



## **Wine and oxidative stress: Up-to-date evidence of the effects of moderate wine consumption on oxidative damage in humans**

**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 2007, 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 wine and oxidative stress: up to date evidence of the benefit of wine consumption on oxidative stress in humans.

The Group further agreed that a discussion paper would be prepared by an electronic working group including Spain and France for consideration during the session of the Group in March 2009. The document was duly presented and discussed, and has been submitted and published in [Atherosclerosis Journal](#)."

**Abstract:** Wine and alcohol consumption has been considered to be protective against coronary heart disease development, an oxidative stress associated disease. Wine contains polyphenols displaying antioxidant properties tested in in vitro and in vivo studies. Due to this, a general consensus exists, both among the general public and the scientific community, that wine, particularly red wine, is an antioxidant beverage. Alcohol consumption, however, is associated with oxidative damage. Several studies have been carried out on the antioxidant health benefits of wine and wine polyphenols. However, adequate scientific evidence (Level I or II) is required to be provided before recommendations or statements which can reach the general public can be formulated. Here, we summarize the state of the art of the up-to-date body of knowledge, and the extent to which there exists evidence of the benefits of moderate wine consumption on oxidative damage in humans. From the available data, there is no evidence, at present, that sustained wine consumption provides antioxidant benefits in healthy volunteers other than to counteract a possible pro-oxidative effect of the alcohol. On the contrary, data on the antioxidant protective effect of red wine in oxidative stress situations are promising. In this way, the postprandial oxidative stress after a meal, despite the diversity of biomarkers used for its evaluation, is counteracted by the ingestion of wine. Further studies are warranted.

**Reference:** [Wine and oxidative stress: Up-to-date evidence of the effects of moderate wine consumption on oxidative damage in humans. Covas, María Isabel et al. Atherosclerosis , February 2010, Volume 208, Issue 2, Pages 297–304](#)