

Alcohol and cancer



Key Messages

- Drinking alcohol increases the risk of many cancers including breast cancer, bowel cancer and cancers of the liver and upper digestive tract (mouth, throat, larynx and oesophagus).
- In terms of cancer risk, there is no safe level of alcohol intake. Even having one or two drinks a day is enough to increase the risk of certain cancers. The more alcohol consumed, the greater the risk.
- Cutting down on drinking, particularly binge drinking, is a good way to reduce cancer risk and improve overall health.
- The Cancer Society recommends people drink at or below the levels recommended by ALAC and the Ministry of Health: no more than 21 standard drinks for men and no more than 14 standard drinks for women per week, and on any one drinking occasion no more than 6 standard drinks for men or 4 standard drinks for women.

Alcohol is one of the most well established causes of cancer

International research shows that drinking alcohol increases the risk of many cancers including breast cancer, bowel cancer and cancers of the liver and upper digestive tract (mouth, throat, larynx and oesophagus) (IARC, 2007). It is also possible that alcohol increases the risk of lung cancer (WCRF, 1997; WHO, 2003; IARC, 2007).

The risk varies between different types of cancer, and also depends on how much alcohol is consumed. Heavy drinkers are at greatest risk, but even one or two drinks a day can increase the risk of some cancers (IARC, 2007; Bagnardi, 2001).

Evidence of Increased Risk:

1. Breast Cancer

Breast cancer is the most common cancer for women, and kills about 600 New Zealand women every year (NZHIS, 2006).

Over a hundred studies have looked at the relationship between alcohol consumption and breast cancer, and the results consistently show that the more women drink, the greater their risk (IARC, 2007, Gonzalez, 2006, Michels, 2007).

The latest evidence shows that drinking 50g of alcohol daily (approximately four drinks), increases the risk of breast cancer by 50% compared with non-drinkers (IARC, 2007). Even as little as one or two drinks a day is enough to significantly increase breast cancer risk (IARC, 2007; Bagnardi, 2001).

Other established risk factors for breast cancer are smoking, gaining weight and being overweight (Michels, 2007). So maintaining a healthy weight, quitting smoking and cutting down on alcohol are three important steps towards reducing breast cancer risk.

2. Bowel Cancer

New Zealand has high rates of colorectal (bowel) cancer, which is the second most common cancer for both men and women (NZHIS, 2006).

The relationship between alcohol and bowel cancer has been examined in over fifty studies, and there is growing evidence that alcohol is one of the factors that increases risk (IARC, 2007; Bagnardi, 2001). Research shows that people who have four drinks a day (50g of alcohol) have a 40% higher chance of getting bowel cancer compared with non-drinkers (IARC, 2007).

A healthy diet is also important for reducing risk of bowel cancer, since diets that are high in red or cured meat are associated with bowel cancer (Gonzalez, 2006). Eating plenty of fruit, vegetables and whole grains, and cutting down on red meat and alcohol can reduce risk.

3. Cancer of the Upper Digestive Tract and Liver

It has been known for many years that alcohol increases the risk for cancers of the oral cavity (mouth), pharynx (throat), larynx (voice box) and esophagus (food pipe) (WHO, 2003; WCRF, 1997). Research shows that people who have four drinks a day (50g of alcohol) are two to three times more likely to get these cancers than non-drinkers (IARC, 2007, Bagnardi, 2001).

There is also consistent evidence that drinking increases the risk of liver cancer, but it is difficult to say exactly what the risk is because people often get other liver problems before liver cancer appears, and cut down their drinking as a result (IARC, 2007).

Note: Smoking and drinking together multiples risk

There is growing evidence that alcohol may increase the toxic effects of other cancer-causing substances, particularly tobacco. This means the combined effects of smoking and alcohol greatly exceed the risk from either one of these factors alone. The risks

of cancers of the upper digestive and respiratory tracts for people who smoke and drink are multiplied. (Taylor, 2006; IARC, 2007).

Evidence of Reduced Risk:

1. Cutting down on alcohol reduces the risk of cancer

Cutting down on alcohol is one of the best ways to reduce the risk of cancer. Even drinking as little as one or two drinks a day is enough to increase risk of certain cancers (IARC, 2007, Bagnardi, 2001), so not drinking alcohol at all is best for cancer prevention. The more alcohol consumed, the greater the risk (WHO, 2003; WCRF, 1997; Bagnardi, 2001).

Reducing alcohol consumption is also a good strategy for reducing weight. A pint of beer contains about the same number of kilojoules as a chocolate bar (about 900kJ), so cutting back even just a few drinks a week could make a big difference in the long term. Having a healthy weight also protects against cancer (WCRF, 1997; WHO, 2003; Michels, 2007).

2. Heart Disease

From a cancer point of view, research suggests that there is no safe level of alcohol consumption (MoH, 2003; IARC, 2007). But studies show that for some people, (e.g. men over 40 and post-menopausal women) small amounts of alcohol taken regularly may protect against heart disease (MoH 2003).

The Cancer Society recommends that:

- Non-drinkers do not start using alcohol
- Drinkers do not increase the amount that they drink to gain the benefit of reduced risk of heart disease.

Any potential benefit is likely to be offset by increased risk of health and social problems, including cancer (WCRF, 1997).

FAQs:

1. Are some alcoholic drinks more harmful than others?

Alcohol comes in many different forms: beer, wine, spirits (e.g. gin, vodka, rum, tequila), ready-to-drinks, sherry, cider, cocktails and liqueurs, for example. It is the alcohol content that causes cancer (Doll & Peto, 2003; IARC, 2007). The type of alcoholic drink makes little or no difference.

Changing to drinks with lower-alcohol content (e.g. light beer) may reduce the cancer risk by reducing the total amount of alcohol consumed.

2. What is a safe level of drinking?

There is no level of drinking that can be called safe for all people at all times (MoH, 2003). The level that is safe for any one person depends on age, gender, body size, food intake, general health, and family history of cancer, heart disease, alcoholism and other diseases.

As well as increasing the risk of certain cancers, drinking alcohol (particularly binge drinking) is associated with other risks: accidents and injuries, mental health problems and suicide, crime and violence, unwanted pregnancy and sexually transmitted diseases, drowning, and road deaths (MoH, 2003).

It is recommended that pregnant women do not drink alcohol at all, because drinking while pregnant can harm the unborn baby (MoH, 2006).

The Alcohol Advisory Council of New Zealand (ALAC) has developed guidelines to help people weigh up the risks and benefits of alcohol (ALAC, 2005). These guidelines are based on a measurement called the ‘standard drink’. Each standard drink contains 10 grams of alcohol

In any one week, drink no more than:	On any one drinking occasion, drink no more than:	If drinking every day, drink no more than:
21 standard drinks for men	6 standard drinks for men	3 standard drinks for men
14 standard drinks for women	4 standard drinks for women	2 standard drinks for women

These guidelines take into account the protective effect of small amounts of alcohol intake on coronary heart disease, but are not specifically designed for cancer protection. If alcohol is drunk, then keeping intake below these levels could help lower the risk of certain cancers. To reduce the risk of developing cancer, the Cancer Society recommends drinking even less, if at all.

It is important to note that a standard drink is smaller than what is most often poured.

Approximate alcohol content of beverages

Type of drink	Serving of alcohol	Number of standard drinks
Beer	1 can	1.5
	1 glass	1
	1 pint	2
	1 jug	4
Wine	1 small glass	1
	1 bottle	7.5
Sherry and port	1 small glass	1
	1 bottle	11.5
Spirits	1 single measure	1
	1 bottle	30

3. What if I have all of my drinks on the weekend?

The evidence is clear – binge drinking is bad for health. It is much safer to have a small amount of alcohol often than to have a lot of alcohol in one day. Having more than six drinks in one sitting for men, or four drinks in one sitting for women, is not recommended.

4. How can I enjoy myself and drink less?

Alcohol can play a big part in our social lives, but there are plenty of ways to cut down on drinking without cutting down on fun. Here are some ideas for social occasions:

- Have an alcohol-free night by volunteering to be the sober driver.
- Alternate alcoholic drinks with water or soft drinks, and make the first drink a non-alcoholic one
- Eat before drinking, and while drinking
- Use a wine or beer glass but fill it with a non-alcoholic alternative (e.g. soda water or sparkling apple juice).
- For a BYO event, take a favourite soft drink as well as (or instead of) alcoholic drinks
- Count drinks
- Hit the dance floor!

There are also simple ways to increase the number of alcohol-free days each week, for example:

- Do more activities that don't involve drinking
- Spend more time with friends who don't drink
- Tell friends you're cutting down

If having a drink is an after-work ritual, think of healthier daily 'treats' that could serve the same purpose. Call a friend, relax with a lime and soda or

have a bath instead. Create a new ritual that helps the unwinding process without increasing cancer risk.

For other ideas to reduce drinking see the Alcohol Liquor Advisory Council website www.alcohol.org.nz or call the Alcohol Drug Helpline: **0800 787 797** for free, confidential advice and resources to help you cut down.

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