



EFFECTS OF ALCOHOL CONSUMPTION IN GENERAL, AND WINE IN PARTICULAR, ON THE RISK OF CANCER DEVELOPMENT: A REVIEW

Background: According to Axes 4 of the OIV Strategic Plans 2015-2019 “Contribute to the safety of the consumers and consider their expectations”, one role of the OIV is to evaluate physiological and nutritional aspects related to the consumption of vitivincultural products. More precisely, to collect and disseminate scientific information and encourage research on the effects of consumption of wine, grapes and other vine-derived products on human health.

Considering that the work of other international organisations, including the World Health Organization (WHO), on the effect 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 2016, the “Consumption, Nutrition and Health”, Experts’ Group initiated a discussion on the effects of wine consumption on cancers.

The Experts’ Group recognised the importance to have information on the effects of wine consumption on cancers. However, many aspects should be taken into account, including consumption behaviour, the fact that tumoral pathologies are multi-factorial and that there are few studies specifically looking at possible connections with wine. A working group was established coordinated by France and including Argentina, Australia, Greece, Romania, Wine in Moderation (WIM) and the General Secretarial of the OIV to prepare a literature review on the epidemiological studies available and on the effects of wine consumption on tumoral pathologies.

The group further considered the discussion paper during several sessions.

In 2020, the final document was presented and discussed and has been submitted and published in the OENO one journal.

Abstract: Since 1988, alcohol has been classified as a Group 1 carcinogen, the highest level of risk, by the International Agency for Research on Cancer (IARC). In fact, alcohol consumption is the third leading risk factor for disease and mortality in Europe. It accounts for 4.65 % of the global burden of both injury and disease, making it one of the most preventable causes of injury and death.



Tissues in closest contact with alcohol when it is ingested, such as those of the oral cavity, pharynx, esophagus and larynx, have at greater risk of becoming cancerous than other body tissues. The consumption of alcohol is also associated with an increased risk of stomach, colon, rectum, liver, female breast and ovarian cancers.

Conversely, recent studies suggest that red wine components inhibit colony formation of human breast cancer and esophageal carcinoma cells, suggesting that wine-derived phenolic compounds may be inhibitory, in contrast to the alcohol component of wine.

Because of a lack of systematic studies dealing with the different types of cancer and alcoholic beverages and wine in particular, in this narrative review we summarize the general risk of cancer linked to the consumption of alcoholic beverages, including wine, according to type of cancer, with 140 extracted relevant references from 1966 to 2020.

Mostly epidemiological studies concerning large cohorts have been selected. For the cancers of the upper aerodigestive tract, liver, colorectum, breast cancer, pancreatic, prostate, an excessive consumption and/or misuse of alcoholic beverages is correlated with increased risk. Conversely, a probable decreased risk has been found for renal/kidney cancers, as well as for Non-Hodgkin lymphomas, such as thyroid lymphomas, associated with the moderate consumption of alcoholic beverages. There is no evidence of ovarian, gastric, head and neck, and lung cancer being linked to the moderate consumption of alcoholic beverages.

Cancer is a multifactorial disease, and many factors contribute to effects on health status, usually being both genetic and environmental. Habits (smoking, dietary/lifestyle pattern/ habits, physical activity), should also be taken into account when defining appropriate consumption frequencies for different types of alcoholic drink (wine, beer, spirits).

Finally, further research is needed related to wine consumption in the context of a healthy dietary and lifestyle pattern, given the health-promoting constituents of wine and their effects on cancer incidence.

Reference: Pierre-Louis Teissedre, Zurine Rasines-Perea, Jean-Claude Ruf, Creina Stockley, Arina Oana Antoce, Raquel Romano, Ursula Fradera, Rena I. Kostic (2020): Effects of alcohol consumption in general, and wine in particular, on the risk of cancer development: a review, Vol. 54 No. 4 (2020): OENO one, DOI:10.20870/oeno-one.2020.54.4.3569 <https://oeno-one.eu/article/view/3569>