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ALCOHOL AND DIABETES

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 1 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.

Under normal conditions, blood sugar 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 sugar may be affected.

The greatest danger for someone with diabetes who drinks alcohol is the increased risk of developing hypoglycemia (low blood sugar). 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 sugar level falls while you are drinking. The liver's ability to release glucose into the blood stream when you haven't eaten for a while is an important protection against low blood sugar. Alcohol can have a delayed effect on lowering your blood sugar for up to 14 hours.

An interesting study (Turner BC et al, *Diabetes Care* 2001;24(11):1888–1893) showed that young men who drank the equivalent of 4 glasses of wine or 4 beers at 9:00 PM had low blood sugars that persisted until AFTER BREAKFAST THE FOLLOWING MORNING!

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 don't recommend that you drink. Consider being the "designated driver"! If the blood sugar 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 doesn't mean you can't have a good time!

TO DECREASE THE CHANCE OF LOW BLOOD SUGARS:

- take food with alcohol
- do not replace food with alcohol
- set a limit
- have snacks if you are active

GETTING READY/PLANNING YOUR NIGHT OUT

BEFORE YOU GO:

- **Stick to your usual meal plan during the day**. Eating less during the day doesn't 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 1 person (friend), preferably a non-drinker, that you have diabetes**, and what to do to treat a low blood sugar (juice, candy, or pop). If you can't swallow, your friend needs to call an ambulance.

WHAT TO BRING ALONG:

- your glucose meter
- identification (medical alert bracelet/necklace, wallet card) that says you have diabetes
- snacks (juice, raisins, crackers and cheese)
- fast-acting sugar (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).
  Sweet wines, liqueurs and regular mixes have lots of sugar in them and may be too much for your insulin to handle, unless you are very active (i.e. dancing).
- **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 (½ wine, ½ soda water or diet gingerale). Try to make your own drink, if possible, so that you can control the amount of alcohol in it.
- **Never drink on an empty stomach.**
  You need food to absorb the alcohol. 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 ½ hour of extra activity. Drink lots of water for rehydration if you are really active.
- **Watch for low blood sugars.**
  Low blood sugars and drunkenness can feel the same. The only way to be certain if you are low is to check your blood sugar. 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 sugars).

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 sugars every 3–4 hours and help you decide what to do if your blood sugars are low. Alcohol can have a relaxing effect and dull your judgement. Be sure to take your meals/snacks on time. If you are not careful, you could go unconscious!

AFTER THE PARTY

BEFORE YOU GO TO BED:

- **Check your blood sugar and have a snack**.
  Alcohol can cause unexpected changes in blood sugar levels. They may rise initially when drinking, and then may drop several hours later. (Alcohol has delayed effects on lowering blood sugars, even up to 14 hours after drinking). You must check your blood sugar 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 sugars.
- **Set your alarm for the usual time**.
  Although it may be tough, it is important to take your insulin and have breakfast, so that you'll feel good for the rest of the day.

IN THE MORNING:

- **Wake up at your usual time**
- **Check your blood sugar**
- **Take your insulin**
- **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 MORE INFORMATION:

Diabetes Canada: *Alcohol & Diabetes*
MADD Canada: madd.ca
Drinking with Diabetes: www.drinkingwithdiabetes.com