Managing your blood glucose before surgery

When you have diabetes, managing your blood glucose is *always* important. But before surgery, it’s vital. This sheet tells you why—and explains what you can do to prepare for surgery.

**Why is my blood glucose so important right now?**

Studies show that people with well controlled blood glucose have fewer problems during and after surgery. But unfortunately, staying in control might not be so easy. Surgery can cause big problems in blood glucose levels—even if you normally have things under control. Here’s why:

- **Surgery is stressful.** Stress usually increases before, during, and after surgery. Beforehand, you’re probably a bit nervous. During and after surgery, your body is stressed, trying to heal itself. And unfortunately, stress makes your body release hormones that make it even more difficult than usual to regulate blood glucose.

- **You may go off your normal meal plan.** Often your doctor will give you special instructions about eating and drinking in the hours before surgery. And for a few days after, you might not eat normally either. Going away from your meal plan can cause changes in blood glucose levels.

- **Your medication routine may change.** Depending on what type you take, you may be told to stop taking your diabetes medications before surgery. Or you may need to switch to a different medication, or adjust your dose.

The stress and changes that surgery brings can push your blood glucose too high—or too low. Very high or low blood glucose can be dangerous at any time. But they’re especially risky when they happen during or after surgery. They can cause dangerous complications and slow your recovery.

*So to avoid problems, feel better, and get well faster—control your blood glucose.*
What should I do to prepare for surgery?
Use this checklist to help make sure your blood glucose stays in control before, during, and after your surgery.

Before you set a date for your surgery...
- Visit the doctor who takes care of your diabetes. Discuss how to get your diabetes in the best possible control in the weeks before your surgery. Can you fine-tune your treatment plan? Should you adjust your insulin before surgery? Your doctor can answer these questions—and may also want to do extra tests to check for problems that may affect you during surgery.

1 week before your surgery...
- Test your blood glucose before each meal and at bedtime, if you don't already. Most people with diabetes should aim for these target values:
  - My pre-meal target: 90 to 130 mg/dL or _________
  - My bedtime target: 100 to 140 mg/dL or _________
- Follow your diabetes treatment plan faithfully. It's even more important now.

1 day before your surgery...
- Continue to test your blood glucose before each meal and at bedtime—and write down the values. Your doctor may need to refer to these readings.
- Continue taking your oral diabetes medications. Take the same pill(s) at the same time as usual, unless your doctor tells you otherwise.
- Continue taking your insulin as usual, unless your doctor tells you otherwise.
- Don't eat or drink after midnight (12 AM). You can drink a few sips of water if you're thirsty.

The day of surgery...
- Stop taking your oral diabetes medications.
- Adjust your insulin according to the box at left.
- Check your blood glucose.
  - If it's low (less than 80 mg/dL), drink half a cup of clear soda (regular, not diet) or clear juice (apple, cranberry, or grape—not orange). Wait 15 minutes, then test again. If it's still low after two treatments, call the doctor who cares for your diabetes.
  - If it's high (more than 150 mg/dL), take a correction dose of rapid-acting insulin (use your correction or sliding scale). If you don't have one, call the doctor who cares for your diabetes.
- When you go in for surgery:
  - Bring your written blood glucose records with you.
  - Report your last blood glucose reading to the doctor or nurse.
  - Remind the doctor or nurse what you've done about your medications and your diet in the last few hours or days.

IF YOU TAKE INSULIN...

If you take insulin, take your regular dose up until the night before your surgery. On the day of surgery, you may need to switch to Lantus. Lantus is a long-acting insulin that can help meet your basic needs for insulin during surgery.

The doctor who cares for your diabetes can give you specific instructions for adjusting your insulin before surgery. If you don't receive specific instructions, follow these general guidelines for making the switch on the morning of surgery:

- If you already take Lantus, take it as prescribed, including the morning of surgery.
- If you use Ultralente, replace it with Lantus on the morning of surgery. The Lantus dose should be equal to the TOTAL amount of Ultralente you usually take in a day.
  
  For example:
  
  IF your usual daily dose of Ultralente is 10 units, 
  THEN INSTEAD take 10 units of Lantus on the morning of surgery.

- If you use NPH or Lente, replace it with Lantus on the morning of surgery. The dose of Lantus should be 80% of the TOTAL amount of NPH or Lente you usually take in a day.
  
  For example:
  
  IF your usual daily dose of NPH/Lente is 40 units, 
  THEN INSTEAD take 32 units of Lantus on the morning of surgery.

- If you use 70/30 or 75/25 insulin, replace it with Lantus on the morning of surgery. The dose of Lantus should be 60% of the TOTAL amount of 70/30 or 75/25 insulin you usually take in a day.
  
  For example:
  
  IF your usual daily dose of 70/30 or 75/25 is 50 units, 
  THEN INSTEAD take 30 units of Lantus on the morning of surgery.

- If you use an insulin pump:
  - On the morning of surgery, take a dose of Lantus equal to the TOTAL amount of basal insulin you usually take in a day.
  - One hour after you’ve taken this Lantus dose, remove your pump.

Call your doctor or pharmacist if you have any questions about adjusting your insulin.

Instructions from my doctor:

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