

The facts about...

Alcohol and **cancer**

**Five key
things you
need to
know**

for the facts
drinkaware.co.uk

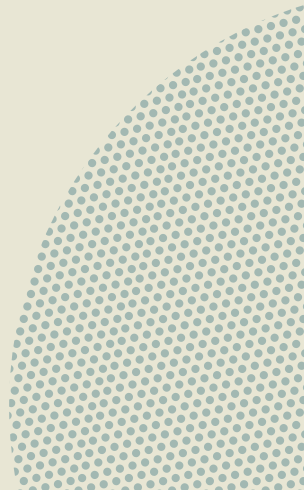
Unfortunately, the consequences of drinking too much alcohol can be far worse than a nasty hangover and hazy memories of bad dancing and inappropriate comments.

Regularly drinking to excess can increase your risk of serious illnesses, such as cancer.

In the UK, one in three people will develop cancer at some point in their lives. Alcohol causes around 4% of cancer cases in the UK every year - that's around 12,500 cases.¹

Of course, not everyone who drinks will get cancer. But scientists have found that cancer is more common in people who drink alcohol than those who don't.

¹ Cancer Research UK website, Alcohol and cancer. Available at <http://www.cancerresearchuk.org/cancer-info/healthyliving/alcohol/>



1

Alcohol can cause seven types of cancer

Drinking alcohol can increase your risk of:²

- **liver cancer**
- **bowel cancer**
- **breast cancer**
- **mouth cancer**
- **pharyngeal cancer (upper throat)**
- **oesophageal cancer (food pipe)**
- **laryngeal cancer (voice box)**

The cancers most associated with drinking alcohol are of the liver and bowel.

Around half a million people worldwide die from liver cancer every year³. Heavy drinking can cause cirrhosis of the liver (where damage to the liver causes scar tissues to build up) which can then lead to cancer.⁴

Recent studies have shown that even small amounts of alcohol can increase the risk of bowel cancer. An ongoing study of 500,000 people in 10 European countries has found that for every two units drunk a day, your risk of bowel cancer goes up by 8%.⁵

² Cancer Research UK website, Alcohol and cancer. Available at <http://www.cancerresearchuk.org/cancer-info/healthyliving/alcohol/>

³ McKillop, I, Schrum, L 2005, 'Alcohol and liver cancer', 2005, Alcohol, vol. 35, no. 3, pp. 195-203.

⁴ Cancer Research UK website, Liver cancer key facts. Available at <http://www.cancerresearchuk.org/cancer-info/cancerstats/keyfacts/liver/>

⁵ Ferrari et al 2007, 'Lifetime and baseline alcohol intake and risk of colon and rectal cancers in the European prospective investigation into cancer and nutrition (EPIC)', International Journal of Cancer, vol. 121, issue 9, pp. 2065-2072.

2

A few theories on why alcohol can cause cancer

Scientists don't know exactly why alcohol increases the risk of developing cancer. But here are some of the potential reasons:⁶

Acetaldehyde

When you drink, the alcohol in your body is converted into a toxic chemical called acetaldehyde. This can damage your DNA and stop your cells from repairing that damage, which can lead to cancer.

Oestrogen and other hormones

Alcohol can increase the levels of some hormones, such as oestrogen, testosterone and insulin. The risk of some forms of breast cancer, for example, can be increased when there are unusually high levels of oestrogen.

Liver cirrhosis

Cirrhosis of the liver, a result of heavy drinking, makes you more vulnerable to liver cancer.

Folate

Alcohol drinkers tend to have lower levels of folate, an important vitamin that helps our cells produce new DNA correctly. Some studies have found that cancer is more common in people with low levels of folate in their blood.



3

Drinking + smoking = greater risk of cancer

Throw cigarettes into the mix when you're drinking and you increase the damage caused to your body's cells.

Smoking and drinking together greatly increases your risk of developing throat and mouth cancer than doing either on their own. That's because when you drink alcohol it's easier for the mouth and throat to absorb the chemicals in tobacco that cause cancer. Studies have found that, on average, people who smoke and drink are up to 50 times more likely to get some types of cancer than people who neither smoke nor drink.⁷

It's true with oesophageal (gullet) cancer. One study found that people who drank up to five units of alcohol and smoked up to eight cigarettes per day could increase their risk of oesophageal cancer between 13 (for men) and 19 times (for women).⁸

⁶ Cancer Research UK website, How does alcohol cause cancer? Available at <http://info.cancerresearchuk.org/healthyliving/alcohol/howdoesalcoholcausecancer/how-does-alcohol-cause-cancer>

⁷ Cancer Research UK website, Alcohol and cancer. Available at <http://www.cancerresearchuk.org/cancer-info/healthyliving/alcohol/>

⁸ Castellsagué X, Muñoz N, De Stefani E, Victora CG, Castelletto R, Rolón PA, Quintana MJ. 1999, 'Independent and joint effects of tobacco smoking and alcohol drinking on the risk of esophageal cancer in men and women', International Journal of Cancer, vol. 82 no. 5, pp. 657-664.



4

Alcohol can increase the risk of cancer

There are lots of debates about low levels of certain alcohol being good for us, such as red wine. However, it's the alcohol itself that does the damage to our bodies and increases our risk of diseases such as cancer. It doesn't matter what form alcohol comes in: beer, wine, or spirits, they all put our long-term health at risk.

The more you cut down on alcohol, the more you reduce your risk of developing cancer⁹. Heavy drinking also causes: heart disease, stroke, high blood pressure, stomach ulcers, pancreatitis and, of course, injuries.

But there is some good news. Cut down on alcohol and the risk of developing cancer recedes quickly. A study has shown that the risk of mouth and oesophageal cancers drops dramatically in heavy drinkers who stop drinking.¹⁰

⁹ Cancer Research UK website, Alcohol and cancer. Available at <http://www.cancerresearchuk.org/cancer-info/healthyliving/alcohol/>

¹⁰ Hashibe et al 2007, 'Alcohol drinking in never users of tobacco, cigarette smoking in never drinkers, and the risk of head and neck cancer: pooled analysis in the International Head and Neck Cancer Epidemiology Consortium', *Journal of the National Cancer Institute*, 99(10), pp.777-789.

5

If you want to stay healthy, you need to exercise and eat well too

Along with cutting down on the amount you drink, eating well and exercising are key to staying healthy. Eating at least five portions a day of fresh fruit and vegetables can have a protective effect against cancer, especially mouth, throat, stomach and lung cancers. Just 30 minutes of moderate activity a day, five days a week, can have a positive effect on your health. And the more active you are, the more you can reduce your risk of cancer.^{11,12}

- **Every year, alcohol causes around 4% of cancer cases in the UK, about 12,500 cases.**¹³
- **Million Women Study, involving 1.3 million women across the UK, showed that the relative risk of breast cancer [the chance of one group developing breast cancer, compared to another] increases by 7.1% for each 10 grams of alcohol you drink, slightly over a unit of alcohol a day.**¹⁴
www.millionwomenstudy.org.uk



¹¹ Friedenreich et al 2006, 'Physical activity and risk of colon and rectal cancers in the European prospective investigation into cancer and nutrition', *Cancer Epidemiology Biomarkers Prevention*, vol. 15, no. 12, pp. 2398-2407.

¹² Howard et al 2008, 'Physical activity, sedentary behaviour, and the risk of colon and rectal cancer in the NIH-AARP Diet and Health Study', *Cancer Causes Control*, vol. 19, no. 9, pp. 939-953.

¹³ Cancer Research UK website, Alcohol and cancer. Available at <http://www.cancerresearchuk.org/cancer-info/healthyliving/alcohol/>

¹⁴ The Million Women Study website, Study progress. Available at http://www.millionwomenstudy.org/study_progress/

Staying in control

The government advises that people should not regularly drink more than the daily unit guidelines of 3–4 units of alcohol for men (equivalent to a pint and a half of 4% beer) and 2–3 units of alcohol for women (equivalent to a 175 ml glass of 13% wine). 'Regularly' means drinking every day or most days of the week.



Here are three ways you can cut back and keep your drinking under control:

A Keep track of what you're drinking.

Your liver can't tell you if you're drinking too much, but the MyDrinkaware drinks calculator can. It can even help you cut down. Visit [drinkaware.co.uk](https://www.drinkaware.co.uk)

B Know your strength.

Alcoholic drinks labels will have the abbreviation "ABV" which stands for Alcohol By Volume, or sometimes just the word "vol". It shows the percentage of your drink that's pure alcohol. This can vary a lot. For example, some ales are 3.5%, some stronger lagers can be as much as 6% ABV. This means that just one pint of strong lager can be more than three units of alcohol, so you need to keep your eye on what you're drinking.

C Give alcohol-free days a go.

Many medical experts recommend taking regular days off from drinking to ensure you don't become addicted to alcohol.

We've got the answers at **drinkaware.co.uk**

Advice

The government advises that people should not regularly drink more than the daily unit guidelines of 3-4 units of alcohol for men (equivalent to a pint and a half of 4% beer) and 2-3 units of alcohol for women (equivalent to a 175 ml glass of 13% wine). 'Regularly' means drinking every day or most days of the week.

Other useful contacts

For the facts on alcohol and to keep track of your units through our MyDrinkaware tool, visit the Drinkaware website drinkaware.co.uk

Your GP can help you figure out if you should make any changes to your drinking, and offer help and advice.

If you're concerned about someone's drinking, or your own, Drinkline runs a free, confidential helpline. Call 0800 917 8282.

For advice on cancer-related issues, visit www.cancerresearchuk.org or call 0808 800 4040 (freephone) to speak to a cancer information nurse. This helpline is available from 9am–5pm, Monday–Friday.

for the facts
drinkaware.co.uk

