Isophane or Lente (Humulin N) insulin
- Do not add insulin to N/Saline infusion
- Do not give Humulin 30:70 or Isophane (Humulin N)insulin I.V
- Adjust insulin dose with blood sugar

Premixed insulin dosing

Step1:First calculate the total daily starting requirement of insulin

$$\frac{\text{BodyWeight}}{2}$$

For a 60kg patient
total daily dose =30 units

Step 2:Then divide this dose into 3 equal parts
10+10+10

Step 3:Give 2 parts in the morning and 1 part in the evening

Morning=20U Evening=10 U

Initial Dosing: Inhaled Insulin

- Can use formula:
  - Body weight (kg) X 0.05 mg/kg = pre-meal dose (mg)
- Round down to nearest whole milligram number
- Supplied in "blisters"
  - A 1 mg blister of inhaled insulin is approximately equivalent to 3 units of insulin.
  - A 3 mg blister of inhaled insulin is approximately equivalent to 8 units of insulin.

EXUBERA® [US package insert]. New York, NY: Pfizer Labs, a division of Pfizer Inc; 2006.

Correction Bolus Formula

$$\frac{\text{Current BG} - \text{ideal BG}}{\text{Glucose correction factor}}$$

Example:

- Current BG: 250 mg/dL
- Ideal BG: 100 mg/dL
- Glucose Correction Factor: 30 mg/dL

$$\frac{250 - 100}{30} = 5.0 \text{ U}$$

How to Give Insulin

- NPH: 1/6 of total daily insulin dose administered every 8hours
- Lispro or Aspart: 1/6 of total daily insulin dose given before meals
- Monitor BGs before and 1hour after meals
- Goals:
  - 65-90 mg/dL before meals
  - <120 mg/dL after meals

Dose adjustment...contd.

- Once the fasting blood glucose has been controlled, check 6-Point blood sugar as follows:

  - Fasting.
  - 2 hours after breakfast.
  - Before lunch (and noon insulin)
  - 2 hours after lunch.
  - Before dinner (AND EVENING INSULIN)
  - 2 hours after dinner

Calculating Insulin Ratio & Doses

- Calculate total daily insulin dose (TDI)
  - Based on current insulin doses
  - Based on weight in kg (weight x 0.5 u/kg/day)
- TDI is approximately ½ basal and ½ bolus replacement
- Example: A 80 kg patient would require ~ 40 units of insulin per day, of which 20 units are for basal replacement and 20 units to cover meal carbohydrates