Diabetes and Alcohol

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Recommended intake

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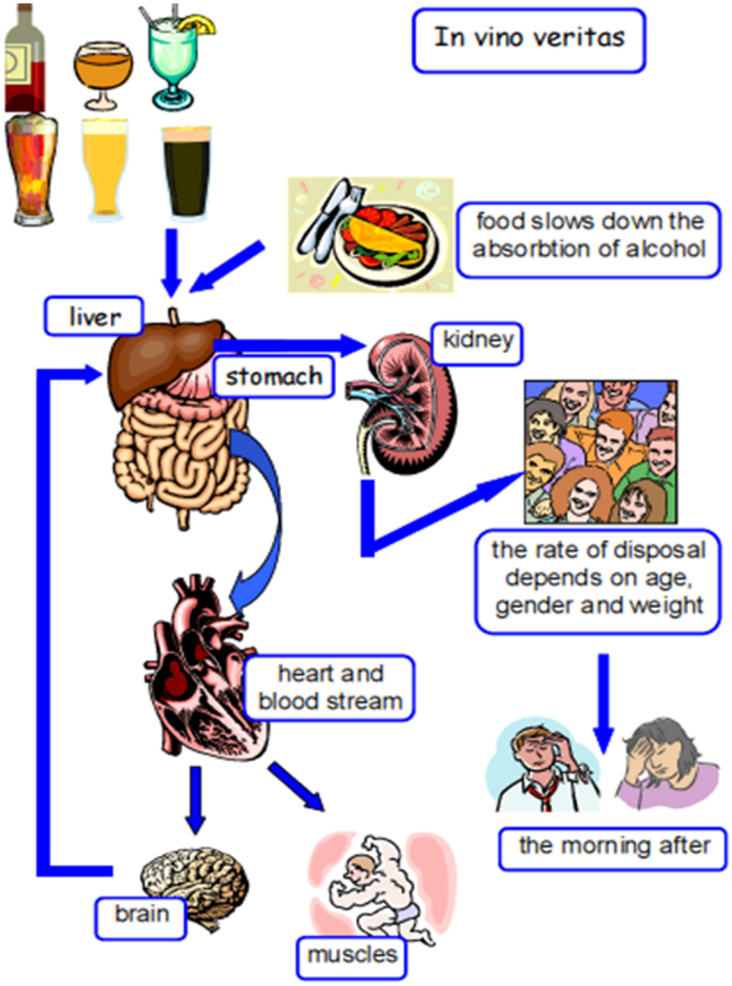
What alcohol does to the body

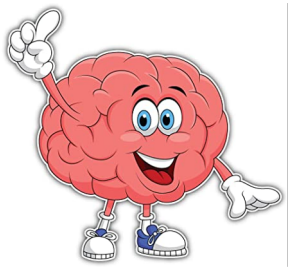
- Once ingested, alcohol begins to travel through your stomach and is mostly absorbed through the small intestine
- Our liver begins to breakdown the alcohol, on average this is around 1unit per hour (weight, gender, age, metabolic rate, alcohol type will all effect this)
- Our blood stream then distributes the alcohol to our organs effecting function of our brain, kidneys, lungs and liver.



Effects of alcohol

Brain:

The main effects we feel are from the brain. This effects mood changes, ability to make decisions, loss of coordination, slurred speech and vision changes



Kidneys:

When consuming alcohol we often need to wee more, this is because alcohol is a diuretic which in turn can cause us to become more dehydrated.

Liver:

Our liver gets busy with oxidising the alcohol to remove it from the body. This can be around 1 unit per hour. Because the liver is performing this task, it cannot perform other tasks that we want it to do for us. E.g. produce glucose and release it into the blood. Keeping this in mind is very important for people with diabetes.

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Carbs

Beer/cider

Around 18grams per pint

Beer/cider

Spirits

0-1gram per measure

Wine

4grams per 125ml serving

Alcopops

30-50grams per bottle

Insulin

Beer/cider

Beer/cider contains carbs therefor we need insulin to absorb that carbohydrate. Because of the risk of hypoglycemia with alcohol only give ½ bolus for the carbs.

Wine

Wine does not contain a lot of carbohydrates and therefore you should not need to bolus for this.

Spirits

Spirits contain very little carbs and therefore do not require a bolus. When drinking spirits its a good idea to occasionally mix this with a sugary drink or snack.

Alcopops

Alcopops can make managing glucose levels difficult while drinking due to the high sugar content. Try bolusing for ½ the amount of carbs and observe sharp rises and drops.

Calories

Beer

Beer/Cider/lager (1pint)
= 200-300 calories

Alcopops

Smirnoff Ice, WKD (275ml)
= 150-230 calories

Wine

Small glass of wine (125ml)
=100 calories

Wine, beer, cider, spirits and many other drinks are made from natural starches and sugars.

Alcohol contains 7 calories per gram which is almost as many as 1 gram of fat (9 calories).

Spirits

Gin/Vodka/Rum (25ml)
=50-70 calories

Careful - other calories can be in added via mixer drinks, such as cola or tonic water.

Size Matters

Remember if you are drinking at home instead of your usual favourite pub/bar etc

Your preferred choice of drinking vessel may hold much more alcohol
i.e. more carbs and calories than you think!




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Hypo's and alcohol

Usually the livers job is to convert the glycogen (the stored form of glucose) in your liver to glucose, helping to regulate your blood glucose levels.

Alcohol increases your chances of having a hypo, because the is liver busy with oxidising (getting rid of) the alcohol we have consumed. Therefore the natural glucagon release we usually have when our blood sugars drop **disappears**.

Which affects your blood glucose management putting you at risk of alcohol-induced hypos.

A hypo can look a lot like being drunk: drowsiness, unsteady movements, slurred speech, etc.

A severe hypo can lead to mental confusion, unconsciousness, or seizures, which can all be extremely dangerous to your physical well being and you ability to treat yourself.

Hypo’s and alcohol

Most alcoholic drinks will rise the blood glucose level at the point of drinking (sugars and carbs digested quickly) but if you have been drinking heavily then alcohol will likely drop the glucose levels over night (you liver helping to detox you). This is more likely to happen if you have insulin on board too which is removing your blood glucose faster than the glucose entering the blood.

Top tips for reducing hypos:

- General advice – consume around 0.5grams of carbohydrate per kg bodyweight without insulin e.g. a bed-time snack containing carbs
- Increase your target range while drinking either with temp basals/temp targets.
- Keep glucose handy in case you need it
- If you have access to libre/cgm – keep an eye on arrows to ensure your blood sugar is not falling to quickly.
- Test as regularly as you can, the test again, and again
- Try not to drink on an empty stomach

Dancing and Alcohol

Dancing is exercise, so remember that it can make your blood sugar levels drop.

If you're walking around from different venues this will all count too as it is aerobic exercise. This can lead to blood glucose levels decreasing.

Alcohol, insulin and exercise can increased the risk of delayed hypos (overnight).

Remember to talk to the people drinking with you about your diabetes – so they can spot the signs of hypos and help keep you safe.

Follow the top tips from earlier to help reduce your risk of overnight hypos. But also before going to sleep try to drink plenty of water to stay hydrated

Hypos and Alcohol

Other diabetes medications like sulphonylureas can also make you more likely to have a hypo.

The Morning After

- Drink plenty of water to stay hydrated
- Try to have breakfast it will help you manage your blood glucose level
- If you can't face any food try to drink fluid and sip on some sugary drinks if your blood glucose is low
- Hypos can feel similar to the symptoms of hypos, try to check your blood glucose levels regularly and correct if needed
- If you have a pump or on split dose insulin you might need to change your insulin dose depending on what your levels are.
- If you have been sick a lot, it can be possible to be in DKA with a normal blood glucose levels, so if you are worried, remember to check for ketones
- Talk to your healthcare team about what you should be doing.

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Glucagon

Glucagon is a hormone which, when injected into muscle, works quickly to raise glucose levels by telling the liver to get to work!

We are prescribed glucagon to treat severe hypo's.

Because our liver is already trying to break down the alcohol we have consumed, it cannot work on raising the blood sugar and therefor administering glucagon will be pointless

Reductions

MDI basal/bolus:

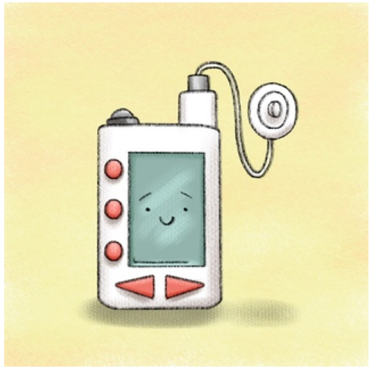
- Reduce boluses for carbs in your alcoholic drinks
- Consider reducing long acting insulin if taken at night by 10-20%

MDI BD:

- Consider reducing intermediate insulin by 10-20%

Pump:

- Reduce boluses for carbs in your alcoholic drinks
- Reduce basal by 10-20% overnight/ temp target



Correction doses:

- Reduce correction doses by at least 50%

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Staying safe

- Stay aware of hypoglycemia, especially overnight. This increased risk of hypos can last for up to 24hours
- ½ bolus for alcoholic drinks with higher carbs
- If possible, alternate alcoholic and non alcoholic drinks
- Try not to drink on an empty stomach
- Were possible, wear an ID band and ensure those who you are drinking with are aware you have diabetes
- Eat a carbohydrate snack before going to sleep (0.5g/kg/BW)
- If your on MDI - ensure you don't forget to give your long acting insulin
- Set an alarm to check your blood glucose in the morning (or ask someone to do it)
- If you use CGM, consider temporarily increasing your low alert