Strange Brew

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In side-by-side taste tests, pub-goers agree: "MIT Brew" tastes better than Budweiser — as long as tasters don't learn beforehand that the secret ingredient is balsamic vinegar.

It sounds more like a fraternity prank than a psychology experiment, but the beer-guzzling participants in a recent study were doing their part for psychology. In this case, helping researchers determine just what it is about consumers' knowledge of food products that affects their taste judgments.

Leonard Lee, Columbia Business School, Shane Frederick, MIT, and Dan Ariely, MIT, were not surprised that foreknowledge of the unappetizing secret ingredient in their special brew might bias tasters against it. Marketers have long known that what consumers know about a product affects how they judge it. What the researchers didn't expect to find was that learning the secret ingredient didn't significantly affect participants' taste judgments if they learned what it was after they had already sipped (but prior to rendering their judgment).

In "Try It, You'll Like It: The Influence of Expectation, Consumption, and Revelation on Preferences for Beer," published in the December 2006 issue of *Psychological Science*, Lee and his coauthors describe the experiment design: At two Cambridge, MA, pubs, nearly 400 patrons willing to lend their taste buds to science were randomly assigned to three groups. In each of three similar experiments, a "blind" group tasted and judged the two beers without knowledge of MIT Brew's secret ingredient; an "after" group tasted the two beers and subsequently learned what was in MIT Brew before judging (Experiment 1) or before choosing which one they would want a full 10-oz glass of (Experiments 2 and 3); and a "before" group was told the difference between the two beers prior to tasting them. In Experiment 3, the "before" and "after" groups actually mixed their reward brew themselves (if they chose the MIT version).

In Experiments 1 and 2, the MIT brew was preferred by all but the "before" group; in Experiment 3, which substituted Samuel Adams for the king of beers, the "blind" and "after" groups were roughly split. But in each of the experiments — and this is the important point — the only significant difference was between the "blind" and "after" groups, on the one hand, and the "before" group (who knew the secret ingredient was balsamic vinegar), on the other.

People's judgments of foods and drinks are formed not just from their sensory experiences — what the researchers call "bottom-up" processes — but also from their "top-down" interpretations. Coke is rated higher when served in cups with the brand on the label than it is when it is served unlabeled. People's preference for a favorite beer disappears in comparison taste tests when the beers' labels are removed. Yogurt and cheese are liked better when labeled "full fat" than when labeled "low fat."

But what exactly is the nature of the interaction between interpretation and judgment? Is knowledge, such as a brand name or a "high fat" label, just treated as a separate attribute of a product that we value

in and of itself and factor into our judgment? Or does it actually affect how that product (if it is a food or beverage item) tastes?

The current study suggests the latter. What we know (or believe) about something beforehand will directly affect how we experience it. If that knowledge comes after the fact, as a revelation, its biasing effect on our judgment may not be as strong.

To learn more about this research (and to find out exactly how many drops of balsamic vinegar can turn an ordinary glass of Budweiser into MIT Brew), see "Try It, You'll Like It: The Influence of Expectation, Consumption, and Revelation on Preferences for Beer," in the December, 2006, issue of *Psychological Science*.