Blood Sugar Monitoring: Why and How

Checking your blood sugar regularly is very important. It gives vital information to you and your healthcare team to allow for better treatment decisions.

How many times you check a day will vary by what your healthcare team deems necessary, general suggestions are to check pre-meal and bedtime.

Speak to your healthcare team about situations which may affect the accuracy of your reading.

Injecting with a Vial and Syringe:
- If prescribed a clear insulin (rapid-acting or long-acting), do not use it if it looks cloudy
- If the insulin is a mixed insulin (70/30, 75/25, or NPH), it is supposed to be cloudy; mix it by rolling it back and forth between the palms of your hands
- Wash your hands with soap and water
- Wipe top of vial with alcohol swap swab
- Set syringe to desired insulin dose (air) and then inject the air into the vial (with the vial right side up)
- Once the air is injected, keep the needle in the vial, flip the vial upside down, then draw back to desired amount slowly to prevent air bubbles
- If air bubbles occur, push back into vial and try again
- If using 2 different types at the same time, discuss with your healthcare team about mixing insulin (not all insulins can be mixed, may decrease effectiveness)

Checking Your Blood Sugars:
- Follow the instructions in your meter start-up guide to set up your meter and lancet device.
- Always wash your hands before you check!
- Set the lancet device to a comfortable setting (the smaller the number, the smaller the blood drop) and prick the sides of your fingers.
- Place blood to the test strip
- Record your result

Injection Sites

You may use these sites for both syringes and pens.
- Make sure to rotate sites and do not stay in the same spot, since lumps may form from overuse
- Speak to your healthcare team about situations which may affect the accuracy of your reading

The pads have more nerve endings and may hurt more.
Not every insulin pen is the same. Please make sure to read the instructions carefully and have your health care team show you how to use it properly. Here are some general guidelines:

Wash your hands with soap and water
- Wipe top of pen with alcohol swab
- Attach pen needle
- Dial pen to 3 or 4 units (this is called priming the needle)
- Press and hold button
- Make sure that you see a stream of insulin come out of the needle; if not, repeat until you see insulin
- Dial returns to zero
- Dial to the dose of insulin you need
- Remove needle after injection (never leave needle on pen)

Note: If the insulin is a mix or NPH and cloudy in the pen, do the same as with a vial and mix it by rolling it in the palms of your hands.

How to Handle a Low Blood Sugar (Hypoglycemia)

Causes of low blood sugars:
- Too much insulin
- Smaller, delayed, or skipped meals (not enough carbs)
- Increased activity
- Alcohol

If your blood sugar < 70 mg/dl:
- “Rule of 15”: 15 grams of a fast acting carbohydrate and test your blood sugar again in 15 minutes; if not > 70 mg/dl, repeat process until above 70 mg/dl
- Call your healthcare team for any questions/concerns

How to Handle a High Blood Sugar (Hyperglycemia)

Causes of high blood sugars:
- Not enough insulin or medication
- Too many carbs
- Stress (physical or emotional)
If you are experiencing a high blood sugar, you should:
- Test your blood sugar every 2-4 hours
- Drink plenty of water
- Take your medication as prescribed
- Call your health care provider if your sugars continue to remain elevated

Think Safety!
- Always have a source of fast acting carbohydrates with you. Glucose tablets are an excellent choice
- Carry diabetes identification and always have your cell phone with you
- Mark down important numbers you may need in case of questions

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