

Woman's Worst Enemy

A Nutrition/Alcohol Presentation on the Effects of Alcohol on Women by **Ashley Rawls**, Beloit College



Abstract:

According to United States Health Surveys 10 to 15% of Americans are "alcoholic." That is "a chronic disorder characterized by dependence on alcohol and the repeated excessive use of alcoholic beverages". However, of all alcoholics it is estimated that only one-third (about 4.6 million) are female. Although the majority of alcoholics are male, studies show female alcoholics are much more likely to suffer alcohol-related damage with death rates 50 to 100% higher than those of male alcoholics. The increased development of liver disease such as cirrhosis and hepatitis, and an increased risk of breast cancer and menstrual disorders such as diminished fertility, all play a role in making alcohol such a deadly addiction for women around the world.

Introduction:

Throughout history, women have been culturally forbidden activities that were 'male', including drinking alcohol in large quantities. This stigma, although changing, still persists in modern culture. Of all alcoholics, 70% are male (4). Alcoholics are people who suffer from alcoholism, which is defined as "a chronic disorder characterized by dependence on alcohol, repeated excessive use of alcoholic beverages and the development of withdrawal symptoms on reducing or ceasing intake"(1). This addiction can be deadly to the human body, but which gender is likely to suffer the most from alcoholism? Conducted by Anne Tjonneland(5), a study on wine intake in 48,763 Danish men and women found that while 10% of the women in the study had an alcohol intake of less than 2.5 drinks per month, only 3% of men did. But, whether due to cultural stigmas or physical factors, women are less likely to drink alcohol and they are more likely to be physically and mentally harmed because of excessive drinking. Alcohol Alert states "studies of women alcoholics in treatment suggest that they often experience greater physiological impairment earlier in their drinking careers, despite having consumed less alcohol than men" (4). Data clearly indicate the dangers of over-drinking for women out-weigh those of men even though two-thirds of all alcoholics are men.

Method:

I looked at peer reviewed studies in nutritional journals and government websites for three categories of studies: 1) women who abstain from drinking alcohol, 2) women who had become alcoholics and 3) the acceleration and advancement of the problems directly related to increased alcohol consumption.

Results:

Major depression, post-traumatic stress disorder (PTSD), and eating disorders were significantly higher in women than in men (3). It has been shown that a daily alcohol ingestion of as low as two drinks per day increases the risk of developing cirrhosis in women, although at least four drinks per day are required to increase this risk in men (2). Women often experience "greater physiological impairment earlier in their drinking careers [than men]" (4).

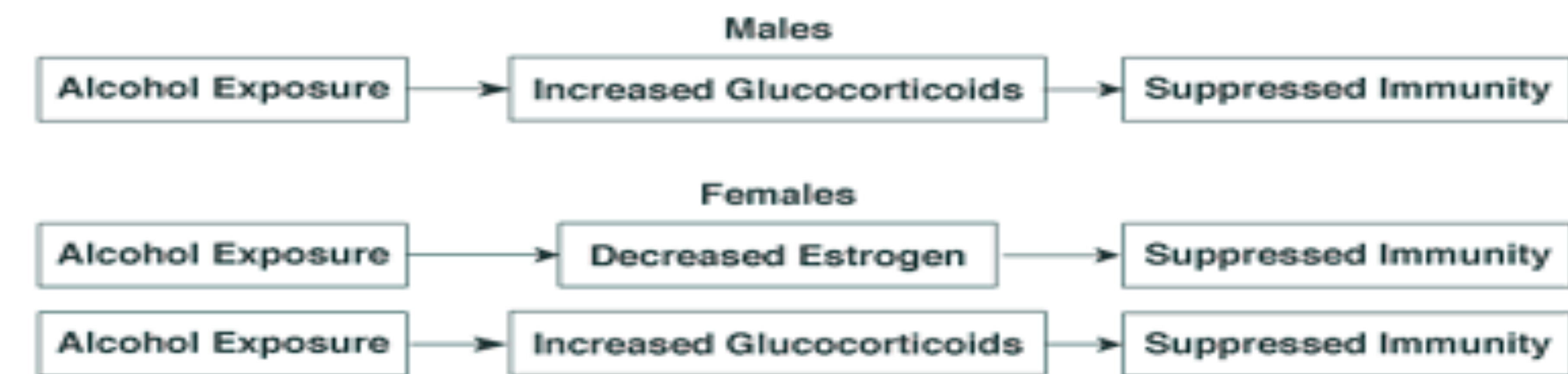


Figure 1: Alcohol suppresses immunity <http://pubs.niaaa.nih.gov/publications/arh26-4/257-263.htm>

Reasons women have a greater risk from alcohol:

Women must worry about the increased risk of breast cancer, liver disease, death, fertility problems, and Fetal Alcohol Syndrome. The reasons women are more significantly affected by alcohol than men is related to physical factors. They 1) "become intoxicated after drinking smaller quantities of alcohol" than men, 2) have a lower amount of total body water content, 3) have diminished activity of alcohol dehydrogenase, "the primary enzyme involved in the metabolism of alcohol, and 4) have "fluctuations in gonadal hormone levels during the menstrual cycle [that] may affect the rate of alcohol metabolism, making a woman more susceptible to elevated blood alcohol concentrations at different points in the cycle" (4).

Discussion:

At the beginning of this research I thought my thesis would be that men drink more often than women and therefore were more likely to be harmed by alcohol-related damage. But as I examined the published research I found that my hypothesis was substantially wrong. As Figure 1 shows, women who begin a lifestyle of alcoholism are much more likely than men to develop suppressed immune systems because women have two ways of developing it versus one for men. Because of physical and mental factors, women are more likely than men to be harmed emotionally and physically by the abuse of alcohol.

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