

*Talk It Up. Lock It Up!™* Column

The Link Between Alcohol and Cancer

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Answer: Mouth, Throat, Voice Box, Esophagus, Liver, Colorectal, Breast.

Question: What are the 7 types of cancer linked to alcohol use?

How many of us knew the answer to the question, or ever even considered that there is a link between alcohol use and cancer? According to the American Institute of Cancer Research, only 4 in 10 Americans recognize that alcohol use increases one's cancer risk. We may have heard that heavy alcohol consumption can cause liver cancer, but haven't we also heard that drinking red wine is healthy? How can this contradiction be explained?

We've been told that moderate alcohol consumption is associated with reduced risk of heart disease, and other health problems. However, a recent review of that research (often linked to alcohol industry funds) found study flaws and limitations which make a connection between moderate alcohol consumption and reduced risk of disease difficult to assess. In 2016, the U.S. Department of Health and Human Services removed language in its guidelines on alcohol consumption that said light drinking could lower the risk of heart disease for some people. In regards to cancer, there are few studies which have focused specifically on the association of red wine consumption and cancer risk, and clinical trials have *not* shown evidence that resveratrol, an antioxidant found in grapes, is effective in preventing cancer. In fact, since 1988, the World Health Organization has listed alcohol as a carcinogen in the same category as asbestos, hydrocarbons, formaldehyde, nitrosamines and radium.

Heavy alcohol consumption, defined as more than 3 standard alcohol beverages per day or more than 7 per week for women per day; and more than 4 drinks per day or 14 per week for men, has been found to be a risk factor for developing cancer. Those who consume more than 3 alcohol beverages per day have a two to three times greater risk of developing head and neck cancers than nondrinkers. Alcohol is also the second largest risk factor for the development of oral cancer. Even lower amounts of drinking can increase one's risk. A study in Australia found that women who drink moderately have a 200 times greater chance of developing colorectal cancer compared to those who abstain. Over 50 studies in the UK have also confirmed that alcohol consumption is a risk factor for developing breast cancer. It is not yet clearly understood why alcohol use is connected to breast cancer, but it appears to be partially linked to an increase in the production of female hormones. Additionally, alcohol breaks down into carcinogens such as acetaldehyde in the body. This chemical then causes genetic mutations and damages DNA, which can lead to the growth of cancerous cells. Researchers have also found that alcohol impairs the body's ability to break down and absorb vital nutrients, which may be associated with cancer risk.

In 2009, approximately 19,500 of all US cancer deaths were attributable to alcohol. Research indicates that *any* level of alcohol use increases the risk but the more alcohol one drinks, particularly over time, the greater the risk of developing cancer. Unfortunately, as evidence for this has increased, Americans' awareness of this link has gone down. However, as one of top preventable forms of cancer, we are not powerless. It's critical to recognize that how much we drink affects our cancer risk, especially if we have a genetic predisposition or other risk factors such as tobacco use, little exercise, and unhealthy eating

patterns. While we cannot change our genetic risk, the good news is that up to 45% of all cancer cases can be prevented through lifestyle changes, including reducing the amount that we drink. Talk it UP!