

White wine

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Introduction. White wine is wine whose colour can be straw yellow, yellow-green, or yellow-gold coloured. It is produced by the alcoholic fermentation of the non-coloured pulp of grapes that may have a white or black skin. It is treated to maintain a yellow transparent colour in the final product. The wide variety of white wines comes from the large number of varieties, methods of winemaking, and the ratio of residual sugar.

Materials and methods. White wine has existed for at least 2500 years. It has accompanied economic development and colonized every country whose inhabitants are wine drinkers: Europe, America, Oceania, although less systematically in Africa and Asia due to climate and religious reasons. Some varieties are well-known such as the Chardonnay, Sauvignon, and Riesling. Others have a discreet existence hidden behind the name of a wine resulting from the assembly of several varieties. Tokay, Sherry, and Sauternes are examples of these.

Results and discussion. Among the many types of white wine, dry white wine is the most common. More or less aromatic and tangy, it is derived from the complete fermentation of the wort. Sweet wines, whether moelleux or liquoreux wines are where the fermentation is interrupted before all the grape sugars are converted into alcohol: this is called Mutage or fortification.

Sparkling wines, which are mostly white wines, are wines where the carbon dioxide from the fermentation is kept dissolved in the wine and becomes gas when the bottle is opened giving a delicate foam beverage considered the festive wine par excellence. Celebrated by writers, poets, singers and painters, white wine is used as an Apéritif during the meal, with dessert, or as a refreshing drink between meals. They are more refreshing, lighter in both style and taste than the majority of their red wine counterparts, making them ideal for spring and summer occasions.

Chardonnay combines well with the taste of fleur de lis (triple cream cheese). White wine also contributes to the development of dishes in the kitchen thanks to its acidity, aroma, and its ability to soften meat and deglaze the cooking juices. Its benefits to the body are however lower than those attributed to red wine because it is low in polyphenolic compounds.

To produce white wine from red grapes it is necessary not to macerate the grapes, nor to press too hard on the harvest to avoid the dissolving of the anthocyanins in the grape juice. The skin contains a lot of cellulose, insoluble pectin and proteins, and organic acids: citric, malic, and tartaric acids. The skin of the Sauvignon blanc B grape has a pH of about 4.15. It also contains between 2 and 3% tannins. The flesh of the grape is the most important part – it is between 75 and 85% of the weight of the grape. It consists of large polygonal cells, which are very thin-walled. With a low pressure, the cells leak their contents: the wort. The flesh of the grape contains mainly water. The organic components are fermentable sugars (between 170-230 grams for a dry wine and between 200 and 300 grams per litre or even more for Fortified wines) and organic acids, especially malic acid and tartaric acid. Acids occur in larger amounts in the centre of the berry while the sugars are in greater proportion at the periphery. The flesh is the major element of the wine, as it is the part that contains the highest proportion of liquid. The flavours are much less present than in the skin.

Conclusions. When placed in the mouth white wine has a balance different from red wine from which the tannic structure is removed. The balance is no longer based only on alcohol and acidity: this is the factor that explains the difficulty of making a white wine.