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Health Tips

Pregnant women or those trying to get pregnant should abstain from alcohol to avoid risking their babies' physical, mental, and emotional health.

Other women who choose to drink should limit their intake to minimise alcohol-related harm.

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Alcohol and Women

Nowadays, drinking among women has become a relatively common phenomenon. In addition, alcohol advertising and promotional activities increasingly target at women.¹ These have led to increasing global concern of "Alcohol and Women"² although there are still relatively fewer women than men who drink alcohol and if women do drink, they drink less worldwide.

According to the World Health Organization (WHO), alcohol use is the third leading risk factor for global disease burden. Though alcohol consumption and alcohol-related harm are more common among males, the burden of disease and death attributed to alcohol among females is also significant. In 2004, alcohol was estimated to cause over 300 000 deaths, accounting for 1.1% of total female deaths, 10.14 million of disability-adjusted life years (DALYs), and 1.4% of total disease burden for female population worldwide.³

Specific Effects of Alcohol on Women

Studies have shown that women are more vulnerable to the effects of alcohol than men. This is because women usually have less tissue to absorb alcohol. In addition, women have a higher body fat-to-water ratio, which reduces their capacity to dilute alcohol within the body. As such, even if the same amount of alcohol is consumed, women will end up having a higher concentration of alcohol in their bloodstream, as compared with their male counterparts.²

Men and women are both exposed to a wide spectrum of alcohol-related harm, including brain damage, liver cirrhosis, cancers, stroke, accidental injuries or poisoning, depression and sleep problems. For women, there are specific harms from alcohol use throughout their life course.

During Adolescence

Adolescence is a time when the developing brain is particularly vulnerable to the long-term consequences from alcohol use. Evidence demonstrated that heavy drinking in adolescents was associated with a smaller volume of the hippocampus, a brain region important for learning and memory.⁴ Some researches showed that by drinking the same amount of alcohol for the same duration, females suffered from greater brain damage than males.⁵ Gender disparity in sensitivity to the neurotoxic effects of alcohol

was also demonstrated among adolescents in a recent study, which showed that the effect of binge drinking in lowering brain activation in regions that control memory and spatial awareness was more prominent among female teenagers than the male counterparts.⁶

During Reproductive Years

Evidence from meta-analyses showed a dose-response relationship between alcohol consumption and the risk of female breast cancer. For every 10-gram increment in alcohol intake per day, there was about 10% increase in the risk of breast cancer for females.⁷ In other words, the more the woman drinks, the higher her risk of developing breast cancer.

Female heavy chronic drinkers are prone to suffer from a variety of reproductive consequences, including infertility and spontaneous abortion.^{8,9} Drinking during pregnancy is of particular concern because alcohol increases the risk of a range of problems in unborn babies, including birth defects, growth and developmental problems, and these problems may persist into adulthood. The most severe form is known as Foetal Alcohol Syndrome (FAS), which includes significant facial anomalies, growth retardation, and behavioural and cognitive abnormalities.¹⁰ The mechanism underlying FAS is not fully understood. However, alcohol and its metabolites can interfere with foetal development by disrupting cellular growth, differentiation and organisation. Alcohol and its metabolites also modify the metabolism of carbohydrates, proteins, and fats; and decrease the transfer of important nutrients across the placenta, indirectly affecting foetal growth.¹¹

Alcohol consumption during lactation adversely affects lactation performance of the nursing mother. Furthermore, alcohol enters breastmilk and impairs

psychomotor development and behaviour of the breastfed baby.¹²

During Later Life

Chronic heavy drinking would compromise bone health, particularly during adolescence and the young adult years when bones are still developing. Alcohol inhibits calcium absorption, decreases bone density, weakens mechanical properties of the bones¹³, and ultimately increases the risk of osteoporosis, which is a common bone disease in postmenopausal women.

Alcohol and Women's Safety

Under the influence of alcohol, women would have a higher risk of exposure to unprotected sex, thereby increasing their risk of contracting sexually transmitted diseases and unwanted pregnancies. Not only women who themselves drink stand a higher risk of becoming victim of sexual assault or other acts of violence, if their male partners have drinking problems, these women were also more likely to become victims of domestic violence. Local study found that alcohol abuse by the husband was a significant risk factor for domestic violence injuries among married women.¹⁴



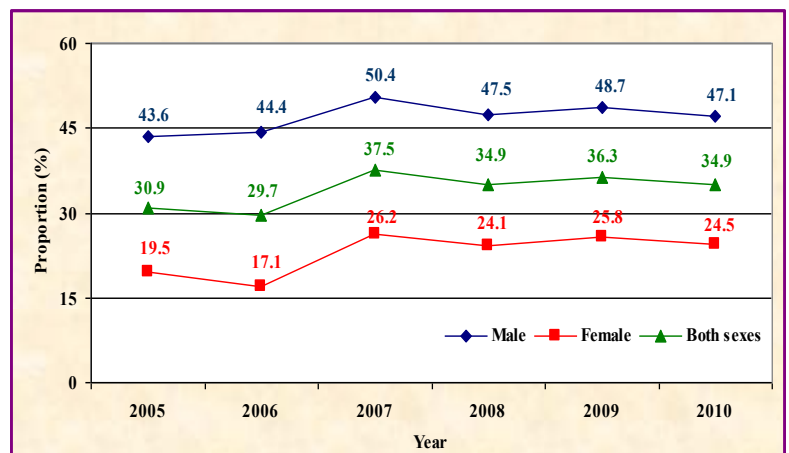
Alcohol Consumption Behaviour in Hong Kong

Like many other countries, alcohol consumption in Hong Kong is less prevalent among women than among men. According to the Behavioural Risk Factor Survey (BRFS) 2010, which successfully telephone interviewed about 2000 community-dwelling people aged 18-64, a lower proportion of women (24.5%) than men (47.1%) reported to have consumed at least one alcoholic drink in the past 30 days.¹⁵ Although fewer women drink, the drinking prevalence in women is catching up with that of men. As shown in Figure 1, from 2005 to 2010, the increase by 5.0 percentage points (from 19.5% to 24.5%) among women was higher than the 3.5 percentage points (from 43.6% to 47.1%) among men.¹⁶

Binge Drinking

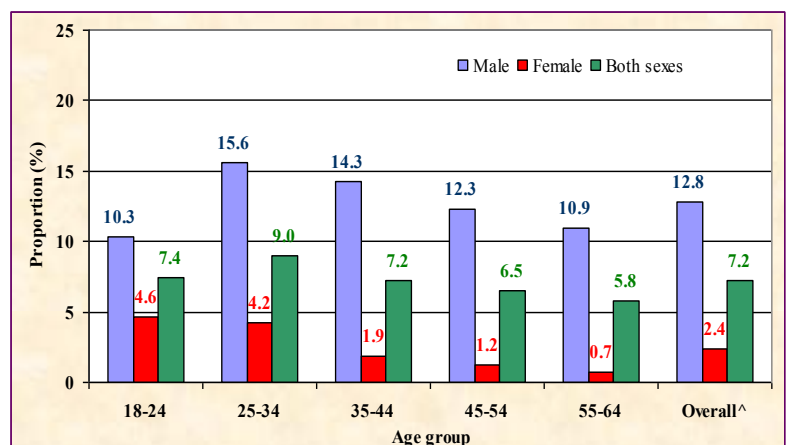
Binge drinking, defined as consumption of at least 5 glasses/cans of alcohol beverages on one occasion, was relatively common among the younger adult female population in Hong Kong (Figure 2). According to BRFS 2010, 4.6% of women aged 18-24 and 4.2% of women aged 25-34 reported that they had binge drinking in the past 30 days before enumeration.¹⁵ In a local random telephone survey conducted among about 10 000 Chinese adults in 2006, the prevalence of binge drinking was 6.3% in women aged 18-20 and 8.7% in women aged 21-30.¹⁷

Figure 1: Proportion of community-dwelling people aged 18-64 who reported to have consumed at least one alcoholic drink in the past 30 days before enumeration by sex, 2005-2010.



Source: Behavioural Risk Factor Surveillance System.

Figure 2: Proportion of community-dwelling people aged 18-64 who reported to have binge drinking* in the past 30 days before enumeration by sex and age group,



Notes: *Consumption of at least 5 glasses/cans of alcohol on one occasion.

^ Including unknown age.

Source: Behavioural Risk Factor Survey, April 2010.

Why Do Young Girls Start Drinking?

The younger adolescents start drinking, the more likely they will develop a problem with alcohol later in life.¹⁸ The Hong Kong Population Health Survey 2003/04 showed that among females who reported to have ever drunk alcohol, 22.8% reported they had started drinking below the age of 18.¹⁹ It is therefore important to understand the reasons that accounted for their drinking behaviour.

According to a local qualitative study which interviewed 55 adolescent girls (average age of 16) who had ever consumed at least one drink, major reasons for their drinking were “drinking was fun”, “they were thirsty”, “they wanted to experiment”, and “they wanted to forget about problems”.²⁰ Another local study that enumerated over 1 400 first year female entrants to a Hong Kong university examined the reasons for drinking among young women using a self-administered questionnaire in Chinese. The most common reasons rated by female students who ever drank were for party or celebration purpose (58.9%), social reasons (50.3%), and good taste of alcoholic beverage (12.9%). Similar reasons were also given by those who reported to have binge drinking. The most common reasons rated for alcohol use among these binge drinkers were socialization (74.4%) and being in party (59.0%), followed by euphoric or excited feeling (15.4%), relaxation (12.8%) and good for health (10.3%). About 6% of the female binge drinkers reported that they used alcohol as a means of stress management.²¹

Alcohol-related Harm among Women

In Hong Kong, death from alcohol-related illnesses or injuries is uncommon among females. From 2003 to 2009, an average of 5 registered female deaths attributed to alcohol-related illnesses or injuries were reported each year.²¹

injuries were reported each year.²² According to the Hospital Authority (HA), an average of 370 in-patient discharges and deaths attributed to alcohol-related illnesses or injuries among females were recorded each year from 2003 to 2009.²³ Nevertheless, these figures need to be interpreted with caution as only those in-patient admissions with alcohol-related disease marked as the principal diagnosis were counted. This would under-estimate deaths and disease burden related to alcohol.

To Drink or Not to Drink?

In fact, there is no absolute ‘safe’ or ‘risk-free’ level of drinking. Generally speaking, health risks associated with alcohol consumption exist on a continuum. In other words, the more people drink, the higher the risk of alcohol-related harm they are to get. If women **choose** to drink alcoholic beverages, they should limit their intake so as to minimise alcohol-related harm.

Tips for Women to Minimise Alcohol-related Harm

1. In certain situations, DON'T drink at all

- ※ Pregnant or planning for pregnancy.
- ※ Underage.
- ※ Taking medication.
- ※ Before or when engaging in activities that require attention, skill and coordination, such as driving.

For women who are breastfeeding, alcohol drinking is not recommended. If women who breastfeed are required to drink alcohol on special occasions, they must be cautioned to drink only after nursing their baby and in a small amount.^{24, 25}

2. If women choose to drink, limit their intake and prevent blood alcohol level from rising quickly

- ※ Choose drinks with lower alcohol content (alcohol by volume).

- ※ Mix drinks with ice or water to lower the alcohol content.
- ※ Fill stomach with food before drinking.
- ※ Sip drinks slowly rather than gulp.
- ※ Avoid rounds, top-ups and re-fills.
- ※ Alternate alcoholic drinks with non-alcoholic ones.

3. *When going out for a party that involves social drinking, beware of external incentives or pressure to drink more*

- ※ Remember women can have fun without drinking alcoholic beverages.
- ※ It is socially acceptable to decline an offer of alcoholic beverages.
- ※ Feel free to share with friends as they may also wish to drink less non-alcoholic beverages for good health.
- ※ Toasting with non-alcoholic beverages shares the same joy.
- ※ Beware of promotions at bars (such as “ladies night”) when free rounds or discounted alcoholic beverages are offered.

4. *Plan well before drinking to ensure your safety*

- ※ Decide with friends beforehand to look out for each other. Go with trusted friends who can monitor each other’s drinking.
- ※ Plan transport home ahead. Use public transport or arrange a non-drinking designated driver. Have phone number for licensed taxis ready.

5. *Monitor and evaluate drinking behaviour*

- ※ Keep a drinking diary to document the amount of alcohol drunk each day.
- ※ Get to know the reasons of drinking.
- ※ Make changes to cope with drinking,

for examples:

- ◆ Do not keep any alcoholic beverages at home.
- ◆ Enjoy other activities (such as tea drinking) during leisure time.
- ◆ Try regular exercise or learn relaxation techniques, such as meditation or yoga to relieve stress instead of drinking alcohol.
- ◆ Seek help from professionals when necessary rather than trying to tackle the drinking problem on your own.

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News Bites

Subfertility is fairly common in Hong Kong. While erectile dysfunction is one of the reasons for subfertility among couples, a local survey showed that alcohol consumption can increase the risk of erectile dysfunction among men.

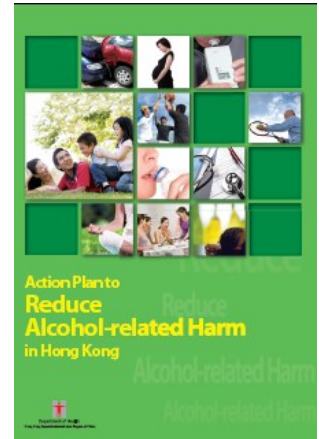
The survey was conducted by the Family Planning Association of Hong Kong in 2004 among 1 506 men aged 20-70 years recruited by stratified random sampling of the male population. Information on drinking and other lifestyle factors was collected by face-to-face interview, and information on sexual activity and erectile dysfunction was obtained by self-administered questionnaire. Results showed that compared with never drinkers, men who consumed 3 or more standard drinks (one standard drink here is defined as 12g of alcohol) a week were 2.27 times as likely to report erectile dysfunction after adjusting for age and cigarette smoking.

To increase couples' chances of getting pregnant, men (and women) should limit alcohol consumption if they drink.

[Source: ACK Lee, LM Ho, AWC Yip, S Fan and TH Lam. The effect of alcohol drinking on erectile dysfunction in Chinese men. *Int J Impot Res* 2010; 22, 272-8.]

Action Plan to Reduce Alcohol-related Harm in Hong

With a view to curbing non-communicable diseases (NCD), the Hong Kong SAR Government published a strategic document entitled '**Promoting Health in Hong Kong: A Strategic Framework for Prevention and Control of Non-communicable Diseases**' in October 2008. A high-level Steering Committee (SC), chaired by the Secretary for Food and Health, Dr. York Chow and comprised of representatives from various sectors, was set up to deliberate on and oversee the overall roadmap for implementation of the strategy. Reducing alcohol-related harm has been identified as one of the priority areas for action.



Under the SC, the Working Group on Alcohol and Health (WGAH) was established in June 2009. After careful review and in-depth discussion regarding the local situation of alcohol use, critical appraisal of overseas evidence, as well as recommendations of the WHO, WGAH has drawn up the '**Action Plan to Reduce Alcohol-related Harm in Hong Kong**' (Action Plan). This Action Plan outlines 17 specific actions that different government bureaux/departments and relevant parties will work together to prevent and control alcohol-related harm in Hong Kong in the coming years.

With the implementation of the Action Plan, it is hoped that:

- ◆ a sustainable environment to reduce alcohol-related harm will be created;
- ◆ the general public will be able to make informed choices about alcohol consumption; and
- ◆ the burden of alcohol-related harm can be reduced.

Partnership between different sectors is critically important in creating an environment that is supportive of the prevention of alcohol-related harm. Active participation by **ALL** is the key to success! A copy of the Action Plan can be found at the Change4Health website <http://www.change4health.gov.hk/> More information about alcohol and health can be found in the 'Alcohol and Health' section of the same website.

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Non-Communicable Diseases (NCD) WATCH is dedicated to promote public's awareness of and disseminate health information about non-communicable diseases and related issues, and the importance of their prevention and control. It is also an indication of our commitments in responsive risk communication and to address the growing non-communicable disease threats to the health of our community.

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