

DRINKING, DRUGS and DIABETES* Do You Know?

While we don't recommend that you drink, smoke, or take drugs, we know that adolescence is a period where people often try new things, even risky ones. If you choose to experiment, we want you to know how to be safer as these substances relate to your health as a person with diabetes.

ALCOHOL AND DIABETES

As a person with T1D, your body handles alcohol differently than someone else's, which can be dangerous if you are not prepared, paying attention, and know what to look out for.

What happens in your body when you drink alcohol?

- Your body considers it a toxin and wants to get rid of it, so your liver starts working to break down the alcohol.
- Your liver stores sugar. So if you drink a moderate amount, your blood glucose can rise. But if you drink a lot, you have a much higher risk of having a severe low blood sugar because your liver is too busy breaking down the alcohol and can't raise your blood sugar for you.
- This risk of low blood sugars can continue for 24 hours after drinking—until your liver clears all the alcohol out of your body.

What's your risk?

You are at risk of severe lows if you are taking insulin or certain diabetes pills.

If you make the decision to drink alcohol, here are some tips to keep you safe:

- Wear your medical ID.
 - Use the buddy system – you don't have to tell everyone at the party you have diabetes, but make sure you drink with a friend who can look out for you, keep you safe, and knows what to do if you get low.
 - NEVER drink on an empty stomach. Eating a meal first will take the pressure off your liver.
 - Check your blood sugar frequently, including before your first drink.
 - Drink slowly (sips, not gulps!) and in moderation.
 - Keep track of how much you're drinking. Write it in your phone, on your arm, or wherever you'll remember.
 - Be mindful of interactions between prescription meds, alcohol, and insulin.
- Don't take extra insulin to cover carbs in drinking.***
- Stick to sugar-free mixers – club soda, diet tonic, seltzer, or water – and read the labels on unknown mixers to avoid ones with lots of sugar.
 - Eat a carbohydrate meal or a snack while drinking.
 - Be extra careful when you go to sleep that night. Check before going to bed and have a carb snack if you're below 130. Set an alarm to check blood sugar levels



during the night and to wake you up in the morning. Ask someone to check on you in the morning.

- Hung over? Throwing up? Not eating? You still need your insulin! If you have concerns, call your diabetes team.

Other Frequently Asked Questions:

What's considered one drink? *(Remember, it takes about 2 hours to break down one drink)*

5-ounces of wine

12-ounce beer - AKA a regular can or bottle (light or regular)

1.5 ounces of liquor - AKA a normal shot (vodka, whiskey, gin, etc.)

How can I tell the difference between being low and being drunk? And being low while drunk?

Being drunk and being low can look the same. And both conditions can severely impair your judgment as well as your ability to function. Intoxication, however, does not usually cause the "shaking/sweating/rapid heartbeat" associated with hypoglycemia. Unfortunately, drinking can actually suppress these symptoms. The only way to know for sure is to do a BG check. And it is certainly possible to be hypoglycemic and intoxicated at the same time. In fact, alcohol tends to reduce the liver's output of glucose hours after the alcohol is consumed, which can make blood sugar drop.



What will happen if I drink while I'm pregnant?

If a woman drinks while pregnant, her child could end up with permanent disabling physical or mental features. High blood sugars during pregnancy can also lead to problems for a developing baby. So it's important to avoid drinking and pay close attention to blood sugar levels while pregnant.

If I don't want to drink, how do I get out of it without embarrassing myself?

You might be hanging out with friends who do drink. If you don't want to, but you don't want to be embarrassed about it or draw attention to yourself, you can do a couple things:

- 1) Keep a non-alcohol beverage on hand. It can be easier to avoid being asked to drink if people see you have a drink in your hands. If you don't want them to know it isn't alcohol, pour it in a glass! No one will notice if you have a solo cup too.
- 2) Use your diabetes as an excuse: "Thanks, but with diabetes, I could pass out and really ruin the party."
- 3) Offer to be the designated driver (a lot of parties and clubs will even let you in free!).

NICOTINE, CIGARETTES, E-CIGARETTES, AND HOOKAH

You already know that smoking is a risky behavior for everyone, increasing long-term risks like gum disease, heart disease, and cancer, as well as short-term issues like impairing athletic performance, staining your teeth, and making your breath, fingers, and clothes smell.

If you have Type 1 Diabetes, smoking is even worse for you because of how the nicotine affects your body. It can make it harder for you to control your diabetes, leading to **high A1cs**. It can increase your **insulin resistance**, which means that your body needs more and more insulin to respond like it should. It also **speeds up nerve damage** that may already occur with diabetes. And it can **increase your risk** for other diabetes complications, including issues with your eyes, kidneys, and heart. Nicotine is found in *all* tobacco products, including e-cigarettes, vapes, and hookah, so those aren't any safer if you have diabetes.

Your body doesn't need nicotine. The best thing you can do to keep yourself safe with T1D is to avoid smoking or to cut back to no more than a few cigarettes a day. If you need help quitting or cutting back, talk to your doctor or diabetes team.

PRESCRIPTION MEDICATION

You may not think of prescription medicine as risky, but these are serious drugs that should only be taken under the supervision of a medical provider, and misusing or abusing them can have serious impacts on your health. In fact, in Utah prescription drug misuse kills more people than car accidents.

One especially risky type of prescription drug are **opioids**, which are prescribed to help with pain. Opioids can be especially dangerous for someone with diabetes for a few reasons: they are highly addictive, they can make it difficult to recognize high or low blood sugar or DKA, and can make it difficult to keep up your diabetes management plan, which can be very dangerous.

Here are some things to keep in mind to help you stay safe with prescribed medications:

- It is important to take the medications you need, in the right amounts, at the right times.
- Don't take more than prescribed – dosages are instructions, not suggestions.
- Don't take someone else's medication. If you are in enough pain to need a prescription pain pill, then you should go to the doctor to have your injury looked at first.
- Make sure your doctor knows you have diabetes and all the other medications you are on (like antidepressants and birth control) when he/she gives you a prescription. Ask how the new medication could affect your blood sugars or insulin needs.

ILLEGAL DRUGS

Marijuana



Like any other drug, marijuana is a mind-altering substance, which is to say, you act, think or feel differently on it. Different strains (types) of marijuana and different ways in which to consume it can also produce varying effects. While your reaction is individual, you should know the wide range of side effects that you could experience when under the influence of marijuana, including: relaxed, euphoric, sleepy, talkative, anxious, paranoid, thirsty, and hungry.

What does it mean for someone with Type 1 diabetes?

Apart from the basic considerations already mentioned, there are some things to consider when it comes to your Type 1 diabetes. As with alcohol, using marijuana can cause either high or low blood sugar. In high doses, marijuana can cause low blood sugar, but generally, high blood sugar is more of a risk because marijuana often stimulates a person's appetite, causing overeating. Marijuana can also produce apathy, which can upset your diabetes management plan, causing you to miss insulin doses, miscalculate doses, or forget to check your blood sugar.

Here are some additional pointers to keep in mind to stay safe if you are using marijuana:

- **Be aware of altered perception** – like alcohol, if you're under the influence of a mind-altering substance, you may not be able to recognize if you're feeling "low" or "high" in terms of your blood glucose levels. Know that your general perception may be inaccurate or faulty.
- **Check your blood glucose levels frequently** – because of altered perception, you should check your blood sugar at regular intervals to be sure you're in a safe range.
- **Keep your equipment nearby** – for your convenience and ability to test when needed
- **Bolus for "munchies"** – because hunger can be a side effect of marijuana, you may want to eat... a lot, so be sure to give yourself insulin for exactly what you plan to consume. (You know the drill.)
- **Don't forget "edible" carbs** – this may seem obvious, but while the forms of smoked or vaporized marijuana have no carbs, your edibles do. A "pot cookie" for example has the carbs that any other cookie would, so give yourself insulin accordingly.
- **Wear your medical alert bracelet.** In case something happens, it's important for emergency personnel to know you have diabetes.

Other illicit drugs (Cocaine, Molly, Meth, Acid, etc.)

Like marijuana, using other illicit or illegal drugs can be dangerous for your diabetes, causing your blood sugars to go high or low and also affecting your ability to manage your dia-

betes. Using drugs can affect your ability to accurately count carbs, take insulin, and gauge your blood sugar. Here are some tips to keep in mind:

- 1) **Know what you're taking.** There are tons of ways to figure this out, from asking a reliable person to searching the internet. You can punch in a description of the pill to see what it is, what it does, and what might happen to you because of your diabetes. Do not take something if you're unsure what it is.
- 2) **Make sure you're with someone sober who knows you have diabetes.** And make sure this person knows what you took.
- 3) **Take the drug in a controlled environment.** Know who is around, where you are, and that your car keys are locked up.
- 4) **Wear your medical alert bracelet.** If something happens, you want the emergency team to know you have diabetes. Emergencies can happen if you're using illicit drugs, and you want to be prepared when they do.

Specific drugs, and what taking them means for your diabetes

- **Hallucinogens** (including marijuana, mushrooms, and LSD)
 - o Generally leads to excessive calorie (and carb!) intake
 - o Altered mental capacity/euphoria
 - o Typically decreases physical activity
 - o Could lead to hypoglycemia unawareness
 - o Disorientation
 - o Sleepiness (so set alarms to make sure you check your blood sugar levels)
 - o Loss of motivation
- **Uppers** (including cocaine, crystal meth, and ecstasy/molly)
 - o They counter the regulatory hormones in your body, which may raise glucose levels
 - o Altered mental capacity that affects decision making
 - o Can decrease your appetite
 - o May lead to increased physical activity
 - o Could lead to hypoglycemia unawareness
 - o Can exacerbate cardiovascular disease (increased blood pressure)

***The staff of Intermountain Health Care, Primary Children's Diabetes Clinic, and the Stanford University School of Medicine do not endorse or encourage the consumption of alcohol for individuals under the legal drinking age of 21, or the consumption of any illegal drugs.**

Resources:

1. Alcohol and Diabetes (n. date). Barbara Davis Center for Diabetes: University of Colorado Anschutz Medical Campus.
2. <https://collegediabetesnetwork.org/content/touchy-topics#alcohol>
3. <http://www.upmc.com/patients-visitors/education/diabetes/Pages/smoking-anddiabetes.aspx>
4. <https://beyonddiabetes.org/marijuana-and-type-1-diabetes/>
5. <https://collegediabetesnetwork.org/content/touchy-topics#drugs>

