

# Not so merry drinking



**Nutri Scene**

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## Alcoholic beverages are a cause of a number of cancers.

**T**HERE is usually more alcohol consumption during festive seasons, such as during Chinese New Year. There is also the perception amongst some that drinking red wine is good for the heart.

Let me then focus on alcohol consumption in this write-up, especially in relation to cancer risk. As in previous write-ups on cancer prevention, I will continue to highlight the World Cancer Research Fund (WCRF) expert report on *Food, Nutrition, Physical Activity and the Prevention of Cancer* ([www.dietandcancer-report.org/](http://www.dietandcancer-report.org/)) as well as the Hong Kong WCRF Recommendations for cancer prevention booklet ([www.wcrf-hk.org/](http://www.wcrf-hk.org/)).

### Alcohol consumption and cancer – the evidence

Upon reviewing all available evidence, the WCRF Expert Panel concluded that:

- The evidence that all types of alcoholic drinks are a cause of a number of cancers is now stronger than it was in the mid-1990s.
- There is convincing evidence that alcohol increases the risk of cancer of the mouth, pharynx, larynx, oesophagus and breast, as well as bowel cancer in men.
- Alcoholic drinks also probably increase the risk of liver cancer as well as bowel cancer in women
- The risk of alcohol-related cancer is even greater if you smoke.
- There is no significant evidence that alcohol protects against any cancer.

The expert panel also pointed out that some evidence suggests that small amounts of alcohol may have a protective effect on the heart. The experts emphasised, however, that the benefits only outweigh the risks in those particularly at risk of heart disease, such as men aged over 40 and postmenopausal women.

### Alcohol, calories and weight gain

It should also be borne in mind that alcoholic drinks contain a lot of calories and offer little nutritional benefit. You may wonder why alcoholic drinks are high in calorie as they do not contain any fat, carbohydrate or protein. Well, the calorie is from the alcohol in the drink. One gram of alcohol gives 7 kcal, even more than 1 gram of carbohydrate or protein.

For example, a drink of beer, vodka or whisky or wine (see definition of what a drink is below), which contains 10-15 grams of alcohol, contains 70 to 105 kcal.

Hence, drinking too much alcoholic beverages can lead to excess energy intake and overweight and obesity. This condition, in itself, is a risk factor for developing cancers. On the converse, cutting down on the amount of drink could play an important role in helping you to lose weight or maintain a healthy weight, and so reduce cancer risk.

### What is the link to cancer?

Scientists are still researching how alcohol causes cancer. Several possible mechanisms have been proposed, including the following:

- Evidence suggests that reactive products of metabolism of alcohol, e.g. acetaldehyde, may be cancer causing
- One theory is that alcohol can directly damage our DNA, increasing our risk of cancer.
- Alcohol may act as a solvent, enhancing penetration of cancer-causing substances into body cells.



There is convincing evidence that alcohol increases the risk of cancer of the mouth, pharynx, larynx, oesophagus and breast, as well as bowel cancer in men. It's worse if you also smoke. – AP

- Heavy consumers of alcohol may have diets deficient in essential nutrients, making tissue susceptible to carcinogenesis.

It should also be pointed out that available evidence shows that alcohol is particularly harmful when combined with smoking.

### WCRF recommendations

In view of the available scientific evidence, the recommendation of WCRF is therefore: Limit alcoholic drinks.

The public health goals, which are for populations and are therefore principally for health professionals are:

- Proportion of the population drinking more than the recommended limits to be reduced by one third every 10 years.

The personal recommendations, meant for people, as communities, families, and individuals are:

- If alcoholic drinks are consumed, limit consumption to no more than two drinks a day for men and one drink a day for women.

The evidence does not show a clear level of consumption of alcoholic drinks below which there is no increase in risk of the cancers it causes. This means that, based solely on the evidence on cancer, even small amounts of alcoholic drinks should be avoided.

From the point of view of cancer prevention, the best level of alcohol consumption is actually zero.

However, available evidence also suggested that one to two drinks a day may be protective against cardiovascular disease. The expert panel therefore adjusted its recommendation to take this into account.

The evidence shows that all alcoholic drinks have the same effect. Data do not suggest any significant difference depending on the type of drink. This recommendation therefore covers all alcoholic drinks, whether beers, wines, spirits (liquors), or other alcoholic drinks. The important factor is the amount of ethanol consumed.

The expert panel emphasised that children and pregnant women should not consume alcoholic drinks.

### Recommendations from other dietary guidelines

These recommendations of the WCRF in rela-

tion to cancer risk are consistent with recommendations from national dietary guidelines for general promotion of healthy eating.

When I checked the dietary guidelines of 11 Asian countries, five of them (Brunei, India, Malaysia, Japan and Vietnam) did not refer to alcoholic drinks in their recommendations. The remaining six countries (China, Indonesia, Philippines, Korea, Singapore and Thailand) have a similar message, i.e. to reduce or avoid intake of alcoholic beverages.

There is also no mention of alcohol consumption in the Malaysian Dietary Guidelines ([www.nutriweb.org.my](http://www.nutriweb.org.my)). I recall this was debated when the guidelines were drafted 10 years ago and the expert group decided not to provide any recommendations. The scientific evidence for the benefits of alcoholic drinks was even weaker at that time and the group was more concerned with the negative social implications of drinking.

As mentioned above, the available evidence suggest that modest consumption of alcoholic drinks may be protective against coronary heart disease compared to no drinking, with higher levels of drinking in some cases showing increased risk.

It should however be noted that no authoritative body has made specific recommendations for alcohol consumption to avoid coronary heart disease because of the adverse biological, behavioural, physical, social, and other effects of higher levels of consumption.

### Practical tips

What is a drink? As a rough guide, a drink contains about 10 -15 grams of pure alcohol, so one drink is the same as:

- One 280ml glass of beer, lager or cider (3-5% alcohol by volume - ABV)
- One 25ml measure of spirits (40% ABV) such as vodka or whisky
- One small 125ml glass of wine (12-13% ABV)

The above information is only a rough guide. We should be aware that drinks contain different amounts of alcohol depending on their serving size and strength.

Furthermore, as many people do not stop after having only one drink, the amount of alcohol consumed can easily exceed the 10-15 grams mentioned above.

We should take heed of the WCRF recommendations to limit alcohol intake to no more than two drinks a day for men and one drink a day for women. Heavy drinking, or binge drinking, is particularly bad for our health, even if only done occasionally.

### Tips for social drinking

In some social situations, you may not be able to totally avoid alcoholic drinks. Try these tips provided by WCRF Hong Kong to lower your alcohol intake without feeling like you are missing out on all the fun:

- When ordering drinks, opt for the smallest serving size. Avoid double measures of spirits, which are often encouraged as "better value".

- Put your glass down between sips. You'll be less likely to drink without realising.

- Wait until you have finished a drink before refilling your glass. This can help you keep track of how much you are drinking.

- Alternate alcoholic drinks with iced/soda water with lemon. This will help you cut down on alcohol and keep your body hydrated.

- Go halves! Choose a drink that's half soft drink, half alcoholic, such as a white wine spritzer rather than a full glass of wine

- Keep a drinks diary for a week. If you are drinking alcohol most days of the week, try to cut down.

■ *NutriScene is a fortnightly column by Dr Tee E Siong, who pens his thoughts as a nutritionist with over 30 years of experience in the research and public health arena. For further information, e-mail [starhealth@thestar.com.my](mailto:starhealth@thestar.com.my). The information provided is for educational and communication purposes only and it should not be construed as personal medical advice. Information published in this article is not intended to replace, supplant or augment a consultation with a health professional regarding the reader's own medical care. The Star does not give any warranty on accuracy, completeness, functionality, usefulness or other assurances as to the content appearing in this column. The Star disclaims all responsibility for any losses, damage to property or personal injury suffered directly or indirectly from reliance on such information.*