

wine style that will work perfectly in just the same way. With this idea in mind, chefs and sommeliers may work together making small tweaks to ingredients and preparation methods of their dish, or to the particular details of the wine (which vintage?; which producer?) in pursuit of the 'perfect pairing'. At best they will achieve something that is a perfect pairing for them, and perhaps the majority of their guests. But because people vary in their sensitivities and their preferences, there is no guarantee that all guests will agree the pairing is even successful.

Conclusion: There is no such thing as an objectively perfect pairing.

Summary of Food and Wine Interactions

Primary flavour in food	Effect on Wine	Pairing Advice
Sweetness	More drying and bitter, more acidic Less sweet and fruity	Take care pairing with wines with less sweetness or with tannins
Umami	More drying and bitter, more acidic Less sweet and fruity	Take care pairing with wines with high levels of tannins or oak character
Salty	Less drying and bitter, less acidic Smoother and richer	Salt can make tannic wines seem more palatable
Acidic	Less bitter and acidic Fruitier, sweeter and richer	Take care pairing with wines with less acidity
Highly flavoured	Overwhelmed by the food flavours	Pair with wines with similar intensity of flavours
Fatty/Oily	Less acidic	Pair with wines with high levels of acidity
Chili heat	More drying and bitter, less sweet and less fruity Increases heat from chili	Pair with wines light in alcohol, fruity and maybe some sweetness

WSET®

Level 3 Award

in Wines and Spirits

ADDENDUM



As of 1st August 2012, this addendum replaces all content relating to **food and wine pairing** within the WSET® Level 3 Award in Wines and Spirits study pack, namely:

- **Chapter 9** of the textbook 'Understanding Style and Quality' (revised edition 2011, p62-65)
- **Matching Food and Wine: Key Facts** section of the **Study Guide** (p12-13)

Wine with Food

Food that is consumed with wine has an effect on the way a wine tastes, and wine can also have an effect on the taste of food. The purpose of food and wine pairing is to take advantage of these effects, so that ideally both the food and wine provide more pleasure than either would when consumed separately. Knowledge of these effects will also help avoid negative or unpleasant interactions.

In addition to understanding the basic taste interactions between food and wine, it is important to remember that people have different sensitivities to various flavour and aroma components, meaning that the same level of bitterness, for example, can affect one person much more strongly than another (this is different from a personal preference – some people like strong reactions while others find them unpleasant). This variation in both individual sensitivities and preferences means that what seems like a 'perfect pairing' to one person may seem ordinary or even unsuccessful to another. Pairings should therefore take into account the preferences of the individual, as well as the basic interactions between food and wine

Primary Food and Wine Taste Interactions

When you place food in your mouth, your taste buds adapt so that the perception of levels of sugar, salt, acid etc. of the next item to be tasted can be altered. An extreme example is when orange juice becomes unpleasantly acidic when consumed immediately after using toothpaste. In addition to this, some foods such as chocolate or thick creamy dishes can have a mouthcoating effect that impairs the sense of taste.

In simple terms there are two components in food (sweetness and umami) that tend to make wines taste 'harder' (more astringent and bitter, more acidic, less sweet and less fruity), and two components (salt and acid) whose presence in food tends to make wines taste 'softer' (less astringent and bitter, less acidic; sweeter, and more fruity). Generally, food has more impact on the way a wine will taste than the other way round, and in particular is more likely to have a negative impact.

Sweetness in Food

- Increases the perception of bitterness, astringency, acidity and the burning effect of the alcohol in the wine
- Decreases the perception of body, sweetness, and fruitiness in the wine

Sweetness in a dish can make a dry wine seem to lose its fruit and be unpleasantly acidic. With any dishes containing sugar, a good general rule is to select a wine that has a higher level of sweetness.

Local Wine with Local Food

This is the idea that with a regional dish, the best wine pairing is likely to be a wine from the region. This can be a good place to start, as regions with a long history of winemaking have had time for food and wine pairings to evolve together. So, for example, wines that clash terribly with all local foods are unlikely to be successful and local vineyards might be replanted with more agreeable grape varieties, or foods might have more salt or acid added to them in regions where high-tannin wines are common (in Italy, for instance). However, most regions produce wines in a range of styles (red or white; fruity or tannic; sweet or dry; simple or complex) in which case the advice is not especially helpful – some knowledge of food and wine interactions is still needed to select from within a potentially wide choice. Also, many great cuisines have developed in places with little or no wine production. We need a way to approach food and wine pairing for these dishes, even if the conclusion is that some of them are difficult or impossible to pair successfully. Conversely, it is helpful to have principles that allow us to find food partners for wines made in regions that are not celebrated for their food.

Conclusion: Regional food and wine pairings are not the whole story.

'Red wine with red meat; white wine with fish'

This first part is based on the idea that tannins in red wine bind to proteins in red meat, thus softening the impact of the wine. However, although tannins do bind to proteins (you can see this in your saliva when you spit red wines), this effect is not important for pairing red wines with food. Rather, it is the salt in meat dishes that softens the effects of tannins. The second part is based on the fact that some fish are high in umami and can make a red wine appear more bitter and astringent. However, this reaction can be offset by salt and acid which are common elements in most fish dishes. More difficult to avoid is the reaction of compounds in red wine with very oily (blue) fish, producing a metallic taste. With these fish it can be safer to stick to the rule and pair with white wines. Again, it is essential to consider all of the components of a dish (especially sauces) as well as what is served with it. If the structural elements of a dish match there is no reason not to serve white wine with red meat or red wine with fish.

Conclusion: This rule helps avoid disasters but also misses opportunities.

The Search for the Perfect Match.

There are many classic pairings of food and wine: goat's cheese and Sancerre; oysters with Muscadet or Champagne; Stilton with Port; olives with Manzanilla. Most (but not all) people will find these pairings successful and interesting, with the food enhancing the wine and vice versa. We have seen that these pairings work because of the taste interaction between structural components (salt, sweetness, acid etc.) in the food and wine, but these successes can suggest that for every dish there is one perfect wine or

potential for more interesting results. The most problematic wines are those that have high levels of bitterness and astringency from oak and skin tannins, combined with high levels of acidity and alcohol, and complex flavours. However, these wines can undergo the most interesting changes when partnered with food and can reveal flavours that are hard to detect when the wines are consumed on their own.

Low-risk wines

Simple, unoaked wines with a little residual sugar are unlikely to be made unpleasant by any dishes. However, these kinds of wines change relatively little when partnered with food, so the food and wine pairing experiences can be less interesting.

One of the most productive ways of applying the principles identified above is to examine well established successful pairings, and analyse the reasons for the success. If these reasons are understood, then other wines can be identified that can also provide successful pairings. For example, Muscadet and Champagne both work well with oysters because they are unoaked (so there is no bitter component to be spoiled by the umami taste of the oyster), relatively light in flavour (so as not to overwhelm the delicate flavour of oysters) and high in acid (so they still seem vibrant and refreshing when oysters are eaten with lemon juice, for example). Other wines that satisfy these criteria should also be successful pairings. Examples might include Rías Baixas Albariño and Hunter Valley Semillon.

Understanding Some Alternative Approaches

Using the principles outlined above, we can evaluate some of the commonly encountered rules about food and wine pairing.

Matching or Contrasting Flavours

The idea that flavours in the food can be mirrored or contrasted by flavours in the wine is one of the most commonly applied ideas in food and wine pairing. So, for example, a smoky, spicy, gamey or creamy dish is matched by a smoky, spicy, gamey or creamy flavoured wine. The result may be successful, but success or failure does not depend on the matching of flavours. Rather, it is dependent on the interaction of structural components in the food (sugar, oil/fat, salt etc.) and the wine (sugar, alcohol, acid, tannin etc.). If the structural pairing works, then flavour matching/contrasting can provide further interest to the pairing, but if the structural pairing fails, then the match is likely to be unsuccessful.

Conclusion: Structural components are more important than flavour.

Umami in Food

- Increases the perception of bitterness, astringency, acidity and alcohol burn in the wine
- Decreases the perception of body, sweetness and fruitiness in the wine

Umami is a savoury taste, and is distinct from the other primary tastes although it can be difficult to isolate. Whereas sweetness can be illustrated in isolation with sugar; salt with sodium chloride and acidity with a number of acids (e.g. tartaric acid); umami tends to be present with other tastes (with saltiness in Monosodium Glutamate (MSG)) or with other flavours (e.g. in cooked or dried mushrooms). One of the simplest ways to experience it is to compare the taste of a raw button mushroom with one that has been microwaved for 30 seconds. The umami taste of the mushroom is greatly increased by the cooking. Umami can also be experienced by tasting MSG –either by eating a few grains, or in a weak solution. Note, however, that in this form, the umami taste is combined with a salt taste.

Many foods that are considered difficult to pair contain high levels of umami without salt to counteract the hardening effects on wine. These include asparagus, eggs, mushrooms and ripe soft cheeses. Other foods that are high in umami also tend to be high in salt, which can counteract the impact of umami on the wine (see below). These include cured or smoked seafood and meats, and hard cheeses (especially Parmesan).

Remember, bitterness in wine comes from tannins extracted from grape skins or oak. For a balanced high-tannin wine, the change in perceived bitterness may not appear to be excessive and will not be enough to unbalance the wine. However, low tannin red wines or white wines made with oak or skin contact can become surprisingly bitter and unbalanced when consumed with umami rich foods.

Acidity in Food

- Increases the perception of body, sweetness and fruitiness in the wine
- Decreases the perception of acidity in the wine

Some acidity in food is generally a good thing for food and wine pairing as it can bring a very high acid wine into balance and enhance the fruitiness. However, if the level of acidity in the wine is low, high levels of acidity in foods can make wines seem flat, flabby and lacking focus.

Salt in Food

- Increases the perception of body in the wine
- Decreases the perception of astringency, bitterness and acidity in the wine

Salt is another wine-friendly component of food which can help soften some of the harder elements.

Bitterness in Food

- Increases bitterness in wine

Sensitivity to bitter tastes varies greatly from person to person. Also, someone who is particularly sensitive to one bitter compound may be relatively insensitive to another. Generally, bitter flavours add to each other, so bitterness in the food alone may be at a pleasant level, and the bitterness in the wine may be balanced, but together the bitter elements can combine to reach an unpleasant level. This effect is very subjective.

Chili Heat in Food

This is a tactile (touch) sensation rather than one of taste and levels of sensitivity can vary greatly from person to person. Not only are some people more sensitive than others, but there is also huge variation in how pleasant or unpleasant this effect feels to the individual.

Chili heat in food

- Increases the perception of bitterness, astringency, acidity, and alcohol burn
- Decreases the perception of body, richness, sweetness and fruitiness in the wine

The intensity of the reaction increases with the level of alcohol in the wine. Alcohol also increases the burning sensation of the chili; some people enjoy this effect.

Other Considerations

Flavour intensity: It is usually desirable for the flavour intensities of the food and wine to be matched so that one does not overpower the other. However, in some circumstances, an intensely flavoured food (such as a curry) can be successfully partnered with a lightly flavoured wine –such as a simple, unoaked, light white. Equally, some lightly flavoured desserts can be successfully partnered with intensely flavoured sweet wines.

Acid and Fat: Most people find the combination of acidic wines with fatty or oily foods to be very satisfying. The pairing provides a pleasant sensation of the acidic wine 'cutting through' the richness of the food, and cleaning up the palate. This is a subjective effect.

Sweet and Salty: Also subjective is the pleasure of combining sweet and salty flavours, but this is a combination many people enjoy, and leads to some very successful food and wine pairings, such as sweet wine and blue cheese.

Applying the Principles

Because people vary in their sensitivities and preferences, there is no simple answer to the questions about which wines go best with which dishes. Although the effects of food on the balance of a wine will generally be agreed, whether people like these effects is a personal judgement. Most people prefer their wines to taste more fruity and less acidic, bitter and astringent, and using this generalisation it is possible to make some cautious recommendations. The best that can be said is that 'most people will find that dish X goes well with wines in style Y', but the host or sommelier should accept that their guests may not agree about which pairings work.

When selecting wines to partner dishes it can be helpful to divide dishes and wines into high risk and low risk. Of course, most foods and wines contain more than one of the structural components listed below so there are many possible permutations.

High risk foods

- **Sugar** - dishes high in sugar should be paired with a wine that has at least as much sugar
- **Umami** - dishes high in umami should be paired with wines that are more fruity than tannic as the umami in the food will emphasise the astringency and bitterness of the tannins.
Umami - high levels of umami in a dish can be balanced by the addition of acid or salt. However the amount added should not alter the basic character of the dish.
- **Bitterness** – dishes high in bitterness will emphasise bitterness in wine. Consider white wines or low-tannin reds.
- **Chili heat** - dishes high in chilli heat should be paired with white wines or low-tannin reds, both with low alcohol (as bitterness and alcohol burn can be highlighted for sensitive tasters). Fruitiness and sweetness can also be reduced so think about wines with higher levels of these qualities to mitigate this effect.

Low risk foods – dishes high in **salt** and/or **acid**.

Note, however:

- High-acid foods should generally be matched with high-acid wines, otherwise the wines can taste too soft and flabby.

High-risk wines

The more structural components in the wine (and food), the more possible taste interactions there will be. This makes pairing more complicated but also provides