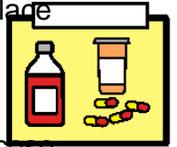


What a 13 year-old should know about diabetes

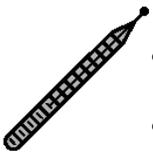
Self Care Tasks:

- Always make sure you have adequate medications and supplies – blood glucose meter with extra test strips, insulin, syringes , blood glucose tablets/gel, ketone testing strips, glucagon
- Bring your medications and supplies wherever you go!
- If there are still care tasks that you are unable to do on your own, now is the time to get comfortable doing those things for yourself – giving injections, mixing insulin, etc
- Know your medications and supplies – how much do you need, how to refill prescriptions, pharmacy information, etc
- Know where you will store your insulin and supplies – have a refrigerator available, safe place to dispose of medical sharps



Items you should always have on hand:

- Diabetes supplies – blood glucose meter with extra test strips, insulin, syringes, blood glucose tablets/gel, ketone testing strips, glucagon
- Medication for nausea/vomiting – Emetrol syrup or Ondasetron Oral-Dissolving Tablets (requires prescription)
- Medication for diarrhea – PeptoBismol or Imodium tablets (over the counter)
- Sport drinks and ginger ale – carb and low carb versions, dry powder or prepackaged



What to do if you get sick:

- Don't stop taking insulin! You will need at least some of your insulin, even if you are not eating, or vomiting.
- Alert someone that you are sick, and to stand by in case of an emergency
- Contact your primary care provider for problems unrelated to your blood sugar or insulin dose
- Check your blood sugar every 2-3 hours or even more frequently if vomiting.
- Check for ketones at least twice a day up to every 4 hours.
- If you are having nausea/vomiting/abdominal cramping:
 - Take medication for nausea/vomiting as prescribed
 - Wait 15 minutes and begin drinking sips of liquids
 - If blood sugar is over 180, use sugar-free liquids
 - If blood sugar is under 180, add some sugared beverages to replace normal carbs if you can't eat solids.
 - Work up to a total fluid intake of 16 ounces an hour
- If you are not urinating at least twice a day, you are becoming dehydrated, and need to increase fluid intake.
- Go to the emergency room if you can't retain liquids after 3 attempts.
- Most of the time you should take your usual amount of insulin even if you are unable to eat your usual meals, but call your endocrinologist if you have questions or concerns.
- If you are vomiting or your blood sugar is low, you may need to decrease your overall insulin
 - Begin by reducing or omitting your rapid acting insulin
 - If still low, reduce your long-acting insulin
 - If you are hypoglycemic and vomiting, low dose glucagon may help you get your blood sugar up, but going to the local emergency room is always an option.
- If you have difficulty breathing or become dizzy, have someone take you to the emergency room or call 911.
- If you have any questions or concerns about your insulin dose and adjustments, contact your diabetes team for advice.



Exercise and Diabetes

- Exercise is really important for everyone, diabetes or not.
- Regular exercise helps insulin work better and may even reduce the amount of insulin you need.
- However exercise can cause blood sugar to fall. There are two ways to avoid hypoglycemia related to exercise:
 - Eat extra carbs to cover the exercise.
 - You can either take extra carbs before you exercise or reduce your dose of insulin.
 - Reduce your insulin dose given before bed particularly after a big exercise day.
 - It's a good idea to check your blood sugar before bed on days when you have done a lot of exercise.
 - During exercise, have some quick acting carbs available.
 - Check your blood sugar before and after you exercise so you get to know how much your blood sugar is likely to change with different kinds of exercise.

What's an A1c?

The Hemoglobin A1C (now referred to as A1C) is a blood test that correlates with the average blood sugar over the past 3 months. Hemoglobin is the part of the red blood cell that carries oxygen from the lungs to the rest of the body. Sugar sticks to hemoglobin and stays there for the lifespan of the red blood cell - approximately 3-4 months. The amount of sugar that sticks to the hemoglobin reflects the average blood sugar level during that period. A1C can be measured at any time of day (whether you have just eaten or not). Often enough blood can be collected in the clinic by a finger prick if the equipment is available. The A1C should be measured every 3 months.

How does an A1C Reading translate into an average blood glucose?

Estimated Average Plasma Glucose (mg/dl) A1C (%)

298	12 %
269	11 %
240	10 %
212	9 %
183	8 %
154	7 %
126	6 %

This may not match the average on your meter as you may not be testing at times of day when your blood glucose is running higher or lower than usual. Try checking during the night or 2 hours after meals. Continuous glucose monitoring may help you uncover hidden peaks and valleys in glucose levels. Also if your meter is set to whole blood instead of plasma, your average bg will be lower than those above.

Target A1C is below 7% (if not 6.5%) for most adults. Discuss your individual A1C goal with your provider. It should be as close to normal without significant hypoglycemia.

Remember that there is research that indicates that though A1C is very important, that blood sugar variability can also contribute to complications. So you should try to get your A1C as low as you safely can, avoiding wide and frequent swings in your blood sugar levels.