## Caviar \& Chocolate

What is it that makes two "magical ingredients" come together to form a perfect union? If it's love we're talking about, there's a lot that's still not very clear (apparently it has to do with scent, or pheromones), but if we're talking about the kitchen, then the answer lies in one of the most popular culinary trends these days: foodpairing, a scientific method of combining the most surprising of flavors. So, caviar plus white chocolate? That's precisely where this all began...

Bored with the well-known, well-worn flavor combinations, Heston Blumenthal, chef at English eatery The Fat Duck, one of the most celebrated restaurants in the world, decided instead to play with combinations most ordinary people might find unfathomable. Known for his propensity for experimentation (check out the video of him preparing ice cream in the beloved British „national" flavor, bacon \& eggs) and for his vast knowledge of chemistry, Blumenthal took to his task methodically. When he discovered that luxurious, salty, cool, crisp, and fishy caviar combines in a surprisingly harmonious way with white chocolate, which is sweet, engaging, warm, and creamy, he decided to investigate as to why: the testimony of his own taste buds was simply not enough. This grown boy with the curiosity and charm of a mad scientist could find no answer on his own, so he decided to hire specialists. He turned to François Benzi, a researcher employed by the celebrated Firmenich "fragrance house" in Switzerland. Benzi works full-time on taste and scent (which itself accounts for about $80 \%$ of taste). Firmenich is a remarkable company, the biggest and most important in the industry, working with taste and scent for more than 100 years now. It has had winners of the Nobel Prize in chemistry among its staff, whose inventions have included an artificial raspberry flavor in 1938, followed by strawberry and lemon. You may hate them for it - for horrible artificial ice cream, for colorful jellies and gummies, for strawberry-scented shampoo - but Firmenich is nowadays responsible for the most innovative, cutting-edge flavor combinations.


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Benzi discovered that caviar and white chocolate have similar amine levels, which he suggested was the reason for their remarkably harmonious pairing on a plate. He decided to investigate this notion for other pairings, and found that chemical compatibility is indeed responsible for a successfully combined taste: similar taste profiles (together with their respective chemical compounds) turn out to produce a harmonious dish. Of course it is not enough to simply throw them together - it's necessary to think a little bit, maybe to add something or cook something a certain way. The Belgian website foodpairing.be offers a useful guide to such combinations, with „trees" based around one primary component and taste satellites tacked on to it. This formula allows one to return to chemistry - because even if we are dealing with strawberries and peas (for which we can thank Sang-Hoon Degeimbre, head of the Belgian restaurant L'Air du Temps, who also patented this fusion), only a small number of corresponding components is needed for things to possibly „click". Tastes or scents that are distinctive and recognizable to us may consist of as many as 700 different factors, and there is a chance for their successful partnership on a plate if some of them agree. But I like to view this as something more than just a few chemical formulas or laboratory experiments: my romantic nature (or simply the right side of my brain) tells me, "maybe it'll work, or maybe it won't...". And, just as much as combining yellow cheese and bacon will seem natural for most everyone, that same cheese together with fig confiture (with chili!) or plum jam won't be as obvious a combination for everyone. The same goes for the „big hits" of the foodpairing methodology: we may indeed fall in love with lamb and strawberries, but the already challenging combination of coffee and garlic might be difficult to swallow. It may simply not be love at first bite...

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