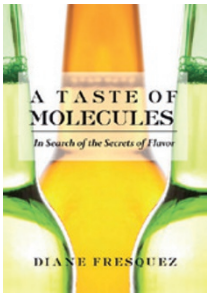
A spoonful of curiosity



A Taste of Molecules

Diane Fresquez

THE FEMINIST PRESS AT THE CITY UNIVERSITY OF NEW YORK; 2013.
208 PP $16.95

I have a confession to make. Actually, it will come as no surprise to people who have shared a meal with me, but I have a slight obsession with salsa — "The sauce, not the dance", as Diane Fresquez says in *A Taste of Molecules*. To me, homemade salsa is the perfect way to celebrate the tang and texture of tomatoes, the sweet crunch of onions, and a variety of flavours unique to each batch that can almost never be perfectly recaptured. After all, it isn't just the recipe — the relative quantities and method of preparation of each ingredient — that determine flavour, but flavours intrinsic to that specific jalapeño, or this head of garlic. It's also fascinating to me that different people think so differently about salsa — some love fruit salsas, some can't eat cilantro, some will eat any salsa without any great discernment or interest that it's different from another kind. Perhaps because there are, at least in the United States, so many salsa options, I think getting to know someone's salsa preferences gives me a little window into their true personality.

Thus, if your goal in writing a book is to get me to read it, begin with salsa. Step 2? Take me on a journey where scientists become cooks and cooks become scientists as they strive to understand and create the flavours that create unique and memorable foods. Step 3 is to take me on a worldwide adventure, describing the scenery of the different places you've been and loved so adeptly that I feel like I'm there with you, especially if your hometown in New Mexico evokes my own childhood in neighbouring Colorado. In her book, Fresquez follows these instructions to the letter, creating a delicious celebration of food perfectly paired with a genuine scientific curiosity.

A Taste of Molecules asks the question, what is flavour? How is it linked to memory such that a spoonful of an old family recipe can immediately recall a scene from a reunion 13 years ago, or fill us with nostalgia for something we've read or someone we've lost? Do we pick a green apple instead of a red one because we think the green colour is more visually appealing or because our past experience tells us we prefer the taste? It is also a quest to understand, at a chemical level, what flavour consists of, and how subtle molecular changes can yield wildly divergent taste sensations. And it is a call to eat and drink more mindfully, enjoying the flavours that brewers and chefs spend so much time perfecting.

Fresquez's search for flavour really starts when she meets Xavier Rennotte, a beekeeper in Belgium searching for the perfect honey from which to make the perfect mead, the primary storyline that stays with us throughout the book. While Rennotte celebrates the highs and lows of linden honey and six-month fermentation periods, Fresquez introduces us to a broad cast of characters focused on flavour. These vignettes often include the stories of how each scientist was inspired in their own research, such as Magni Marten's introduction to the importance of cultural norms in taste perception from Uganda to Norway during an effort to feed malnourished children, or Helene Hausner's efforts to understand how flavours, such as those that define liquorice and banana, are transmitted to babies through breast milk. And Fresquez gets the chance to explore flavour in unique ways, such as in trying to mix up 10 grams of banana flavour at International Flavors and Fragrances under the guidance of senior flavourist Caroline Korsten, or brewer An De Ryck's admonition that the signature aromas of her banana-flavoured beer change with temperature (and thus the glass should be held).

Fresquez herself becomes a research subject at the Restaurant of the Future, where the awareness that her actions are being recorded launches a hilarious inner monologue of awkwardness and self-doubt.

Fresquez is inspired by these experiences to launch her own scientific experiment, played out at Only4Senses, a dining-in-the-dark restaurant. The experiment goes perfectly wrong — a result that any scientist can commiserate with — but still yields surprising discoveries about individual responses to flavour.

Beyond these stories, two things about this book caught my attention. The first is that Fresquez creates an extensive bibliography sprinkled throughout — primarily her reading on various trains — ranging from *The History of the Pint* to the painting *The Garden of Earthly Delights* (though perhaps those two examples are not so disparate!). These references reflect her love of reading and inspire further exploration.

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Second, I was intrigued to learn the book is part of the 'Women Writing Science' project, both because the goals of the project — to "celebrate the achievements of women scientists" and "address gender bias barriers", amongst others — resonate with me, and because I am delighted that I was not asked to review this book specifically because the book supports women in science, or because I am a woman in science, but simply because the editor thought it was interesting. Gender bias barriers, begone!

Overall, *A Taste of Molecules* succeeds for me not so much because I feel more educated about the specific chemicals in mead, though a reader without a strong science background might come to a different conclusion, but because it is written from a perspective of curiosity and a desire to know more about the world around and within us. The thoughtful and enthusiastic dialogue between Fresquez and her companions makes an excellent counterpoint to what Korsten laments as the negative public perception of working with 'chemicals', a theme familiar to many chemists. And, through her desire to learn, Fresquez reminds me that I too am curious. Happily, she ends with recipes of some favourite dishes, so now I am curious to know how they taste. ❐

REVIEWED BY CATHERINE GOODMAN
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