

## **James L. Holly, M.D.**

### **Alcohol in health and in hearth**

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**Your Life Your Health**

*The Examiner*

**November 19, 2009**

When my oldest granddaughter was young she could not say an “m” after an “s” and would always substitute an “n.” She often said, “You’re not every ‘snart’ if you ‘snoke.” I tell that to my patients and they laugh, whereupon I say, “Now, do you really think it is funny when someone tells you that you’re stupid?” Fortunately, today there is a social stigma to smoking which has helped many people quit who would not otherwise have done so. Sadly, that stigma is not as great today as it was a few years ago and, to the delight of the tobacco companies, there is a rise in the incidence of smoking among young people.

Sadly, there is not such a stigma in regard to alcohol consumption. Recently, I had occasion to tell my wife, “Even if I did not have personal religious convictions about avoiding alcohol, I would not drink because of the health implications of beverage alcohol.” I am personally shocked at how integral alcohol consumption is to social interactions in the United States. It is beyond my comprehension why people think that an opportunity to “get together” most often means an opportunity to drink alcohol at all and most often to drink it in excess. And, before you say, “I don’t drink in excess,” read on.” Furthermore, it amazes me that healthcare professionals regularly drink alcohol in excess without any negative social implications. In fact, most often, the negative social impact is upon those who choose not to drink rather than those who drink excessively.

### **How do you measure alcohol consumption?**

In a major study, published by the World Health Organization in 2004, entitled, “Global Report on Alcohol,” the following definitions of alcohol-drinking categories were identified:

- Category I: for females not exceeding on average 0 to 19.99 grams pure alcohol per day; for males not exceeding on average 0 to 39.99 grams pure alcohol per day;
- Category II: for females not exceeding on average 20 to 39.99 g pure alcohol per day; for males not exceeding on average 40 to 59.99 grams pure alcohol per day;
- Category III: for females on average 40 grams pure alcohol and above per day; for males on average 60 grams pure alcohol and above per day.

### **But, you ask, “How much alcohol is a ‘gram’?”**

A standard drink in the United States is equal to 13.7 grams (0.6 ounces) of pure alcohol or

- 12-ounces of beer.

- 8-ounces of malt liquor.
- 5-ounces of wine.
- 1.5-ounces or a “shot” of 80-proof distilled spirits or liquor (e.g., gin, rum, vodka, or whiskey).

Often, when taking a history, patients will say, “I don’t drink hard liquor; I only drink beer.” They say this thinking that drinking beer is safe. Is beer or wine safer to drink than liquor? The reality, as seen above, is that one 12-ounce beer has about the same amount of alcohol as one 5-ounce glass of wine, or 1.5-ounce shot of liquor. It is the amount of ethanol consumed that affects a person most, not the type of alcoholic drink.

### **What does moderate drinking mean?**

There is no one definition of moderate drinking, but generally the term is used to describe a lower risk pattern of drinking. According to the Dietary Guidelines for Americans, drinking in moderation is defined as having no more than 1 drink per day for women and no more than 2 drinks per day for men. This definition is referring to the amount consumed on any single day and is not intended as an average over several days.

The truth is that you cannot “save up” your daily allotment of alcohol consumption and then consume it in one day and pretend that you are not an excessive drinker and/or avoid the health consequences of excessive alcohol consumption. If you exceed the “moderate drinking level on any one day a week, you will reap the health consequences of excessive drinking.

All of the research on “protective” benefits of alcohol relate to a regular consumption of one alcoholic drinking every other day and also seems to indicate that any health benefit of alcohol consumption at this low level is predominantly found when alcohol is consumed with a meal.

### **Does alcohol consumption above the one drink every other day with meals and particularly excessive drinking even one day a week contribute to illness?**

Alcohol affects every organ in the body. It is a central nervous system depressant that is rapidly absorbed from the stomach and small intestine into the bloodstream. Alcohol is metabolized in the liver by enzymes; however, the liver can only metabolize a small amount of alcohol at a time (less than one ounce of alcohol a day), leaving the excess alcohol to circulate throughout the body. The intensity of the effect of alcohol on the body is directly related to the amount consumed.

Over 60 serious, life-threatening, and life-shortening illnesses are caused by or worsened by alcohol consumption. There has never been a study which suggests that the potential health benefit of alcohol consumption outweighs the potential risk of excessive alcohol use. A number of disease conditions are wholly attributable to alcohol. These include:

- alcoholic psychoses

- alcohol-dependence syndrome
- alcoholic polyneuropathy
- alcoholic cardiomyopathy
- alcoholic gastritis
- alcoholic liver cirrhosis

Alcohol can cause a number of different cancers:

- The risks of developing lip, tongue, throat, oesophagus and liver cancer increases proportionally with the amount of alcohol consumed.
- Even moderate alcohol consumption can cause breast cancer, according to recent research, and a series of studies confirm that the risk increases with the amount consumed.
- Evidence of a possible link with alcohol consumption is weaker for cancers of the stomach, prostate, colon, rectum and ovaries

Alcohol consumption, particularly heavy drinking occasions, can contribute to high blood pressure, abnormal heart rhythms, heart failure, and strokes. At low levels of consumption (less than 40g of pure alcohol per day) without heavy drinking occasions alcohol may protect against strokes, at least in women. This is equivalent to 3 small glasses of wine or 1 litre of beer per day. Above this limit, the risks of cardiovascular disease increase dramatically.

Alcohol is the main cause of liver cirrhosis in developed countries. However, in China and India, for instance, liver cirrhosis is mainly caused by other factors such as viral infections. The fraction of liver cirrhosis attributable to alcohol ranges from as low as 10% in China, up to 90% in Finland. It is very difficult to determine whether an individual's cirrhosis is induced by alcohol or by other unspecified causes, and a considerable proportion of deaths from cirrhosis in which alcohol is not mentioned may in fact be attributable to alcohol. Apparently the risk of liver cirrhosis mainly depends on the volume of alcohol consumed, but possibly also on heavy drinking occasions.

Alcohol appears to contribute to causing depression. Moreover, alcohol dependence and other mental conditions often go hand in hand, though the role of alcohol in these conditions remains unclear.

Who should not drink alcohol?

The current Dietary Guidelines for Americans specify that there are some people who should not drink alcoholic beverages at all, including

- Children and adolescents.
- Individuals of any age who cannot limit their drinking to low levels.
- Women who may become pregnant or who are pregnant.
- Individuals who plan to drive, operate machinery, or take part in other activities that require attention, skill, or coordination.

- Individuals taking prescription or over-the-counter medications that can interact with alcohol.
- Individuals with certain medical conditions.
- Persons recovering from alcoholism.

### **Is teenage or pre-teen drinking safe and legal?**

Studies have shown that alcohol use by youth and young adults increases the risk of both fatal and nonfatal injuries. Research has also shown that youth who use alcohol before age 15 are five times more likely to become alcohol dependent than adults who begin drinking at age 21. Other consequences of youth alcohol use include increased risky sexual behaviors, poor school performance, and increased risk of suicide and homicide.

Sadly, in the State of Texas it is not illegal for parents to serve alcohol to their pre-teen and teenage children. The conditions are, however, that the parents must give the alcohol to the child AND the parent must be in the room, in the presence of the child while they are drinking. It is criminal for any adult to give alcohol to any children not his/her own. Teenage alcohol use would be decreased significantly if parents who facilitate the drinking of alcohol by children other than their own were to be prosecuted to the fullest extent of the law and were given the harshest sentences possible under the law. Also, teen drinking would be significantly decreased if adults who facilitate children drinking were prosecuted and sentenced for negligent homicide, injury to a child and other applicable crimes when a child is killed or injured in an automobile accident caused by illegal alcohol by a minor.

Parents would do well NOT to allow their children to be supervised by other adults who have not formally given them assurances that they know, respect and intend to obey the laws concerning teenage drinking both in avoiding the active giving of alcohol to their children and/or to negligent allowing of alcohol to be obtained in their homes or while the child is in their care. Remember, it is illegal to allow a child under 21 to obtain alcohol. This crime is rarely reported and rarely punished which is a fact of shame for parents who avow to love and protect their children.

### **Conclusion**

It is sad that there is no social stigma to the consumption of beverage alcohol in the United States of America. It is sad that many who believe they are “social drinkers” or really beige and/or heavy drinkers. It is sad that many people don’t believe that beer is alcohol. There was a time when one was considered stylish or sophisticated to have a cigarette in hand or mouth. To a great deal that is now considered not to be “snart.” Now, it is considered stylish or sophisticated to have a “drink” – not a cold drink or juice – but an alcoholic beverage in your hand. That is sad.

It is a greater shame that few people are prosecuted for providing alcohol to teenagers who are not their own children. You cannot say that you love your child and provide them the tool (beverage alcohol) for the destruction of their mind and/or body. How sad

it was when I was told that in Pakistan, in order to buy alcohol you must prove that you are a Christian, as alcohol will not be sold to a Muslim.

If you don't want to have cancer, cirrhosis, heart disease, hypertension, depression or 60 other diseases, don't drink. Next time you give a party, see if your friends will come if you don't serve them alcohol. See how many will appreciate that you care about their health by not encouraging them or facilitating them not to destroy their health while "having a good time."

Remember, it is your life and it is your health. It is your responsibility to care for your health and not to harm the health of those you love.