

Alcohol and Diabetes....

Know the Risks

Let's start with the take home message: →

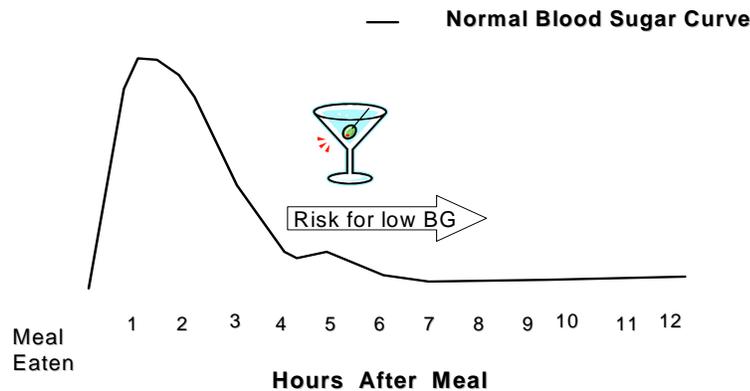
Drinking alcohol can lead to serious low blood sugar reactions

Drinking alcohol can lead to serious low blood sugar reactions if you take insulin or the types of diabetes pills that stimulate insulin production (Any diabetes pills that can cause low blood sugar.) Yet many adults with diabetes want to know if, and when, they can safely have that occasional drink.

It helps to understand a little bit about the human body and how things work, so here is some background information:

- When you eat carbohydrate foods (such as starches, fruit and milk) the foods digest and turn into *glucose*. This glucose is needed for the brain, tissues, and organs in your body to function properly. The blood sugar levels are typically at their highest peak about one to two hours after the meal. It takes about 4 hours to completely use or store the glucose from the previous meal.
- When there is glucose available after a meal, some of the glucose gets stored in the liver as *glycogen*, a storage form of glucose. The liver will release the stored glucose from the liver when there is no more available glucose from a meal. In other words, about 4 hours after a meal, the meal is gone and the liver must release its stored glucose to keep the brain, tissues and vital organs supplied with this essential fuel. The liver can even make new glucose if the glycogen stores are low. Making new glucose is called *gluconeogenesis*. The liver will take amino acids, the building blocks of proteins and muscles, and convert the amino acids into glucose if needed. The bottom line: the body must never run out of glucose.
- When alcohol is consumed it must be broken down into safer components. Alcohol is actually quite toxic as alcohol, so our bodies want to quickly break it down into safe byproducts. The liver is where alcohol is processed.
- When alcohol is being processed by the liver, the liver is no longer able to freely release glucose into the blood. The process of gluconeogenesis is greatly reduced. This is the key risk of drinking alcohol. Simply stated, if you have no carbohydrate foods digesting and providing glucose to the blood, then you are relying on your liver to make and release glucose. The liver can't make glucose effectively if it is busy detoxifying alcohol. With alcohol in your system, and the diabetes medications at work, the blood sugar can quickly drop.

Drinking alcohol on an empty stomach may lead to significant hypoglycemia



Other Safety Considerations:

- ✓ Alcohol can mask the symptoms of low blood sugar, so someone who has been drinking may not realize he/she is hypoglycemic.
- ✓ Drinking alcohol may impair good judgment and interfere with diabetes self management.
- ✓ Glucagon injections may not work effectively to raise the blood sugar since glucagon hormone stimulates the liver to release glucose and alcohol impairs that process.
- ✓ If a person passes out from low blood sugar, other people may suspect intoxication and may not know to seek appropriate medical attention.
- ✓ Each alcoholic beverage takes 1 - 1 ½ hours to finish processing in the liver. For that entire time the risk of low blood sugar exists. So, if you have 2 drinks, you double that time to 2 – 3 hours that you are at risk for low blood sugar. The more alcohol consumed, the bigger the risk for serious low blood sugar.
 - One Drink is considered
 - 4 ounces of wine
 - 12 ounces of beer
 - 1 ½ ounces of hard liquor (gin, vodka, rum, etc)

Never Drink Alcohol without having a carbohydrate meal or snack.

Health professionals recommend:

Women should not drink more than one drink in a day

Men should not drink more than two drinks in a day

Some individuals should not drink *any* alcohol (ask your medical provider)