

## **“GOOD WINE MAKES GOOD BLOOD”: AN INTEGRATED APPROACH TO CHARACTERIZE AUTOCHTHONOUS APULIAN GRAPEVINES AS PROMISING CANDIDATES FOR HEALTHY WINES**

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Wine production represents an ancient human activity and one of the most economically important markets in Europe. Moreover, the health effects of grapes and related products have been largely demonstrated, and mostly depend on their richness in bioactive molecules such as flavonoid and non-flavonoid phenolic compounds. Italy has the highest global wine production and provides one of the richest grapevine germplasm in the Mediterranean

area. In this paper, our attention was focused on the evaluation of the total phenol and anthocyanin content in five autochthonous Apulian grapevine cultivars, in both wines and their non-alcoholic extracts. Moreover, the potential antioxidant effects of the non-alcoholic wine extracts on the cell viability of Caco-2 and HeLa carcinoma cell lines were tested. Finally, for the most promising autochthonous selected cultivars (Negramaro, Nero di Troia and Susumaniello), comparative transcriptomic analysis in berries was performed using high-throughput sequencing technology.