

## Evaluating Your Insulin Sensitivity Factor(s)

Evaluating your insulin sensitivity factor (ISF) is similar to evaluating your insulin-to-carb ratio (I:C). Isolate the effects of your ISF by eliminating other variables. The goal is for your ISF to return high blood glucose (BG) to your target range within four hours of a correction bolus. Follow the general guidelines below to evaluate your ISF, and take note of the specific steps.

Directions	BG Checks
<ul style="list-style-type: none"> <li><input type="checkbox"/> Basal rates should be evaluated and adjusted prior to evaluating your ISF</li> <li><input type="checkbox"/> Start 4 hours after previous bolus and when you can plan to not eat for 4 hours</li> <li><input type="checkbox"/> Start when BG is above target (at least 40-50 mg/dL)</li> <li><input type="checkbox"/> If BG is higher than 250 mg/dL, be sure to troubleshoot high BG before starting evaluation. If you have ketones, postpone evaluation and treat high BG</li> <li><input type="checkbox"/> Do not evaluate ISF during time of illness, or unusual stress</li> <li><input type="checkbox"/> Do not evaluate if you have exercised within the past 24 hours, unless this is your usual routine</li> <li><input type="checkbox"/> Calculate and deliver BG bolus using your ezBG feature</li> <li><input type="checkbox"/> If BG drops below 70 mg/dL during evaluation, stop and treat low</li> <li><input type="checkbox"/> You may want to evaluate ISF at different times of the day</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Check BG prior to taking correction dose</li> <li><input type="checkbox"/> Check BG hourly for 4 hours</li> </ul>

### Example of ISF Bolus Evaluation Log

Day/Date: Tuesday, March 6 Event: Overnight ISF

	BG before correction dose	Hour 1	Hour 2	Hour 3	Hour 4
Time	12:00 am	1:00 am	2:00 am	3:00 am	4:00 am
BG	220	199	170	155	140
ISF/Target	1:50, 120				
Bolus Correction	2 units				

The example above indicates that the correction bolus is not enough since BG remains above target 4 hours after correction. An ISF of 45 might work better.

## Evaluating the Results

- If BG returns to target by 4 hours, your ISF is correct.
- If BG remains higher than target, your ISF needs to be decreased to give more bolus insulin.
- If BG becomes lower than target, your ISF needs to be increased to give less bolus insulin.

Adjust your ISF slowly. For example, if you use an ISF of 50 and your BG remains higher than target, try using an ISF of 45.

You may discover that you need a different ISF at different times of the day. You may also need more correction insulin than usual when you have very high BG (over 250 mg/dL), have ketones, or are ill. Many people choose to use a different ISF during bedtime hours to be more cautious with corrections when they are sleeping.

As with any insulin adjustment, check with your healthcare provider before changing your I:Cs or ISFs.

## Bolus Dose Evaluation Logs

Use the following charts to help you pull together information from your bolus dose evaluations.

### I:C Ratios

Day/Date: \_\_\_\_\_ Event: \_\_\_\_\_

	Before meal	Hour 1	Hour 2	Hour 3	Hour 4
Time					
BG					
Carbs					
Bolus					

Day/Date: \_\_\_\_\_ Event: \_\_\_\_\_

	Before meal	Hour 1	Hour 2	Hour 3	Hour 4
Time					
BG					
Carbs					
Bolus					

Day/Date: \_\_\_\_\_ Event: \_\_\_\_\_

	Before meal	Hour 1	Hour 2	Hour 3	Hour 4
Time					
BG					
Carbs					
Bolus					