



Resveratrol, Human health and winemaking perspectives

Background: According to Strategy 11 of the OIV Strategic Plan 2009–2012, Nutrition and health—individual and societal aspects and the following OIV strategic plan, 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 2013, the "Consumption, Nutrition and Health" Expert Group discussed extensively the items for the future work of this Group and decided on the proposal of delegation of Argentina to establish a working group for developing a discussion paper on the biological and physiological effects of resveratrol.

The Group further agreed that a discussion paper would be prepared by an electronic working group including Argentina, Australia, Italy, Spain, France and the OIV Secretariat for consideration during the sessions of the Group in March 2014. The document was duly presented and discussed, and has been submitted and published in *Critical Reviews in Food Science and Nutrition Journal*.

Abstract : Resveratrol, (3, 5, 40-trihydroxystilbene) is a non-flavonoid polyphenol stilbene synthesized by plants when damaged by infectious diseases or ionizing radiation. Although present in more than seventy plant species, grapes and wine are the major dietary contributors of resveratrol, responsible for 98% of the daily intake. In 1992, Renaud and De Lorgeril first linked wine polyphenols, including resveratrol, to the potential health benefits ascribed to regular and moderate wine consumption (the so called "French Paradox"). Since then, resveratrol has received increasing scientific interest, leading to research on its biological actions, and to a large number of published papers, which have been collected and discussed in this review. The relatively low amounts of resveratrol measured in wine following moderate consumption, however, may be insufficient to mitigate biological damage, such as that due to oxidative stress. On this basis, the authors also highlight the importance of viticulture and the winemaking process to enhance resveratrol concentrations in wine in order to bolster potential health benefits.

Reference: Raúl Francisco Pastor, Patrizia Restani, Chiara Di Lorenzo, Francesca Orgiu, Pierre-Louis Teissedre, Creina Stockley, Jean Claude Ruf, Claudia Inés Quini, Nuria García Tejedor, Raquel Gargantini, Carla Aruani, Sebastián Prieto, Marcelo Murgo, Rodolfo Videla, Alicia Penissi & Roberto Héctor Iermoli (2017): Resveratrol, human health and winemaking perspectives, *Critical Reviews in Food Science and Nutrition*. <https://doi.org/10.1080/10408398.2017.1400517>