

Alcohol and Cancer Risk

EN weighs in on whether it's still okay to say "cheers" or just skip it to reduce cancer risk.

Less than half of Americans are aware that alcohol can be a cancer risk, according to a 2015 survey by the American Institute for Cancer Research (AICR). Alcohol does increase the risk of at least six cancers, so limiting consumption is among the strategies that deserves a place in your cancer-prevention game plan. Let's address some common issues about alcohol and cancer risk.

Which Cancers are Affected by Alcohol?

Risk varies by type of cancer. Alcoholic drinks cause about 27 percent of cancers of the mouth, pharynx, and larynx (sometimes called the "voice box") and about 37 percent of esophageal cancers in the U.S. Alcohol is linked to a smaller proportion of colorectal and liver cancers, which are more strongly linked to influences like obesity, physical inactivity, low dietary fiber intake, and processed meat. Alcohol is linked to about 11 percent of U.S. breast cancer (in premenopausal and postmenopausal women). That means that after being physically active and maintaining a healthy weight, avoiding alcohol seems

one of the most powerful steps to lower risk of this common cancer. Emerging evidence suggests that alcohol may pose a risk for other cancers, too.

Alcohol as a Carcinogen. Alcohol itself (whether in distilled liquor, beer or wine) has been identified as a carcinogen. Moreover, as alcohol is broken down in the body, it forms a compound called acetaldehyde, another human carcinogen. The ability to damage the DNA in cells seems to be the main way that alcohol causes cancer in the mouth, digestive tract, and liver. Alcohol's breast cancer risk seems to involve its role in increasing estrogen and other hormones and growth factors in women. Alcohol also increases the ability of carcinogens from tobacco and other sources to get into cells and cause damage. Combined exposure to alcohol and tobacco dramatically raises the risk of mouth and throat cancers.

It's Not Just "Big Drinkers" at Risk. It's true that the greater the alcohol consumption, the greater the risk. For people who drink four or more standard alcoholic drinks daily (see "A Drink Defined"), risk of various cancers increases from 50 to 500 percent compared to nondrinkers. However, no threshold has been found at which alcohol consumption does not pose some cancer risk. Keeping alcohol to less than one or two drinks a day poses much less risk, but does not remove it.

In the British Million Women Study, one drink a day increased women's risk of breast cancer by 12 percent, with even three to six drinks weekly posing some risk. For some people, the increase in risk linked with such limited alcohol intake is acceptable within their overall value system. Yet for those who want to reduce risk as much as possible, this becomes worth consideration.

Red Wine in the Mediterranean Diet.

Red wine contains resveratrol and other polyphenol plant compounds, which in laboratory studies can reduce cancer development. Human studies, however, don't consistently show wine



Even moderate alcohol intake may raise cancer risk.

protecting against cancer. It's possible that the amounts of these compounds are too low to be protective within amounts that don't produce alcohol-related risk. Some studies link lower cancer risk with a Mediterranean-style diet, which traditionally includes low to moderate amounts of wine with meals. However, many choices within this overall plant-rich eating pattern are more likely sources of protection.





Alcohol and Your Heart. Some studies suggest light or moderate drinking may be heart-healthy. But [some researchers say] comparing heart disease risk in moderate drinkers to nondrinkers may give a false impression, since nondrinkers include those who don't drink because of health problems. If there is lower heart disease risk with light or moderate alcohol, it clearly disappears if that drinking involves binge drinking or amounts beyond two drinks per day.

The Bottom Line. For lowest cancer risk, avoiding alcohol is best. For those who choose to drink alcohol and don't have specific reasons to avoid it, cancer-prevention guidelines consistently recommend a limit of no more than two standard drinks per day for men, or one for women. Regular heavy drinking poses the greatest risk, and any reduction in alcohol consumption helps reduce cancer risk. [EN](#)

—Karen Collins, MS, RDN, CDN, FAND

A Drink Defined

In the United States, a standard alcoholic drink is defined as a portion that provides about 14 grams of ethanol. That means:

- ▶ 5 ounces of wine (12% alcohol) 
- ▶ 12 ounces of regular (5% alcohol) beer 
- ▶ 1.5 ounces of 80-proof liquor 
- ▶ 1 ounce of 100-proof liquor 

Watch out for portions and unique choices! As restaurants (and homes) have begun using larger wine glasses, one "glass" of wine may be more than one serving, and some types of wine are higher in alcohol content. A growing number of craft beers that are 8% to 10% alcohol (which would mean a smaller serving size equals one "drink") are becoming popular, as are larger bottle and glass sizes. Some mixed drinks also contain enough alcohol to be more than one standard drink.