Do People Really Taste Wine Differently?

Taste is mostly genetic, but appreciating a fine bottle of wine can be learned

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Oct. 21, 2013 Wall St. Journal

Taste is mostly genetic. But appreciating a fine bottle of wine can be learned. One expert, Gary K. Beauchamp, director of the Monell Chemical Senses Center in Philadelphia, which studies smell and taste and how they affect human health, offers his view of what goes on when we sip.

That Tingly Feeling

When we talk about flavor, says Dr. Beauchamp, three factors come into play. The first two are the most familiar: The tongue and palate sense the primary taste categories of sweet, salty, sour, bitter and umami. And smell receptors at the top of the nose capture molecules floating in the air. In fruit season, for instance, "the odors and the tastes interact with different receptors and all converge in the brain, which tells you that this is a peach," he says.

For wine, a third factor is also important—an irritation in the mouth, the throat and the nose that some people like and others find unpleasant. "We don't have a good term for it, but it's that sense of pain you feel when you taste something spicy or fermented—that little stinging," Dr. Beauchamp says.

For example, "If you were to give a spoonful of extra virgin olive oil to people in the U.S., many wouldn't like that burning sensation," says Dr. Beauchamp, who has done studies on this particular condition. "But if you give it to people from the Mediterranean, they will recognize the feeling as the sign of the very best olive oil." Enjoying that subtle pain is learned, scientists believe, but Dr. Beauchamp says they don't yet understand how that happens.

Expert Palate

One of Dr. Beauchamp's colleagues explains that wine flavors are made up of many chemical structures. They arise from materials in the grape, from enzymatic reactions with grape compounds, through alcoholic fermentation and even from the wooden barrels used in the aging process. In the glass, those scents and flavors react with the nose and tongue

at different times during sipping, which may cause one person to taste a cherry bouquet and another a leather finish from the same vintage.

Professional wine tasters are trained to notice the different flavors that tannins, sugars, acids and various processes give to a particular wine, and to put words to them. But tasters' physiology is basically the same as everyone else's. "It's not as though they were born with more receptors or grew more over time. They simply developed an ability to notice small differences," says Dr. Beauchamp. "With experience, some people can become more attuned to certain smells and tastes, which may lead them to like particular wines more, but their chemistry doesn't change; it's a cognitive effect."

Bitter Evolution

Among the basic tastes, people seem to differ the most on bitter—a big factor in appreciating fine wine. "It's not exactly clear why there is so much more variation on bitter than sweet and salty. But we have evolved to detect bitter things differently, perhaps to protect us against danger in the environment," he says.

And because so many factors are at work in the preference for certain wines, it would be very difficult for one person to tell another what he should like.

"Take your genetics plus your experience, and we are all living in our own sensory world," Dr. Beauchamp says. For that reason, he has one simple recommendation: Enjoy what you enjoy, and don't worry about what the other guy is savoring.