

Conference

N°13



How alcohol can be a double-edged sword, for Asians and the global population

The Asian population is renowned for its intolerance to alcohol and its distinctive 'flush syndrome'. But are all Asians equal when it comes to drinking alcohol? **Michael Apstein MD** explained the unique genetic make-up at work and also detailed some of the health benefits wine offers to moderate drinkers worldwide.

Alcohol is metabolised by alcohol dehydrogenase (ADH) turning it into acetaldehyde which is then transformed into acetic acid by acetaldehyde dehydrogenase or ALDH. ADH is present in the lining of the stomach and liver, and is also oestrogen-sensitive which is why women have higher blood alcohol levels after similar alcohol intake to men. Its presence in the stomach also explains the differences between the alcohol derived from wine and that contained in spirits, as wine is drunk usually with food and therefore absorbed more slowly. In 50% of Asians, alcohol is not converted into acetic acid because of an aldehyde dehydrogenase deficiency (ALDH2). The deficiency, due to the unique genetic make-up of Asians, is not identical though across the region: whilst 53% of the

Japanese, 39% of the Chinese and 33% of Koreans have it, only 10% of Thais, 4% of Indians and just 1% of Filipinos are affected. ALDH2 deficiency can have positive and negative effects on consumers. On the positive side, it is correlated to lower rates of alcoholism because of the immediate effects of alcohol, among others; it increases the efficacy of sublingual nitroglycerin, used to relieve angina; and may protect against ischemia. On the negative side, there is an increased risk of squamous cell esophageal cancer and possibly other cancers, along with histamine release, bronchoconstriction, asthma and 'Asian Flush' syndrome due to mast cell degranulation.



Positive effects on heart disease

More generally speaking, whilst alcohol has been shown to lead to a decrease in death from heart disease, it is also linked to increased prevalence of diseases of the liver such as cirrhosis, the nervous system, the pancreas, the stomach, the heart and the blood, not to mention its adverse social effects. Research has yet to ascertain its actual effects during pregnancy and with regard to cancer. The French Paradox, the term coined after a study published by St Leger in the Lancet in 1979 showed that despite their high alcohol consumption, the French have a much lower incidence of heart disease than countries drinking much less, is still relevant today, said Dr Apstein. In 1991, Dr Arthur Klatsky showed that at moderate levels – 1 to 2 drinks a day – death from heart disease

was lower than for non-drinkers, creating a J-shaped curve. One of the explanations for the health benefits of moderate drinking could reside in alcohol's possible effect on good (HDL) and bad (LDL) cholesterol, whereby alcohol increases HDL cholesterol. The secretion of gastric acid may also hold answers. Many beverages stimulate gastric acid secretion but the levels are higher with red and white wine. Concurrently with this, red wine has been shown to increase polyphenols and reduce LDL-oxidation, revealing that wine has more beneficial effects than simple ethanol. All of these benefits, though, are tied to moderate drinking which Dr Apstein described as 40g a day for men and half for women, with a bottle of 12% wine containing 72g. Outside these limits, alcohol becomes a double-edged sword.





Special interview: Joao Pires, MS

Q1: Food and wine pairing is a relatively new concept to most Chinese wine consumers, some believe that it is partially because of a plethora of Chinese food types and tastes being often shared among dinner tables, which makes it impossible to find a "one fits all" solution. What are your suggestions to restaurateurs, sommeliers, and wine trade professionals on wine pairing for Chinese cuisines?

JP: The first thing that comes to my mind is, does Chinese food need wine or can Chinese food be paired with wine anyway? There is no such thing as a "one fits all" recipe as there is no such thing as Chinese food. There are various cuisines such as Cantonese, Sichuan, Jiangsu, Hunan, Shandong and many others. Most importantly, the Chinese approach to the preparation and serving of food is very different to what Westerners are familiar with. For instance, the idea of sharing that I love - an example being the main course, where several different dishes are all served at once, with everyone helping themselves from the same dish - makes food pairing quite a challenge to say the least. A regular Chinese guest of mine once explained to me that he likes to start with the most complex, perhaps more expensive wine, at the beginning of a meal then pour the less interesting ones at the end. This is truly the opposite of our Western culture but his argument in support of this makes a lot of sense, as he added that drinking the best wines at the end of the meal when you are possibly already drunk is not worth the investment. I have organized various wine dinners in our Chinese Michelin starred restaurants at Melco with authentic Chinese food but of course it was served course by course and various elements such as spice, sweet and sour and oily tastes as well as the richness and complexity of sauces were played around with and managed. A real challenge is desserts because the Chinese normally prefer fresh fruit. When they do indulge in something special, instead of being loaded with sugar, the desserts are frequently filled with sweet and savory ingredients, from taro to sweet red bean paste. Our mindset needs to be reset to be able to understand why sweet wines do not sell quite so well in this part of the world. Even in our Western world of sugar, I tend to avoid sweet wines with very sweet desserts as they will taste so boring, so nauseating, so disgusting. Instead, the key here is the involvement of acidity, not only for the

wine pairing balance but for the absolute need to lift and cleanse your palate.

Q2: Professional sommelier service is an essential part of the wine culture, and China has a unique wine culture or lack thereof. How do you think being a sommelier in China, one should keep the balance between respecting the local dining cultures and observing the standard practices of a sommelier?

JP: The standards for a sommelier are not related to geography and different cultures. The main purpose of a sommelier is guest satisfaction. This means not only product knowledge, management and financial skills but most importantly the ability "to read", respect and ideally to anticipate the guest's expectations. That being said, one needs to bear in mind that the approach in London is different to the approach in Paris, New York, Tokyo or Shanghai. Operating in an environment such as London where I lived for 10 years, where most guests have a satisfactory wine knowledge background, are very open-minded and price sensitive, is totally different to a sommelier working for instance in Macau, a market driven by casinos. The one who survives it is not necessarily the strongest, the most skilled and the most knowledgeable, but on the contrary, the one who adapts the best. Wine is not part of Chinese culture and definitely the sommelier is quite a recently created profession. Money develops the ability to attract fashions and trends whose distance and time is shortened by our modern, high-tech, fast-moving world. The speed of development is sometimes faster than the foundations, that only time can fix. I arrived in China three and a half years ago and I can tell you this is quite a different world. I have been studying, reading as much as I can, travelling and experiencing a culture dating back 5,000 years, and this is so, so serious and powerful. To inject our relatively young culture into a very old one is not always a smooth transition. I honestly must confess that sommelier proficiency and credibility in China is a long term commitment but I have absolutely no doubt about its success in the future. Our Western vision will change for sure and that is not a bad thing at all. As Dr. Wayne Dyer, an American philosopher and spiritual thinker once said: "When you change the way you look at things, the things you look at change".