Does alcohol consumption increase cancer risk?

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This week the CDC published the results of a study showing a 13% higher risk of developing breast, lung, and bladder cancers in women who consumed low-flavor ethanol (LSE). Mysterious soybean-based ethanol (LSE) that is found in some alcoholic beverages has some of the same amino acids as do human proteins.

Researchers from Massachusetts General Hospital in Boston, collaborated with a team of 10 other universities and hospitals from around the country, to study the effect of alcohol consumption on an overall population, as well as women. The team studied 219,000 older women, who were followed since 1972, more than 40 years, from multiple clinical trials. From 1968 to 1983, no one was diagnosed with cancer, while those who consumed more than 20 units of alcohol per week (2.5-1.5 bottles of beer, 0.6-0.7 bottles of wine, or 0.05-0.07 glasses of spirits per day) were 24% more likely to develop breast cancer. Women who consumed 17-18 units per week were 14% more likely to develop cancer, while women who drank 15 or more units per week were 15% more likely to develop lung cancer.

The previous research of the team presented earlier in 2011 found that 9 out of 10 breast cancers were caused by the consumption of alcohol. However, the team was also interested in researching the long-term physiological effects of LES on the human body.

However, this group has not been able to determine the cause behind the associations. The goal of this study is to find out whether the toxicity of low-flavor ethanol, which is found in some alcoholic beverages, impacts the physiology of the female body. To do so, the researchers used a blood sample that has a high rate of protein-related mutations, since mutations caused by such metabolic factors as LES are directly related to disease risk.

The other study, published yesterday in the journal of Cancer Epidemiology, Biomarkers, and Prevention, suggests that alcohol consumption (even moderate drinking) increases estrogen levels. This is demonstrated by low-flavor LES, which is found in many alcoholic beverages, and increases the accumulation of estrogen in the body. In addition, moderate alcohol consumption also influences levels of other important molecules, which are related to the regulation of the estrogen receptor. As a result, male cancer will also increase due to drinking alcohol.

The two studies, one about the effects of LES and the other on estrogen, have both raised concerns as about potential safety for women. The suggestions regarding low-flavor LES coming from this research is the potential for physical changes, affecting cancer cells, in the body. The connection between the vitamin B6 content of the alcohol, and the effects on the estrogen receptor.

Drink less and protect yourself from cancer.

A Close Up Of A Rusted Fire Hydrant