



Patient Name: _____

Date: _____

How to Test a Basal Rate

Basal Rate Log

Day 1 Test Overnight Basal	Day 2 Test Day Basal, Part 1 Morning	Day 3 Test Day Basal, Part 2 Lunchtime	Day 4 Test Day Basal, Part 3 Dinnertime
Blood Sugar:	Blood Sugar:	Blood Sugar:	Blood Sugar:
Bedtime _____ mg/dL	Start _____ mg/dL	Start _____ mg/dL	Start _____ mg/dL
2 AM _____ mg/dL	+1 hr _____ mg/dL	+1 hr _____ mg/dL	+1 hr _____ mg/dL
Waking _____ mg/dL	+2 hr _____ mg/dL	+2 hr _____ mg/dL	+2 hr _____ mg/dL
	+3 hr _____ mg/dL	+3 hr _____ mg/dL	+3 hr _____ mg/dL
	+4 hr _____ mg/dL	+4 hr _____ mg/dL	+4 hr _____ mg/dL
	+5 hr _____ mg/dL	+5 hr _____ mg/dL	+5 hr _____ mg/dL

General Guidelines for Testing a Basal Rate:

- Your healthcare provider will determine the initial basal rate you should use when starting on your insulin pump. The goal is to not let your blood sugar level rise or fall more than 30 mg/dL when not eating or exercising.
- Use the above basal rate log to test the basal rate for the first 3 or 4 days after starting on your pump to determine together with your healthcare provider if any adjustments are needed.
- Use this worksheet for directions on how to test a basal rate (on the back) and to record results using a basal rate log (above).
- If your blood sugar goes below 70 mg/dL, stop the test and correct the low.¹
- If your blood sugar rises >30 mg/dL during a test, stop the test and take a correction bolus.¹
- Do not change your infusion set during a basal rate test. Stop the test if there is an infusion site problem.
- If you experience hypoglycemia during the day, do not perform a basal rate test.
- Test only one time period each day.
 - For example, test overnight basal on Monday, morning basal on Tuesday, etc.
- You and your healthcare provider can then fine-tune and adjust the basal rate for different times of day and activities.
- All values obtained, even if test is not completed, should be given to your healthcare provider.

How to Test a Basal Rate

Directions

Test	Prepare	Test Time	Results/Actions
Day 1 Overnight Basal	<ul style="list-style-type: none"> Bedtime test should be at least 3½ hours after last bolus Bedtime blood sugar should be 100–150 mg/dL Patient should not eat a high-fat dinner and not eat bedtime snack 	<ul style="list-style-type: none"> Bedtime 2 AM Upon waking 	<ul style="list-style-type: none"> If blood sugar rises more than 30 mg/dL: increase overnight basal rate slightly (0.1–0.2 units per hour) and retest next night If blood sugar drops more than 30 mg/dL: reduce overnight basal rate and retest¹ If blood sugar stays level or changes no more than 30 mg/dL during 8 hours of sleep: good basal rate; retest to verify
Day 2 Day Basal, Part 1 Morning	<ul style="list-style-type: none"> Blood sugar should be 100–150 mg/dL upon waking Patient should skip breakfast and breakfast bolus and not eat during test period 	<ul style="list-style-type: none"> Upon waking Every hour for 5 hours after waking 	<ul style="list-style-type: none"> If blood sugar rises more than 30 mg/dL: increase morning basal rate slightly (0.1–0.2 units per hour) and retest If blood sugar drops more than 30 mg/dL: reduce morning basal rate and retest¹ If blood sugar stays level or changes no more than 30 mg/dL during 5 hours of fasting: good basal rate; retest to verify Patient can eat after last test, close to usual lunchtime
Day 3 Day Basal, Part 2 Lunchtime	<ul style="list-style-type: none"> Blood sugar should be 100–150 mg/dL before lunch Patient should skip lunch and lunch bolus and not eat during test period 	<ul style="list-style-type: none"> At usual lunchtime Every hour for 5 hours after first test 	<ul style="list-style-type: none"> If blood sugar rises more than 30 mg/dL: increase lunchtime basal rate slightly (0.1–0.2 units per hour) and retest If blood sugar drops more than 30 mg/dL: reduce lunchtime basal rate and retest¹ If blood sugar stays level or changes no more than 30 mg/dL during 5 hours of fasting: good basal rate; retest to verify Patient can eat after last test, close to usual dinnertime
Day 4 Day Basal, Part 3 Dinnertime	<ul style="list-style-type: none"> Blood sugar should be 100–150 mg/dL before dinner Patient should skip dinner and dinner bolus and not eat during test period 	<ul style="list-style-type: none"> At usual dinnertime Every hour for 5 hours after first test 	<ul style="list-style-type: none"> If blood sugar rises more than 30 mg/dL: increase dinnertime basal rate slightly (0.1–0.2 units per hour) and retest If blood sugar drops more than 30 mg/dL: reduce dinnertime basal rate and retest¹ If blood sugar stays level or changes no more than 30 mg/dL during 5 hours of fasting: good basal rate; retest to verify Patient can eat after last test, close to bedtime

Bring this form with you to discuss at your next appointment with your healthcare provider.

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Information for this worksheet was taken from Walsh J, Roberts R, *Pumping Insulin* (4th ed.; San Diego, CA: Torrey Pines Press; 2006), and the ACCU-CHEK® *Professional's Pocket Guide to Insulin Pump Therapy*.

This worksheet is designed as a reference when initiating insulin pump therapy. There are several equally valid methods for arriving at a therapeutic regimen. We have selected commonly used ones. Experience will validate the most appropriate method for you.

¹ Walsh J, Roberts R. *Pumping Insulin*. 4th ed. San Diego, CA: Torrey Pines Press; 2006:133-134.

