Wine as part of a healthy diet?

Australian Dietary Guidelines 2013

A QUESTION THAT is often posed by consumers is whether wine has a legitimate place at the dinner table? In an era of headlines such as ‘Wine not heart-healthy for fatties’ in The Age on 10 December 2012, Australians are uncertain as to whether wine can be considered to be part of a healthy diet.

The latest iteration of the Australian Dietary Guidelines was launched in February 2013 by the National Health and Medical Research Council.

Alcohol is considered in Guideline #3, Limit intake of foods containing saturated fat, added salt, added sugars and alcohol, and specifically in part 3.4 Limit intake of alcohol.

A table summarises the available evidence on alcohol consumption and the risk of different diseases. The first association or risk to be considered is cardiovascular disease, and moderate alcohol consumption is associated with a reduced risk. The level of evidence for this association is deemed to be ‘probable association’. It is interesting to note in this table that the level of evidence for risks is either considered to be a ‘probable association’ or a ‘suggestive association’, but not ‘convincing’.

The second association considered is high density lipoprotein, which is called the ‘good cholesterol’, where a high concentration is protective against developing atherosclerosis or hardening of the arteries, which leads to cardiovascular disease. Moderate alcohol consumption promotes the production of high density lipoprotein in the body, and the level of evidence is again ‘probable’.

Associations three to seven were the risk of developing cancer of the breast and oesophagus, where the level of evidence is ‘probable’ and cancer of the colo-rectal, liver, oral cavity, pharynx and larynx where the level of evidence is ‘suggested’.

The eighth and final association was dementia, and moderate alcohol consumption is associated with a reduced risk, where the level of evidence was again ‘suggested’.

In summary, the table in Guideline #3 shows that moderate alcohol consumption may actually be beneficial for cardiovascular and cognitive function diseases associated with ageing. This is relevant as cardiovascular disease remains the leading cause of death and disability in Australia, accounting for 34% of all Australian deaths, and it remains the most expensive disease group in Australia, costing approximately $5.9 billion in 2004-05; $2 billion of which was associated with hospitalisation (AIHW 2011). In addition, cognitive function diseases such as dementia, are increasing as the population reaches greater ages.

Dementia is not a natural part of ageing, although most people with dementia are older. After the age of 65, the likelihood of living with dementia doubles every five years and it affects 24% of those aged 85 and over, where the number of people with dementia will grow from over 175,000 in 2001 to almost 465,000 in 2031.

Is wine considered to be different in the Australian Dietary Guidelines 2013?

While wine is often considered to be no different from any other alcoholic beverage, Guideline #3 acknowledges that “Alcoholic drinks contain few other nutrients except for the bioactive flavonoids found in wine (mainly red wine)”. This subsection also addressed blood alcohol concentration where it is stated that “A full stomach reduces the rate of absorption of alcohol into the bloodstream, and drinking alcohol in combination with eating therefore reduces the rate at which blood alcohol content increases”. It is the alcohol component and the first breakdown product of alcohol, acetaldehyde, which are toxic and potentially carcinogenic to the body’s cells, organs and tissues. Wine is mainly consumed with meals.

The core components of a Mediterranean-style diet include the high consumption of cereals, fruits, legumes, vegetables and the moderate consumption of wine, which all typically contain a high concentration of phenolic compounds. Studies that have compared...
a Mediterranean-style diet with a higher fat diet such as that typical in northern Europe and the US, found that only a Mediterranean-style diet is associated with a reduced risk of cardiovascular disease.

When extending the association to death from all causes, which includes cancer and other degenerative diseases, a Mediterranean-style diet is also associated with a reduced risk of death from all causes. Wine consumers have also been shown to have a similarly reduced risk of cardiovascular disease and all-cause mortality. A good example is from Spain, which is one of the 18 Mediterranean countries. A higher rate of cardiovascular disease was observed in those Spanish regions with the lowest per capita wine consumption, despite having, overall, a Mediterranean-style diet. The rate of cardiovascular disease was, however, still less than that of countries consuming a higher fat and lower phenolic compound diet. A recent study undertaken by the Spanish government evaluated the core components of a Mediterranean-style diet and as acknowledged in the Australian Dietary Guidelines 2013, showed that the components of wine that might confer a reduced risk of cardiovascular disease are represented by the phenolic compounds such as the flavonoids as well as the alcohol component.

Further considerations
A little-publicised Australian study of 7989 individuals aged 65-83 years followed for five years examined the relationship between low-risk behaviors and mortality. The eight selected low-risk behaviors included having no more than two alcoholic (total 20g alcohol) drinks/day. This level is consistent with the definition of low-risk drinking for both men and women in both the NHMRC Australian Guidelines to Reduce health Risks from drinking Alcohol 2009 and the NHMRC Australian Dietary Guidelines 2013. Individuals with five or more of the selected low-risk behaviors had a lower risk of death from any cause within five years compared with those having less than five. More importantly the study showed that while most individuals already have some healthy habits, almost all could make changes to their diet and lifestyle to improve their health. The study did not suggest abstinence from alcohol, and avoidance of heavier alcohol consumption is also inferred.

In Australia, between now and 2050 the number of older individuals (65 to 80 years) is expected to more than double; and very old individuals (85 and over) are expected to more than quadruple from 0.4 million people today to 1.8 million in 2050 (www.treasury.gov.au/igr/igr2010/Overview/html/overview). Increased numbers of older individuals may have implications for associated expenditure on income support, housing and health services, although a healthy, independent older population can also form a valued social resource, for example, in providing care for others, sharing skills and knowledge and engaging in volunteer activities. Consequently, simple dietary measures such as moderate alcohol to supplement a healthy exercise and nutrition routine, or as an adjunct to prescription medicines when appropriate, may thus be needed to maintain a healthy ageing population.

The topic of wine’s contribution to health will be discussed through a series of presentations and debates at WineHealth 2013. WineHealth 2013 continues the series of scientific international conferences discussing the complex interaction of wine and health (which have been held previously in Italy, USA, Chile, South Africa and France over the past 17 years). In 2013, the next conference will be held in Sydney from 18-21 July at the Sydney Convention Centre and is open to anyone interested in this topic. Information on the program and speakers are on the website (www.winehealth.com.au).

References