

ABUNDANT  
HEALTH  
*with Melissa*

# Setting Basal Rates

LOW  
mg/dL  
BLOOD  
SUGAR

# Basal Doses

Whether you use an insulin pump or take daily injections, setting the right basal insulin doses is crucial. Proper management helps keep blood sugar levels steady and prevents both lows and highs.

## **WHY BASAL TESTING IS IMPORTANT:**

Basal insulin needs vary based on individual factors such as body size, activity level, and hormone levels. During different life stages, these needs can change. For instance, children and teens often need more basal insulin at night due to growth hormones, while adults might experience the "dawn effect" with increased glucose secretion in the early morning hours.

## **SETTING BASAL DOSES:**

In the absence of food, exercise, and mealtime/bolus insulin, basal insulin should hold blood sugar steady. Any significant rise or fall indicates that the basal rates need to be adjusted.

# 4 Steps for Basal Testing

## Using Injections



### 01 PREPARATION

- Ensure you haven't eaten or injected bolus insulin for at least 4 hours.
- Avoid high-fat meals before the test.
- Stay hydrated with non-caloric beverages like water.
- Avoid heavy exercise during the test period.
- Do not test during illness, menstruation onset, or following hypoglycemia.

### 02 START THE TEST

- Check your blood sugar about 4 hours after your last bolus.
- If above 250 mg/dL, take a correction dose and cancel the test.
- If below 70 mg/dL, eat to raise your blood sugar and cancel the test.
- If within the target range, proceed with the test.

### 03 MONITORING

- Check your blood sugar every 1-2 hours during the test.
- Note any significant changes (more than 30 mg/dL) which may indicate a need to adjust your basal dose.

### 04 ADJUST AND RETEST

- Adjust basal insulin doses in small increments (e.g., 1-2 units).
- Retest the following day to see if adjustments have improved blood glucose stability.

# 4 Steps for Basal Testing Using Insulin Pump



## 01 PREPARATION

- Ensure no food or bolus insulin for at least 4 hours.
- The meal before the test should be low in fat.
- Stay connected to the pump and avoid suspending it or changing settings.
- Avoid heavy exercise during the test period.
- Do not test during illness, menstruation onset, or following hypoglycemia.

## 02 START THE TEST

- Check your blood sugar about 4 hours after your last bolus.
- If above 250 mg/dL, take a correction bolus and cancel the test.
- If below 70 mg/dL, eat to raise your blood sugar and cancel the test.
- If within the target range, proceed with the test.

## 03 MONITORING

- Check your blood sugar every 1-2 hours during the day and every 2-3 hours overnight.
- Observe any significant changes (more than 30 mg/dL) indicating a need for basal rate adjustment.

## 04 ADJUST AND RETEST

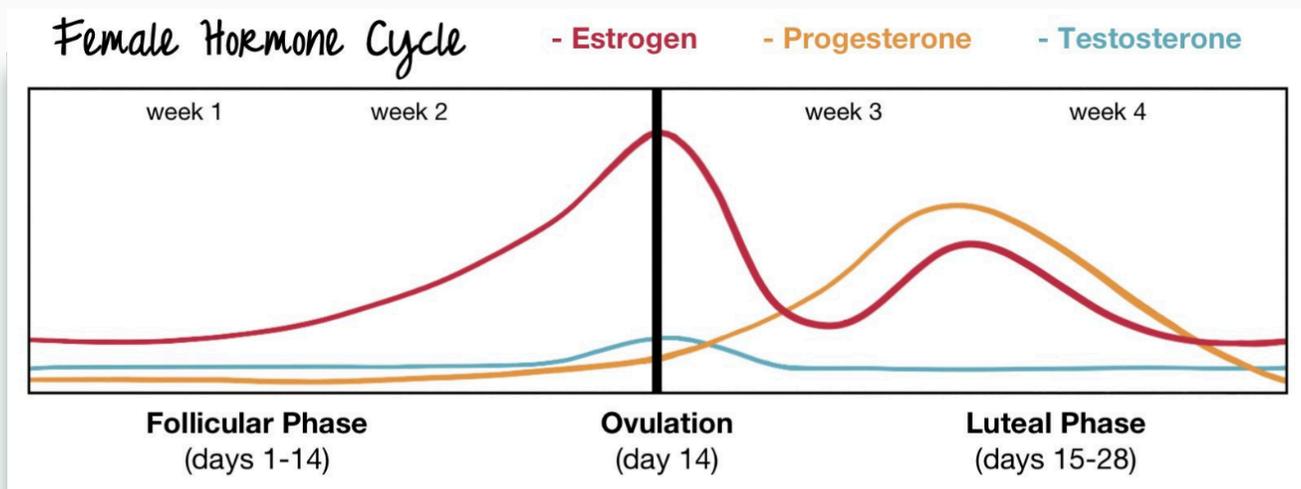
- Adjust basal rates in increments of 0.05 to 0.2 units/hr.
- Retest the next day to confirm if the adjustment improved stability.

# Timing of your cycle

Did you know that hormonal changes during your reproductive years and menopause can affect your basal rates, glucose metabolism, and insulin sensitivity?



This graph shows hormone levels through the different stages of a normal 28-day cycle in a woman's reproductive years.



- **INSULIN SENSITIVITY** is **HIGHER** in the follicular phase (menstruation thru pre-ovulation) when estrogen levels are highest and peak during ovulation.
- **INSULIN SENSITIVITY** is **LOWER** during the luteal phase (post-ovulation) when estrogen levels drop, and progesterone levels increase.

# Important Considerations



- ✓ **Overnight Testing:** Test overnight basal rates first, then move on to daytime rates.
- ✓ **Change Timing:** Adjust basal rates 1-2 hours before an observed change in blood sugar.
- ✓ **Activity Levels:** Maintain normal daily activities but avoid heavy exercise during the test.

**CONCLUSION:** Proper basal testing is essential for maintaining stable blood sugar levels and effective diabetes management. Regular testing and adjustments can help achieve optimal insulin absorption and prevent complications. If you need assistance, consult with a healthcare provider or diabetes educator.

*YOUR GO TO*

# RESOURCE LIST

## 6 EASY STEPS TO PRIORITIZE YOURSELF AND YOUR DIABETES

AS MIDLIFE WOMEN WITH TYPE 1 DIABETES, WE FACE UNIQUE CHALLENGES. IT CAN BE DAUNTING TO BALANCE HORMONES, WEIGHT GAIN, AND BLOOD SUGAR, ESPECIALLY AS WE ENTER PERIMENOPAUSE AND TRANSITION INTO MENOPAUSE.



## WHY ARE YOUR BLOOD SUGARS HIGH IN THE MORNING?

MANY PEOPLE EXPERIENCE SOME KIND OF DAWN PHENOMENON THROUGHOUT THEIR LIFE, DIABETES OR NOT AND IT OCCURS IN PEOPLE WITH TYPE 1 OR TYPE 2 DIABETES. THESE HIGH BLOOD SUGAR READINGS IN THE EARLY MORNING ESPECIALLY AFTER WHAT WE ATE THE NIGHT BEFORE MAY BE RELATED TO HORMONAL CHANGES WHILE YOU SLEEP.

