Breast cancer is by far the most prevalent and one of the most lethal cancers for women in the UK.\(^1\) It affects around 1 in 8 women in the UK during their lifetime, and was diagnosed in nearly 50,000 women in 2011\(^2\) and caused the death of over 11,000 in 2012.\(^3\)

Why does drinking alcohol increase breast cancer risk?

The exact causal mechanism between alcohol and breast cancer is not fully known – but it is likely due to the way alcohol breaks down into toxic chemicals in our body and increases the production of the female hormone oestrogen.\(^4\)

Drinking moderate amounts of alcohol has been linked with increased levels of oestrogen in the blood.\(^5\) Breast cells are particularly sensitive to oestrogen, and when exposed to higher-than-normal amounts may become cancerous.

Alcohol also breaks down into the carcinogenic compound ‘acetaldehyde’ inside the body. This substance causes genetic mutations and permanently damages DNA, which can trigger a response in the body leading to the development of cancerous cells.\(^6\)

Choice of Drink

The risk is not affected by the choice of drink.\(^7\) The crucial factor is the strength of the alcohol and the number of drinks consumed. Drinking a higher quantity or stronger alcohol directly impacts on the risk of developing breast cancer.\(^8\)

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Alcohol consumption increases risk of developing breast cancer

Alcohol has long been known to have carcinogenic (cancer-causing) properties, and more than 50 studies have confirmed alcohol is a particular risk factor in the development of breast cancer. 6% of female breast cancer cases in the UK in 2010 were attributable to alcohol consumption.\(^11\)

Consuming large amounts of alcohol or drinking on a daily basis increases the risk. Each drink per day increases the risk in women of developing breast cancer by between 7% - 12%.\(^12\)

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How can I reduce this risk?

There is no definite evidence that women who stop drinking altogether reduce their risk of developing breast cancer. However limiting alcohol intake may reduce the risk – given that drinking more alcohol does increase it.

While the NHS recommends women should not regularly drink more than 2-3 units of alcohol a day, it is important to remember there is no ‘safe’ level of alcohol consumption. Drinking just two drinks a day still increases the risk of developing breast cancer by roughly 18%.

If alcohol consumption was reduced to a very low level – less than one unit a week – an estimated 6% of breast cancer cases could be prevented. Sticking to government guidelines of alcohol consumption is a reliable way of minimising alcohol-related health risks.

References

8 N E Allen et al, “Moderate alcohol intake and cancer incidence in women”, Journal of the National Cancer Institute, (March 2009), Vol 101 No 5, pp. 296 - 305

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