


Substances & Diabetes

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 Children with Diabetes®

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Everything seems to affect blood sugars, from food to exercise to stress, and substances are no exception. Some recreational substances, such as alcohol and marijuana have been well-studied, while others are less understood. Here's what the current research says about some of the more common substances and diabetes.

Tobacco

Smoking has an incredibly high-risk profile for someone living with diabetes. This is because smoking significantly increases the risk of cardiovascular disease – such as heart attack or stroke, kidney disease and eye disease, all of which are already risks when you have diabetes.¹ Smoking itself also raises blood sugar levels, increases your insulin resistance, raises blood pressure, causes inflammation throughout the body, and can cause nerve damage.

I hope you've already learned about how bad smoking is for you, but, honestly, there is no positive to smoking tobacco. It also makes you smell gross, your teeth yellow, you look aged prematurely, and can cause sexual dysfunction. There are also lung-related risks to inhaling the smoke and vaping. There has been a HUGE rise in vaping over the last few years, and just because it doesn't smell as bad, doesn't mean you're not at an increased risk for all of the things above-mentioned.

Then, there are the potential added risks related to the additives in the tobacco that's vaped and the vape pens themselves. Remember that huge recall from that fungus that was in popular vape pens? What a mess. Chewing tobacco still has the same effects on glucose as well, even though you're spitting it out when you're finished. Chewing also can cause a whole lot of issues with your mouth which can make it harder to eat and could have added BG challenges related to this as well.

Alcohol

Although most of diabetes education is focused on the pancreas, the liver is also very involved in blood sugar control. The liver is the body's gas tank, if you will, holding onto and creating extra glucose as fuel when the body needs it.² Since we are not constantly eating, this means that the liver is often putting its stored glucose out into our blood stream, which is why people with insulin-dependent diabetes need a basal (background) insulin.³

When you consume alcohol, the liver has to process the alcohol in the body and does not release the same amount of glucose that it usually puts out into the bloodstream. In someone without diabetes, their pancreas will simply back off making insulin during this time period. But given that our insulin comes from an injected or infused insulin, it doesn't automatically adjust. Pure alcohol, therefore, typically lowers blood sugars. But people usually drink beverages that contain carbohydrates and alcohol, complicating the blood sugar management.

Here are some quick tips to consuming alcohol safely with diabetes: (check out our handout [here](#))

- **Talk to your Healthcare Team.** Have a plan in place, ask questions and get tips.
- **Glucagon may not be as effective.** The liver can only do one thing at a time.
- **Wear medical identification.** Lows can look like you're drunk.

- **Know your drinks.** Carbs or no carbs? Bolus or not?
- **Educate your drinking buddies.** Safety net!
- **Eat a snack.** Helps you not throw up or go low.
- **Be prepared.** Have snacks, BG kit, etc.
- **Check BG often.** Have BG meter if you wear CGM, in case it's needed.
- **Exercise & Alcohol increase risk of lows.** Reduce insulin or add carbohydrates to avoid lows.
- **After the party take extra care.** Monitor often, set alarms to check BG if needed, have a big snack with fat and protein to protect from delayed lows.

When in doubt, take less insulin. What typically happens is that later in the night, once you reach a fasting state, your blood sugar will start to drop. This is why we recommend higher fat or protein for your snack to help carry you over until the morning. Oh, and you probably want to make sure you're hydrated or else you'll have an unpleasant hangover.

Marijuana

Marijuana is becoming less taboo and has been legalized in many parts of the United States, so there's no time like the present to learn about how it can affect diabetes! For most people with diabetes, in small doses, marijuana does not impact blood sugars directly. However, there are some challenges that go along with having the mind altered. Marijuana comes in many forms these days, and it's unclear if different types and strains have different effects on glucose levels. More studies are definitely needed!

Here are some key takeaways about risks associated with marijuana for people with diabetes:

- **The Munchies** can make you high when you're high. If your mind is altered, you may not take insulin properly for the carbs that you're eating. And, let's be honest, the snacks that you choose when you're munching are usually not carrots and hummus...
- **Increased Risk for DKA (ketoacidosis):** Recent data from the T1D Exchange showed that people with T1D who used marijuana recreationally were more likely to go into DKA.⁴ Everything in moderation, friends – and perhaps the safest way to enjoy marijuana recreationally is similar to consuming alcohol with regards to having support from people who know how to manage diabetes or at least keep you safe. (Ideally a sober person – especially if you're doing it for the first few times).
- **Cannabinoid Hyperemesis Syndrome:** – There is a syndrome that people can develop with chronic use of marijuana called Cannabis Hyperemesis Syndrome. This causes severe vomiting and can look like and even cause ketoacidosis in someone with diabetes.⁵ It's relatively rare, and typically occurs in people who use marijuana daily over a long period of time.

The potential positive side of using marijuana versus alcohol is that you do not have the risk of hypoglycemia. However, any substance when used in excess can be very dangerous, and those of us with diabetes have many added risks to consider. For example, the challenge of having a low blood sugar when you also have the munchies; make sure you bolus just thinking about this combination.

Psilocybin a.k.a. Magic Mushrooms

Psychedelic or Magic Mushrooms have become legalized in some parts of the U.S., so it will be important to know what effects it has on people with diabetes. Unfortunately, there is a complete lack of data on how psychedelic mushrooms affect blood glucose levels. One should assume that when consuming or using drugs that can significantly alter the mind, if you have diabetes you would need to take steps to stay safe (ideally having a sober companion).

There has been more research done in the last 5 years after a hiatus from research due to the criminalization of psychedelic drugs in the 1970's.⁶ Most recently, the field of psychiatry has been doing research on psilocybin and other psychedelic drugs on severe depression and other mental illnesses.⁷ It shows great promise for certain types of depression that are difficult to manage with medications.

Stimulants – Cocaine, Amphetamines, etc.

Drugs that are classified as stimulants tend to increase your energy level, which can also cause an increase heart rate and body temperature.⁸ These symptoms could mimic low blood sugar and increase anxiety. These types of drugs can have a multitude of effects on the body related to the way they are taken and direct effects on the body, depending on the drug. They also can cause a decrease in appetite, which could lead to low blood sugars.⁹

However, depending on how long you are taking the drugs and how intense the effects are, you are also at an increased risk for high blood sugars if you miss insulin doses. Considering that caffeine, a more mild and socially acceptable stimulant, can cause an increase in blood glucose levels for many people with diabetes, it is possible that other stimulants would have the same effects.

As usual, your diabetes may vary.

Everyone's diabetes so individual (yay?), making it hard to predict how these substances or others will affect your blood glucose levels. For many of us living with diabetes, we may avoid certain substances due to the demands of managing glucose levels and concern that if our mental status is too altered, we wouldn't be able to care for ourselves. I'd like to think this is a healthy fear that keeps us safe.

For those who are interested in consuming substances, I hope you have a good safety plan and a sober friend who you've trained in diabetes management – or maybe a more experienced friend with diabetes if you can find one. Consider the start small approach versus go big or go home, just to be safe. I should add that I am not encouraging anyone, with or without diabetes, to use substances.

And, if you want to say no to something, keep diabetes as a card in your back pocket. If someone's trying to be pushy about trying something, "No thanks, I have diabetes, I can't do it." Do you really think they'll know any different? It sure has worked for me a number of times. Just BYODC (Bring your own Diet Coke) and have fun in your own way. Cheers to using diabetes for good.

References:

1. [Smoking and Diabetes Don't Mix: 9 Reasons to Quit Smoking Now](#)
2. [The Liver & Blood Sugar](#)
3. [Basal Bolus Injection Regimen](#)
4. [Cannabis Use Is Associated With Increased Risk for Diabetic Ketoacidosis in Adults With Type 1 Diabetes: Findings From the T1D Exchange Clinic Registry](#)
5. [Differentiating Diabetic Ketoacidosis and Hyperglycemic Ketosis Due to Cannabis Hyperemesis Syndrome in Adults With Type 1 Diabetes](#)
6. [Psychedelic use and lower heart disease, diabetes risk: Is there a link?](#)
7. [Psychedelics could alleviate depression in the brain](#)
8. [DIABETES AND RECREATIONAL DRUGS](#)
9. [Cocaine and Diabetes](#)