

Is it scientifically justifiable to exclude wine and/or unfermented grape derivatives from the diet of consumers with or at risk of developing type-2 diabetes?

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 vitivinicultural 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 role of wine consumption in relation to diabetes.

The Expert Group recognised that T2D is a cardiovascular disease and a major health problem at the global scale. Prospective observational studies have suggested that the low-to-moderate consumption of ethanol decreases the risk of diabetes. Different studies have suggested that women are more sensitive than men to the protective effect of ethanol. Among ethanolic beverages, wine seems to be the most efficient in reducing the risk of diabetes. Wine could reduce the risk of microvascular complications. The mechanism of the protective effect of wine should be explored further in order to determine the respective roles of ethanol and its non-ethanolic constituents, and their possible synergy. Other studies should be carried out on 'prediabetic' patients. The Expert Group agreed that it would be necessary to produce a scientific publication on the topic. A working group was established coordinated by Italy and including Australia, Greece, France, Wine in Moderation (WIM) and the General Secretarial.

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 Food & Function journal.

Abstract

The abuse of alcoholic beverages has been associated with an increased risk of chronic-degenerative diseases, including diabetes mellitus, so that there is a general diffidence towards the low/moderate consumption of wine by individuals with type-2 diabetes (T2D) or at risk of developing it.

This narrative review investigates by critical revision of the scientific literature whether wine/grape derivatives must be excluded or if their low/moderate consumption could be part of the daily diet of T2D individuals.

Although further intervention studies on the consumption of alcoholic beverages and the development or control of T2D are needed, the burden of evidence suggests that low/moderate wine consumption could have beneficial effects.

Reference

Patrizia Restani, Chiara Di Lorenzo, Ursula Fradera, Creina S. Stockley, Pierre-Louis Teissedre, Jean-Claude Ruf, Barbara Iasiello, Simone Biella, Francesca Colombo and Rena I. Kosti: Food & Function,

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