Public consultation on the NHMRC’s draft revised
Australian alcohol guidelines for low-risk drinking

Recommendations from The Cancer Council Australia

The Cancer Council Australia is Australia’s peak non-government cancer control organisation, representing the national objectives of the eight state and territory Cancer Councils. The Cancer Council’s network of evidence-based, expert advisory groups includes its National Nutrition and Physical Activity Committee, comprising scientists and other public health professionals from a range of disciplines relating to cancer control and nutrition and physical activity.

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Key points and recommendations in summary

- The NHMRC is commended for this revised draft, which recommends a safer daily alcohol consumption limit for men and includes an increased focus on cancer, consistent with emerging evidence.

- The guidelines should recommend a limit of one standard drink per day for women, consistent with the NHMRC’s dietary guidelines and with evidence on cancer risk associated with both alcohol as a carcinogen and with weight gain as a consequence of alcohol consumption.

- The guidelines should identify alcohol as a carcinogen, consistent with the findings of the International Agency for Research on Cancer, and incorporate important new evidence reported in the World Cancer Research Fund’s *Food, nutrition, physical activity, and the prevention of cancer: a global perspective* (2007).

- To complement the provision of updated new alcohol guidelines, nutritional information on the energy content of alcoholic beverages should be mandatory on all containers and recommended in the guidelines.

- The guidelines require an increased emphasis on long-term harms, consistent with the rationale, to balance the disproportionate focus on behavioural/immediate harms.

- The ‘Additional health advice and precautions for specific groups of adults who have an increased risk’ section should include separate recommendations for people with elevated risk of alcohol-related cancers through family history, including advice that abstinence may be the safest option in such cases.

- Discussion throughout the draft guidelines of the potential benefits of low-level alcohol consumption in protecting against heart disease should include statements advising that there are a range of alternative ways to prevent heart disease which, unlike alcohol consumption, carry no risk of cancer.

- Appendix 5 should elaborate on and distinguish between the nutritional and pharmacological properties of alcohol to add important context to the evidence on the risk of alcohol-related diseases.
Overview

The Cancer Council Australia commends the NHMRC for revising its Australian Alcohol Guidelines: health risks and benefits (2001) and for consulting publicly on the development of updated guidelines.

The Cancer Council Australia welcomes the increased focus on cancer throughout the draft revised Australian alcohol guidelines for low-risk drinking (“the draft”), consistent with the emergence of significant new evidence over recent years showing an increase in the link between alcohol consumption and cancer.

This brief submission consists of summary recommendations; an overview; rationale; emerging evidence; and specific comments addressing individual statements and omissions throughout the draft. The Cancer Council Australia’s comments are focused on Guideline 1, which is most relevant to cancer risk.

We strongly endorse the proposal in the draft to reduce the recommended number of standard drinks per day for Australian men from four to two. The Cancer Council Australia also strongly recommends that the NHMRC reduce the recommended limit of standard alcoholic drinks for women from two to one, in order to reduce cancer risk. This would also be consistent with the NHMRC’s advice on alcohol in the Australian Dietary Guidelines.

The Cancer Council Australia also believes that the draft has disproportionate emphasis on the social and behavioural harms associated with alcohol consumption; recommending a limit of one standard drink per day for women would in our view redress this imbalance. Specific areas in the text are highlighted under the heading “Addressing specific statements,” below.

In addition, references throughout the draft to the potential benefits of low-level alcohol consumption in protecting against heart disease should include statements advising that there are a range of other ways to prevent heart disease which, unlike alcohol consumption, carry no risk of cancer. These occur on page 16, paragraph 3; page 29, paragraph 2; page 30, paragraph 2; page 43, paragraph 5; and page 99, paragraph 1.

The ‘Additional health advice and precautions for specific groups of adults who have an increased risk’ section should include separate recommendations for people with elevated risk of alcohol-related cancers through family history, including advice that abstinence may be the safest option in such cases. This is particularly important for people at genetic risk of breast and colon cancers.

More generally, a number of the diseases discussed in appendix 5 (and all of the chronic diseases linked to alcohol consumption) are diseases of nutritional biochemistry, not the pharmacological effects of alcohol. It is important to therefore distinguish between and elaborate on the nutritional and pharmacological properties of alcohol to add necessary context.
Rationale

‘Two for men, one for women’

There are a number of important reasons and supporting evidence for recommending a limit of two standard drinks for men per day and one for women, including:

- Two and one is consistent with the NHMRC Dietary guidelines for Australian adults (2003), which recommend no more than one drink per day for women. This recommendation is based on the link between alcohol consumption and weight gain. Recommendations on alcohol consumption should be consistent in both the dietary and low-risk drinking guidelines, as weight gain is an important health concern and a risk factor for cancer.

- Weight gain is a particularly important risk factor for cancer in women, with two of the most common cancers diagnosed in Australian women, bowel and (post-menopausal) breast cancer, linked to overweight/obesity.

- The confusion in Australia between “standard drinks” and “serving sizes”, discussed on pages 19 and 20 of the draft, shows the importance of recommending the safer and lower consumption level for women, as serving sizes tend to be larger than standard drinks.

- Sections 2.3 (page 24) 3.3 (page 31) of the draft largely overlook the significant differences in alcohol metabolism between men and women and the impact these have on blood alcohol concentration and consequent disease risk.

- Section 3.4 (page 32) compares the physiological effects of alcohol consumption on women with the behavioural effects on men in the context of lifetime risk. The Cancer Council Australia’s view is that this is an incongruous comparison, which may further understate the cancer risk to women of two standard drinks per day. The metabolic issues relating to women expressed in section 3.4 add to the requirement for women to have a lower recommended daily consumption limit than men and should be reported in that context.

- Recommendation 6 in chapter 12 (pages 383-384) of the latest comprehensive World Cancer Research Fund (WCRF) study on alcohol and cancer states “If alcoholic drinks are consumed, limit consumption to no more than two drinks a day for men and one drink a day for women”.¹ (See below for important additional information about the WCRF study.)

- Additional evidence and statements throughout the draft support recommending a daily limit of one standard drink for women, including:
  - “…the risk of death from alcohol-related disease escalates much more rapidly for women than for men” (page 9)
  - “…for any given level of drinking, women have a higher relative risk of injury” (page 41)
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- English et al, 1995, Holman et al 1996 recommend 1-2 Australian standard drinks for men and 0-1 for women (page 44)
- Review by Burger et al, 2004 led to 10-12g/day (1-1.2 std drinks) for women and 20-24g/day (2-2.4 std drinks) for men (page 44).

**Emerging evidence**

The Cancer Council Australia recognises the extensive research and literature review involved in the draft.

We recommend that, where appropriate, references to the World Cancer Research Fund’s *Food, nutrition, physical activity, and the prevention of cancer: a global perspective*, published in 2007, be added, particularly in the introduction. This, the second WCRF report on alcohol and cancer (*inter alia*), is a major addition to the evidence base on cancer risk linked to alcohol consumption and provides direct comparisons with the first report published in 1997.

The 2007 WCRF report includes detailed analyses of the risks relating to specific cancer sites. Among its most important findings is evidence that any level of alcohol consumption may increase cancer risk (see below).

**Addressing individual statements**

<table>
<thead>
<tr>
<th>Draft statement: Page 11, table 1, Guideline 1. “Men and women… Two standard drinks or less in any one day”.</th>
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<tbody>
<tr>
<td><strong>Cancer Council recommendation:</strong> “Men: two standard drinks or less in any one day.” “Women: one standard drink or less in any one day.”</td>
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<tr>
<td>Draft statement: Page 15, section 1.1, paragraph 1. Alcohol is described as a toxin and teratogen, but not as a carcinogen.</td>
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<tr>
<td><strong>Cancer Council recommendation:</strong> State in the introduction that alcohol is recognised as a carcinogen.</td>
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<tr>
<td>Draft statement: Page 29, bullet point 3 (first discussion on cancer): “alcohol is associated with an increased risk of cancer overall, and is a cause of cancer of the mouth, throat and oesophagus. Alcohol is also a risk factor for other cancers, such as cancer of the stomach, breast and liver, and has also been associated with bowel cancer.</td>
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</tbody>
</table>
| **Cancer Council recommendations:** The draft text may understate the alcohol-related risks of breast and bowel cancer. For additional context, it should also highlight that breast and bowel cancers are the second and third most common cancers in Australia respectively. Proposed statement: “Convincing evidence shows alcohol consumption increases the risk of cancers of the mouth, pharynx, larynx, oesophagus and liver (men and women), bowel cancer in men and breast cancer (pre- and post-menopause) in women. Evidence also shows alcohol
consumption is a probable cause of colorectal cancer in women. Alcohol is also a risk factor for other cancers, such as cancer of the stomach and pancreas. (Bowel and breast cancer are the second and third most common cancers in Australia respectively.)


**Cancer Council recommendations:** Replace “colon” with “bowel”.

Draft statement: Page 30, Table 3.1 (final row, left column), “malnutrition” and “weight gain” overlooked as “nutritional conditions” associated with alcohol consumption.

**Cancer Council recommendations:** Insert “malnutrition” and “weight gain” under “nutritional conditions”.

Draft statement: Page 40, Box G1.1. This presents the absolute risk over a lifetime but only the relative risk (with no indication of the magnitude of absolute risk) for each drinking session. It is therefore inconsistent with Box 2.1 (page 23), which provides detail on the differences between relative and absolute risk.

**Cancer Council recommendations:** Include absolute risk in Box G1.1.

Draft statement: Page 43, section 1(b) and the corresponding section in Appendix 5 (page 99). This section refers to alcohol dose-response in terms of the risk of developing alcohol-related diseases. The second WCRF report is particularly relevant in this context, as it shows there is no generally safe threshold for alcohol consumption in relation to cancer risk—a significant change in the evidence from the first report, published in 1997, which identified a “modest” consumption threshold below which no cancer risk was observed.

**Cancer Council recommendation:** Insert into page 43, section 1(b), paragraph 2: “An important recent change in the evidence on dose-response in relation to cancer risk is the World Cancer Research Fund’s finding in 2007 that there is no safe consumption threshold.”

Draft statement: Page 51, Box G2.1, “Initiation of alcohol use at a young age may increase the likelihood of negative physical… health problems” understates the increased risk of cancer linked to prolonged exposure to alcohol, a carcinogen.

**Cancer Council recommendation:** Add sentence, “Prolonged exposure to carcinogens, including alcohol, increases cancer risk.”

Draft statement: Page 99, under heading “Diabetes”, paragraph 2. Erroneously states that 30g alcohol is “2 standard drinks”.

**Cancer Council recommendation:** Change to “3 standard drinks”.

Draft statement: Page 100, heading “Appetite”. This is potentially misleading, as the key issue is malnutrition rather than appetite. In addition, there is inconsistent evidence on alcohol as an appetite stimulant in cancer patients and no evidence to support alcohol as
an appetite stimulant in people with anorexia.

Cancer Council recommendation: Change heading to “Malnutrition” or “Under-nutrition”. Use the section under this heading to include the nutritional properties of alcohol at high and low use.

Draft statement: Page 100, under heading “Obesity”. This section discusses the energy density of alcohol, but the nutrient density is not mentioned in either this or the preceding “appetite” section.

Cancer Council recommendation: Add information on nutrient density under the renamed previous heading, “Malnutrition”.

Draft statement: Pages 104-107, Table A5.1, heading, column 1 is “69 years”.

Cancer Council recommendation: Amend heading to “Study”.

Conclusions

The Cancer Council Australia again commends the NHMRC on the draft. As evidence on the link between alcohol consumption and cancer continues to emerge, this is in our view a timely opportunity to provide clear advice to all Australians on the cancer risks related to alcohol by adopting The Cancer Council Australia’s recommendations.

References


2 International Agency for Research on Cancer, IARC Group 1 classification for ‘Alcoholic beverages’ and ‘Ethanol in alcoholic beverages’
   http://monographs.iarc.fr/ENG/Classification/crthall.php