Drinking pattern of wine and effects on human health: why should we drink moderately and with meals?

**Background:** According to Strategy 11 of the OIV Strategic Plan 2009–2012, Nutrition and health—individual and societal aspects, one role of the OIV is to collect scientific information in order to promote and provide direction for research on the effects of wine and other vine-product consumption on human health.

Considering that the work of other international organisations, including the World Health Organization (WHO), on the effects of the consumption of alcoholic beverages on human health should be taken into account,

Considering that the OIV emphasises that all information concerning the effects of wine on health must be presented in a competent and balanced manner,

In March 2009, the "Consumption, Nutrition and Health" Expert Group discussed extensively the items for the future work of this Group and decided to establish a working group for developing a discussion paper on the drinking habits and effects of wine to human health.

The Group further agreed that a discussion paper would be prepared by an electronic working group including Croatia, Australia, Germany, Greece, Argentina, Italy, Spain, France, Sweden, FIVS and the OIV Secretariat for consideration during the session of the Group in March 2010. The document was duly presented and discussed, and has been submitted and published in *Food & Function* Journal.”

**Abstract:** Conclusions of epidemiological studies examining the effects of alcoholic beverages on human health may be unclear and limited if they do not take into account drinking pattern parameters such as beverage type, regular moderate versus binge drinking and drinking with or without meals. This review considers different aspects of drinking patterns and effects on human health with special attention to wine. We particularly discuss the potential underlying mechanisms for epidemiological evidence that the beneficial effects of wine are more evident if consumed with food. In this context, we address the effects of food on blood alcohol concentration and acetaldehyde production in the gastrointestinal tract, the role of wine components and uric acid in counteracting the detrimental effects of postprandial oxidative stress, as well as wine’s antimicrobial properties and its potential to act as a digestive aid. In addition to its biological correlates, drinking patterns with regard to different socio-cultural circumstances in different populations are also considered. In order to avoid confusion and misconceptions in the general population because of the hormetic associations of wine with human health, it is important that all medical and scientific information concerning the effect of wine consumption on human health are evidence-based and communicated in a competent, credible and unbiased manner. In conclusion, we propose several practical recommendations concerning wine consumption and consumer information to minimize the risks of alcohol-related harm and to encourage individual responsibility and a healthy lifestyle.