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THE CURIOUS COOK

Cilantro Haters, It's Not Your Fault

By HAROLD MCGEE

FOOD partisanship doesn't usually reach the same heights of animosity as the political variety, except in the case of the anti-cilantro party. The green parts of the plant that gives us coriander seeds seem to inspire a primal revulsion among an outspoken minority of eaters.

Culinary sophistication is no guarantee of immunity from cilantro-phobia. In a television interview in 2002, [Larry King](#) asked [Julia Child](#) which foods she hated. She responded: "Cilantro and arugula I don't like at all. They're both green herbs, they have kind of a dead taste to me."

"So you would never order it?" Mr. King asked.

"Never," she responded. "I would pick it out if I saw it and throw it on the floor."

Ms. Child had plenty of company for her feelings about cilantro (arugula seems to be less offensive). The authoritative Oxford Companion to Food notes that the word "coriander" is said to derive from the Greek word for [bedbug](#), that cilantro aroma "has been compared with the smell of bug-infested bedclothes" and that "Europeans often have difficulty in overcoming their initial aversion to this smell." There's an "I Hate Cilantro" [Facebook](#) page with hundreds of fans and an [I Hate Cilantro blog](#).

Yet cilantro is happily consumed by many millions of people around the world, particularly in Asia and Latin America. The Portuguese put fistfuls into soups. What is it about cilantro that makes it so unpleasant for people in cultures that don't much use it?

Some people may be genetically predisposed to dislike cilantro, according to often-cited studies by Charles J. Wysocki of the Monell Chemical Senses Center in Philadelphia. But cilantro-phobe genetics remain little known and aren't under systematic investigation. Meanwhile, history, chemistry and neurology have been adding some valuable pieces to the puzzle.

The coriander plant is native to the eastern Mediterranean, and European cooks used both seeds and leaves well into medieval times.

Helen Leach, an anthropologist at the University of Otago in New Zealand, has traced unflattering remarks about cilantro flavor and the bug etymology — not endorsed by modern dictionaries — back to English garden books and French farming books from around 1600, when medieval dishes had fallen out of fashion. She suggests that cilantro was disparaged as part of a general effort to define the new European table against the flavors of the old.

Modern cilantro-phobes tend to describe the offending flavor as soapy rather than buggy. I don't hate cilantro, but it does sometimes remind me of hand lotion. Each of these associations turns out to make good chemical sense.

Flavor chemists have found that cilantro aroma is created by a half-dozen or so substances, and most of these are modified fragments of fat molecules called aldehydes. The same or similar aldehydes are also found in soaps and lotions and the bug family of insects.

Soaps are made by fragmenting fat molecules with strongly alkaline lye or its equivalent, and aldehydes are a byproduct of this process, as they are when oxygen in the air attacks the fats and oils in cosmetics. And many bugs make strong-smelling, aldehyde-rich body fluids to attract or repel other creatures.

The published studies of cilantro aroma describe individual aldehydes as having both cilantro-like and soapy qualities. Several flavor chemists told me in e-mail messages that they smell a soapy note in the whole herb as well, but still find its aroma fresh and pleasant.

So the cilantro aldehydes are olfactory Jekyll-and-Hydes. Why is it only the evil, soapy side that shows up for cilantro-phobes, and not the charming one?

I posed this question to Jay Gottfried, a neuroscientist at [Northwestern University](#) who studies how the brain perceives smells.

Dr. Gottfried turned out to be a former cilantro-phobe who could speak from personal experience. He said that the great cilantro split probably reflects the primal importance of smell and taste to survival, and the brain's constant updating of its database of experiences.

The senses of smell and taste evolved to evoke strong emotions, he explained, because they were critical to finding food and mates and avoiding poisons and predators. When we taste a food, the brain searches its memory to find a pattern from past experience that the flavor belongs to. Then it uses that pattern to create a perception of flavor, including an evaluation of its desirability.

If the flavor doesn't fit a familiar food experience, and instead fits into a pattern that involves chemical cleaning agents and dirt, or crawly insects, then the brain highlights the mismatch and the potential threat to our safety. We react strongly and throw the offending ingredient on the floor where it belongs.

"When your brain detects a potential threat, it narrows your attention," Dr. Gottfried told me in a telephone conversation. "You don't need to know that a dangerous food has a hint of asparagus and sorrel to it. You just get it away from your mouth."

But he explained that every new experience causes the brain to update and enlarge its set of patterns, and this can lead to a shift in how we perceive a food.

"I didn't like cilantro to begin with," he said. "But I love food, and I ate all kinds of things, and I kept encountering it. My brain must have developed new patterns for cilantro flavor from those experiences, which included pleasure from the other flavors and the sharing with friends and family. That's how people in cilantro-eating countries experience it every day."

“So I began to like cilantro,” he said. “It can still remind me of soap, but it’s not threatening anymore, so that association fades into the background, and I enjoy its other qualities. On the other hand, if I ate cilantro once and never willingly let it pass my lips again, there wouldn’t have been a chance to reshape that perception.”

Cilantro itself can be reshaped to make it easier to take. A Japanese study published in January suggested that crushing the leaves will give leaf enzymes the chance to gradually convert the aldehydes into other substances with no aroma.

Sure enough, I’ve found cilantro pestos to be lotion-free and surprisingly mild. They actually have deeper roots in the Mediterranean than the basil version, and can be delicious on [pasta](#) and breads and meats. If you’re looking to work on your cilantro patterns, pesto might be the place to start.

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