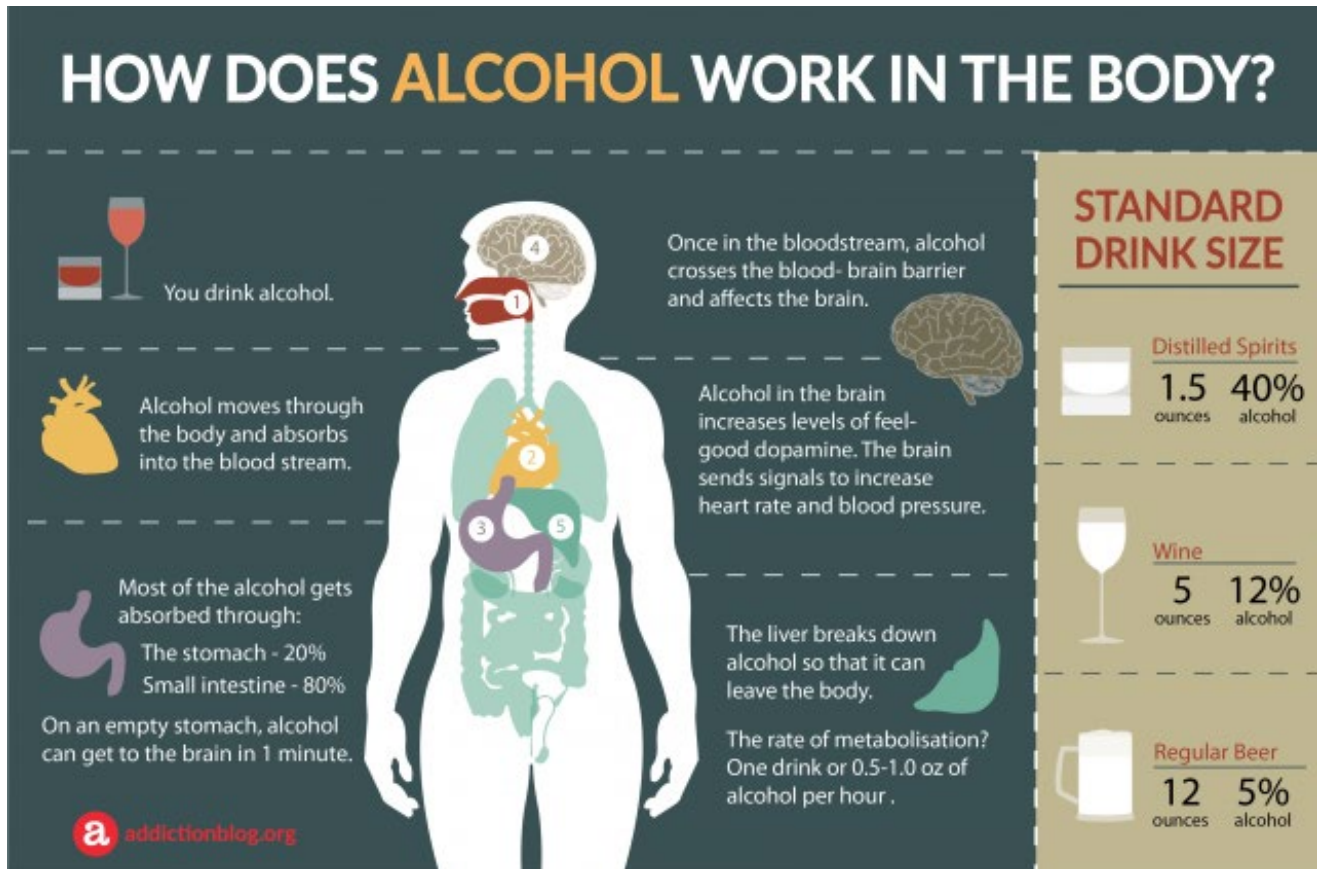


## ALCOHOL AND HYPERINSULINISM

In order to use alcohol wisely and safely, it is important to understand how your body handles it. Alcohol is absorbed very rapidly and requires no digestion. It is carried in the bloodstream to the liver, where it is processed (detoxified). The liver removes the alcohol from your system as fast as it can, but the process is slow. The liver can only remove the equivalent of one drink per hour. If you drink more than this, the alcohol builds up in the bloodstream, which leads to intoxication (drunkenness). Drinking slowly, diluting your drink with a mix, and eating are all ways to slow down the rapid absorption of alcohol.



[addictionblog.org/infographics/alcohol-in-the-body-from-drinking-to-elimination-infographic](http://addictionblog.org/infographics/alcohol-in-the-body-from-drinking-to-elimination-infographic)

Under normal conditions, blood glucose levels are not affected by moderate use of alcohol (1-2 drinks per week). However, if an alcoholic drink contains sugar or is mixed with a sugar-containing beverage, the blood glucose may be affected.

The greatest danger for someone with hyperinsulinism who drinks alcohol is the increased risk of developing hypoglycemia (low blood glucose). **This happens mainly because the liver cannot make new glucose while it is processing alcohol.** This prevents the body's normal protective mechanism from kicking in if the blood glucose level falls while you are drinking. The liver's ability to release glucose into the blood stream when you have not eaten for a while is an important protection against low blood glucose. Alcohol can have a delayed effect of lowering your blood glucose for up to 14 hours.

Knowing about the effects of alcohol and what to do if you are going to drink can help you make the right choices. Ideally, if you are under the age of 19, we do not recommend that you drink. The legal age for purchase and consumption of alcohol in BC is 19. Consider being the "designated driver"! If the blood glucose levels are well controlled, it is okay for an adult to have a moderate amount of alcohol (1-2 drinks per week). If you have any questions or need help planning for a special occasion, your doctor, nurse or dietitian is available to help you.

**Remember:** being responsible does not mean you cannot have a good time!

**TO DECREASE THE CHANCE OF LOW BLOOD GLUCOSE:**

- take food with alcohol, don't drink on an empty stomach
- do not replace food with alcohol
- set a limit
- have snacks if you are active
- take your medication as prescribed
- carry your back-up medication (diazoxide, octreotide, glucagon) with you in case you need a dose or you end up sleeping over at a friends

**GETTING READY/PLANNING YOUR NIGHT OUT**

**BEFORE YOU GO:**

- **Stick to your usual meal plan during the day.** Eating more or less during the day does not mean you can "save up" for the party. Remember your food/insulin balance.
- **Check your blood sugar prior to going out.** This helps you to figure out what snacks you will need for the evening.
- **Tell at least one person (friend), preferably a non-drinker, that you have hyperinsulinism and are at risk for low blood sugar.** Ensure they know what to do to treat a low blood sugar (juice, candy, or pop). If you cannot swallow, your friend needs to call an ambulance.

**WHAT TO BRING ALONG:**

- your glucose meter and extra medication
- medical identification (bracelet/necklace, wallet card) that says you have hyperinsulinism
- snacks (granola bar, crackers and cheese)
- fast-acting sugar (juice, glucose tablets, jelly beans, hard candy)

## AT THE PARTY

- **Choose a mix or drink that is sugar-free.**  
Diet pop, club soda, soda water, or tomato juice are some examples of sugar-free mixes. Sweet wines, liqueurs and regular mixes have lots of sugar in them and can cause your blood glucose to rise quickly. This, in turn, can cause your body to make more insulin and then drop your blood glucose quickly. If you are very active (e.g. dancing) you will need to consider the effects of the activity on your blood glucose levels and may need some extra long-acting carbohydrates as you would take to prevent a low blood glucose with activity.
- **Sip each drink slowly** (to stretch it out).  
Alternate each alcoholic drink with a non-alcoholic drink. This gives the body a chance to clear the alcohol out of your system. Try a wine spritzer ( $\frac{1}{2}$  wine,  $\frac{1}{2}$  soda water or diet ginger ale). Make your own drink, if possible, so you can control the amount of alcohol in it.
- **Never drink on an empty stomach.**  
Eating food with your drink slows down the alcohol absorption. Make sure to eat a carbohydrate containing snack (such as crackers or breadsticks), throughout the night and before bed.
- **Eat extra food for extra activity.**  
If you are active (dancing, skiing) you will use extra energy, so you need to eat extra carbohydrate-rich foods for each  $\frac{1}{2}$  hour of extra activity. Drink lots of water for rehydration if you are very active and sweating.
- **Watch for low blood glucose levels.**  
Low blood glucose and drunkenness can feel the same. The only way to be certain if you are low is to check your blood glucose. Glucagon will not work with excessive alcohol consumption.
- **Alcohol can add some extra calories to your meal plan.**  
Do not eat less food to make up for the extra calories. (This can lead to low blood glucose).

### **You don't want to drink too much, but if you do...**

...make sure someone stays with you who can help you check your blood glucose every 3-4 hours and help you decide what to do if your blood glucose is low. **Alcohol can have a relaxing effect and dull your judgement. Be sure to take your medication and meals/snacks on time.**  
If you are not careful, you could go unconscious!



## AFTER THE PARTY

### BEFORE YOU GO TO BED:

- **Check your blood glucose and have a snack.**  
Alcohol can cause unexpected changes in blood glucose levels. They may rise initially when drinking, and then may drop several hours later. (Alcohol has delayed effects on lowering blood glucose, even up to 14 hours after drinking). You must check your blood glucose regularly to know exactly what is going on. It is important to let someone at home know if you have had something to drink, so that they can be alert to signs of low blood glucose.
- **Set your alarm for the usual time.**  
Although it may be tough, it is important to take your medication (diazoxide, octreotide or other insulin blocking medication) and have breakfast, so that you feel good for the rest of the day.

### IN THE MORNING:

- **Wake up at your usual time**
- **Check your blood glucose**
- **Take your medication**
- **Eat breakfast**

If you are still tired you can go back to bed for a few hours. As tempting as it is to sleep in, not following this routine could be hazardous to your health.

#### ONE DRINK EQUALS:

- 45 mL (1½ oz.) hard liquor = 1 shot
- 360 mL (12 oz.) beer = 1 bottle/can
- 150 mL (5 oz.) wine = 1 glass

### FOR ADDITIONAL INFORMATION:

Diabetes Canada: [Alcohol & Diabetes](#)

\*\* (Although the above handout talks about diabetes, much of it also relates to hyperinsulinism)

MADD Canada: [madd.ca](http://madd.ca)