

# Diabetes and Drinking



**Evan David Rosen, M.D., Ph.D.**

I am not going to preach to you about the perils of drink. I promise. I myself have been known to enjoy a cold one on a hot day, and I have rarely said "no" to a glass of wine offered in good company. The person with diabetes, however, should know a few things about the effects of alcohol that may save them some trouble, and possibly even save their life.

I am not being melodramatic when I say that moderation in alcohol ingestion may save a diabetic's life. Ethanol overdose is the leading cause of death due to low blood sugar in the United States. Even relatively small amounts of alcohol can cause hypoglycemia in people treated with insulin, sulfonylureas (e.g., Glucotrol, Micronase, Diabinese, Amaryl, and others), or repaglinide (Prandin). In one report from the 1960's, heavy drinking was found to be the culprit in the hypoglycemic deaths of two insulin-treated patients; three others suffered severe neurological damage. Drinking on an empty stomach increases the odds that things will not turn out well for patients with diabetes who drink heavily.

It is not clear how ethanol causes this problem, but it certainly involves reductions in the liver's ability to release sugar into the bloodstream. It may also be due in part to an increase in insulin secretion from the pancreas. Another problem is that the symptoms of mild intoxication are very similar to the symptoms of hypoglycemia, including lightheadedness and confusion.

In addition to low blood sugar, alcohol can cause other problems as well. For example, patients taking certain older sulfonylureas may find that alcohol causes their medication to be less effective. This is due to ethanol's ability to induce liver enzymes responsible for destroying drugs. People taking metformin (Glucophage) are prone to a serious condition called lactic acidosis. Alcohol also increases acid levels in the blood, which should make physicians wary about prescribing this compound to patients who imbibe heavily.

3. Drink slowly (two beers should last almost 2 hours).
4. Avoid drinks with high sugar content.
5. Have a glucose monitor handy.

If one follows these simple guidelines, it's unlikely that anything untoward will occur. For many patients, diabetes can be viewed as the excuse one needs to exercise good judgment and common sense in matters of eating, exercising, and smoking cessation. Alcohol consumption is clearly no different.

#### **REFERENCE**

White JR, Campbell RK. Dangerous and common drug interactions in patients with diabetes mellitus. *Endocrinology and Metabolism Clinics of North America* 29:789 (2000).