
Even moderate drinking affects women's cancer risk

March 2009

Drinking just a glass of wine a day increases women's risk of breast cancer, as well as several other types of the disease, a new study concludes. The research, carried out among more than a million UK women, says that alcohol accounts for 5,000 cases of breast cancer every year.

What do we know already?

Many of us enjoy relaxing with a glass of wine at the end of the day. But it's an unpalatable fact that alcohol can damage your health, especially when you look at alcohol's links to some types of cancer. It's easy to dismiss these stories as health scares, only relevant to heavy drinkers. But evidence is mounting that even moderate drinkers have an increased cancer risk.

Now researchers have examined the results from a very big study of women aged around 55, to see exactly how the amount of alcohol they drank related to their risk of getting different types of cancer. The women were recruited when they attended breast cancer screening and followed for the next 7 to 8 years, to see if they were diagnosed with any type of cancer.

What does the new study say?

Compared to women who said they drank only 1 or 2 units of alcohol a week, women who regularly drank the equivalent of 1 unit a day had an increased risk of getting seven types of cancer: breast, liver, rectum (part of the bowel), mouth, pharynx (a space at the back of the mouth), oesophagus (the tube that takes food from the mouth to the stomach) and larynx (voicebox).

The risk was most increased for breast cancer. In developed countries like the UK, the chances of having had breast cancer by the

age of 75 is 9.5 in 100. According to the study, for every extra daily unit of alcohol (over 2 a week), that risk increases by 1.1 per 100. So if you had a roughly 9.5 percent chance of getting breast cancer by the age of 75, but you drank one glass of wine a day, that risk would go up to 10.6 percent. If you drank two glasses of wine a day, that would increase to 11.7 percent.

These might sound like quite small increases in risk. But because many women drink alcohol at these sorts of levels, it means a lot of women are affected overall. The researchers estimate that alcohol accounts for 11 percent of all breast cancers in the UK. That means that every year, 5,000 women get breast cancer who wouldn't have got it without drinking alcohol.

Tell me more about the study's findings

The risk for cancers of the mouth, oesophagus, pharynx and larynx only increased for women who also smoked. Researchers think that alcohol may dissolve some of the toxins in cigarette smoke, making drinking and smoking together more risky than doing either alone. There was no increased risk of these cancers for women who drank alcohol but didn't smoke.

The increased risks for rectum and liver cancer were relatively small, with an increased risk of 1 per 1000 and 0.7 per 1000 respectively.

Most of the women in the study were moderate drinkers. A quarter didn't drink at all, and of those who drank, only 2 percent drank more than 21 units a week. The average woman in the study who drank alcohol had 7 units a week, or about 1 drink a day. That reflects previous studies of women in this age group (the average age was 55 at the start of the study).

How reliable are the findings?

The findings are likely to be fairly reliable. The study followed 1.28 million women, for an average 7 years. The women filled in questionnaires at the start of the study, and then again 3 years later, saying how much alcohol they drank. The researchers were also able to take account of other things that affect women's cancer risk, such as whether they'd taken the contraceptive pill, HRT, whether they smoked or took exercise, and how much they weighed.

The researchers didn't use the women who drank no alcohol at all as their comparison group. That's because women who don't drink at all may have quit alcohol because of serious health problems. So they're not a healthy group to compare to. Instead, the researchers used women who drank only one or two alcoholic drinks a week as their comparison group. That's likely to make the results more reliable.

Where does the study come from?

The study was done by the Cancer Epidemiology Unit at the University of Oxford. It was published in the Journal of the National Cancer Institute and published by Oxford University Press. It was funded by Cancer Research UK, the UK Medical Research Council, and the NHS breast screening programme.

What does this mean for me?

Just about everything we do has risks. We can't avoid risks altogether, but knowing about them can help us make decisions we are comfortable with. It's been clear for some time that alcohol is a factor in women's risk of getting cancer, especially breast cancer. This latest study puts some figures on that increased risk. You may find that this helps you decide whether you are happy with the amount of alcohol you drink.

What should I do now?

It helps to know how much you're drinking. One unit is 10 millilitres (ml) or 8 grams of pure alcohol, which is the amount of pure alcohol in a 25 ml single measure of spirits (ABV 40%), a third of a pint of beer (ABV 5%-6%) or half a standard (175 ml) glass of red wine (ABV 12%).

The government's recommendations are not to drink more than 2 to 3 units a day for women or 3 to 4 a day for men

From: Allen NE, Beral V, Casabonne D, et al.
Moderate alcohol intake and cancer incidence in women. J Natl Cancer Inst. 2009; 101: 296-305.
