Why pair food and drink

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https://www.alamy.com/2017-02-johann-wilhelm-preyer-still-life-with-champagne-and-oysters-image154709403.html?imageid=0F47B3D7-DBDF-4FE9-971B-E8CAE5E98199&p=699375&pn=1&searchId=55fe95eaf2a0a360632f2cc87c501122&searchtype=0 Yes looks great.

Standfirst: Why people at any point in history may have considered a particular combination of food and drink as pairing especially well is likely due to reasons of food culture (including social and economic factors), more than the underlying food chemistry.

Though we may eat and drink to be merry without giving what we choose to consume a second thought, the pairing of food and drink can be studied from social, scientific, nutritional, economic, and even religious perspectives. Understanding the many reasons why flavours are matched is important if we are to explain why it is that certain food and beverage combinations work so well together, and also come up with novel food and drink pairings in the future. There is potential here for developing alternative, more sustainable meals, for promoting gastrotourism, or simply to intrigue the consumer's palate (and mind). Here, we consider some of the factors in the successful pairing of oysters and Champagne.

In 2020, according to the world's press, the mystery of why oysters pair so well with Champagne had been solved, once-and-for-all. According to the lead author of a scientific study[1], Charlotte Vinther Schmidt, "Certain chemicals in champagne and oysters pair well to "spark an umami synergy… that greatly enhances the taste of the champagne," (cited in [2]). The synergy in question was suggested to result from the simultaneous binding of a free ion of amino acid glutamate (basal umami) and a free ion from certain 5′-ribonucleotides (synergistic umami). This apparently leads to a stronger binding of the glutamate ion and thereafter to a superadditive enhancement of the neural signal reaching the brain's taste cortex. Aspartic acid or aspartate (Asp) and glutamic acid or glutamate (Glu) are two of the primary amino acids responsible for the umami taste, though there are others, such as the well-known monosodium glutamate (MSG). The umami taste that results from the binding of glutamate to the umami receptor T1R1/T1R3, can be enhanced several-fold by the presence of free nucleotides, such as guanosine-5′-monophosphate (GMP) and inosine-5′-monophosphate (IMP). The latter compounds have long been referred to as 'flavour potentiators' in the food science literature.[3] However, the consequences for consumer choice and preference of the intriguing synergistic

interactions that have long been known to occur between umami and free nucleotides, currently remains unclear.

A reading of the scientific research underpinning the pairing of oysters and Champagne less cursory than that of the world's media reveals hypothesis, rather than observation, from the Danish scientists concerned. Furthermore, according to earlier data from Maga and Yamaguchi[3], pilchards and oysters have very similar levels of free Glu and one of the nucleotides (IMP) giving rise to the umami synergy, though, I am not aware of anyone suggesting that they would necessarily make a particularly good match for Champagne. In other words, despite the optimistic pronouncements of flavour chemists, the pairing of food and drink may be embedded more in cultural and social history, than in flavour chemistry.

Responses to various ingredients/foods have changed radically over the years. Until relatively recently for example, any tuna caught by North American fisherman was thrown away or the fatty belly meat was turned into cat food. Now, pound for pound, tuna is the most expensive fish any of us are likely to consume given the global rise in the popularity of sushi[4]. In the 18th and 19th centuries, pineapples and celery were phenomenally popular, expensive and prized foods in the west, but are nowadays seemingly treated no differently to any other fruit or vegetable that one finds on the supermarket shelf[5].

In North America, in 1909, oysters cost half as much as beef per pound[6]; the emergence of the railways undoubtedly facilitated the distribution of oysters inland from coastal waters when they were harvested, thus contributing to the North American oyster craze of the 19th century. In fact, oysters were so abundant, and cheap, that they were often used as a filler in meat pies. At the turn of the 20th century, it would thus have been unlikely that anyone would have thought of pairing such a cheap foodstuff with Champagne, a drink that has long been positioned as an expensive luxury drink.

Indeed, French wine and beer experts consider the need to match food and drink of a similar quality as a principle of pairing food and drink.[7] Looking back in time, the more traditional wine to pair with oysters was actually Chablis or Mersault Sur Lie (meaning that the wines have been aged on the Lees for a minimum of six months), while caviar (which has seemingly always been considered an expensive delicacy) was a much more common pairing for Champagne. It was caviar, after all, that the Mayor of Versailles chose to serve with a 1904 Louis Roederer Champagne for his distinguished guests, King George VI and Queen Elizabeth, when they visited on July 21st, 1938. It is often suggested that Chablis pairs so well with oysters

due to the wine's minerality – some even going so far as to point out that the limestone, mineral-rich soils of the Chablis region are rich with marine fossils including oyster shells! It may be as much the metallic notes of Champagne that work particularly well with oysters, to the extent that they actually do make for a good taste/flavour combination. At the same time, however, one can find other commentators rallying against the pairing of Champagne with oysters for precisely the same reason, namely that the combination may leave a metallic taste in the mouth. In fact, the University of Copenhagen researchers who claim to have explained why oysters pair so well with Champagne[1] did not make any perceptual assessment of the goodness of the matches between the oysters and the champagnes that they tested (if not tasted).

Nowadays, oysters are considered something of a luxury item, given their expense. Their change in status is linked to the shortage of global supply resulting, in part, from various diseases that have affected oyster beds in several parts of the world. It can be argued that the fact that Champagne and oysters currently both fall in the luxury category may help to explain this particular pairing of products in the current era. According to this suggestion, the correct level of explanation for the pairing of Champagne with oysters is more likely to be found at the cognitive/social level rather than necessarily in terms of the chemical make-up or any perceptual synergy that might (or might not) result. Indeed, such observations hint at more of a cultural-historical, or traditional, rather than necessarily chemical, basis to the pairing of food and drink (e.g., wine).

There are a number of cognitive and perceptual reasons as to why people choose to pair particular foods and drinks[7,8]. Beyond matching food and drink on the basis of the similar quality/luxury of the contributing parts, other cognitive reasons for pairing include matching food and drink products because they originate from a similar geographical region, because similar processes (such as fermentation) are involved in their creation, or because of a similar level of perceived complexity[9]. And, on occasion, specific food and drink products are paired for no other reason that the idiosyncratic whimsy of the person who happens to be recommending the match in the first place[7]. By contrast, perceptual reasons to pair food and drink include the delivery of a synergistic perceptual interaction, the modulation (enhancement of a desirable note, or the suppression of a less desirable one), and the putative harmony of the tastes/flavours of the food and drink products that are being paired[10].

Ultimately, therefore, it can be argued that our preference for specific foods, drinks, and their combinations, relies as much on trends, tradition, price, and availability as it does on the

underlying flavour chemistry. As Weiss once put it: "The preference for any flavour is a function of the transmigrations, transfigurations, and reincarnations of childhood taste as it enters the public realm of culinary production and consumption, followed by transformations that continue throughout one's lifetime, sometimes conscious, often unconscious."[11] And while some commentators have questioned the importance of food and beverage pairing (e.g., at a time when so many around the world are going hungry), there can be little doubt that there are considerable marketing opportunities in the space, given the current popularity of the pairing concept amongst consumers in many parts of the world[12].

Competing interests: The author declares no competing interests

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