

Zingy lime juice awakens the palate in Picca Peru's ceviche, which chef Ricardo Zarate tempers with lemon juice or vinegar just before serving.



FLAVOR FOCUS

Savoring SOUR

Sour flavors step out from their supporting roles
and into the limelight

BY PRISCILLA MARTEL

At the new and hip restaurant Picca Peru in Los Angeles, the house drink is the pisco sour and the raw fish is bathed in lime-infused tigre de leche. In Portland, Ore., Pok Pok Thai restaurant started selling its Som drinking vinegar nationwide this year. In the San Francisco Bay Area, the debut menu at Asian Box (a new Chipotle-like fast-casual concept) features tamarind vinaigrette. Tangy kefir and Greek-style yogurt are trending in the specialty food industry. Pucker up. Sour tastes are coming out from their supporting roles and starting to add kick and sparkle to menus.

From birth, humans exhibit a natural aversion to sour and bitter tastes and a preference for sweet, salty or umami flavors. We're programmed to balk at unpleasant acidic tastes because they could signal the presence of harmful bacteria or something that will make us feel sick. We usually cloak sourness in a veil of sugar or oil, whether it's lemonade or salad dressing. So how and why is sourness becoming more dominant and appealing? Among the drivers of the trend toward tangy flavors is a greater emphasis on wellness, artisanal foods, ethnic cuisines and the craft cocktail movement. The expanding American palate seems ready to embrace foods with elements of sourness.

PUCKER UP FOR PICKLES

At the annual International Association of Culinary Professionals conference in April, participants learned pickling basics in a sold-out session on fermented foods. Chow-chow, giardiniera, tart pickles and vegetables preserved through fermentation are as fashionable as plaid shirts and are a natural and healthful accompaniment to artisan foods. The beneficial aspects of consuming such live cultures as lactobacillus have been widely touted. In addition, according to chef Michael Schwartz, culinary instructor and founder of BAO Food and Drink,

we're attracted to sour tastes because of the complexity of flavor they add. He says sour tastes created through fermentation add "umami tastes" or spice, in the case of kimchee. When you eat fermented foods, "you have at least two and possibly four of the flavor components," he says. "Fermented foods can have a tremendous influence on the flavor of a finished dish."

As many chefs have discovered, pickled vegetables and fruits complement fatty flavors. "For the omnivores, charcuterie and pâtés — very rich, fatty foods — go very well with sour ferments," says Schwartz. "The sour helps to cut and balance the richness of the fat." Pickled onions, shallots or cherries, sour gherkins, cucumbers or turnips make ideal accompaniments to cheese and salami plates. Even vegetarian cooking such as tempura-fried vegetables benefit from the sour note.

"When you have more than one flavor and more than one texture, the food instantly becomes more interesting — the palate doesn't fatigue as quickly," he notes.

Balancing sour with savory sweetness — as in goat cheese with blueberry pesto — creates interest and craveability.



NATURRIPE FARMS

ETHNICALLY SOUR

"Sour wakes up the palate," says Kara Nielsen, trendologist at CCD Innovation in San Francisco. She sees breakout sour flavors coming from many global cuisines. Tamarind is an "edgy flavor" a little out of the mainstream that recently attracted her firm's attention. It is common in Indian, Southeast Asian and Latin cuisines and is a stealth ingredient in marinades, barbecue sauce and Worcestershire sauce. Nielsen cites a range of tamarind menu sightings such as a ham and yam melt with tamarind-balsamic glaze on Cosi's 2012 holiday menu, and Seasons 52's chipotle shrimp flatbread with chipotle-tamarind barbecue sauce. Her big takeaway from the tamarind trend research is that "people are eating the sour taste in many places without realizing it." Pad Thai, which has become ubiquitous, is craveable because of the "deeper flavor nuances of its salty sweet taste," adds Nielsen. Tamarind may be the bellwether for the emerging popularity of sour tastes.

"I feel as if we are growing up as a people and a palate," she says, noting that "younger people are influenced by their cohorts who come from all over world." As we are exposed to Korean tacos, street food and Mexican agua fresca with tamarind, we're more likely to adapt and seek sour tastes, "not just lemon and lime but different sources of sour," adds Nielsen. She even sees the appeal of extreme sour candies for adults who grew up eating Sour Patch candies as a sign of the trend.

"Sourness is the cornerstone of Philippine cooking" says Amy Besa, co-owner of The Purple Yam in Brooklyn, N.Y. She's talking about such dishes as adobo, (pungent vinegar-marinated stew), sinigang (a sour broth), and kinilaw (Philippine ceviche). Sourness is "a remnant of the age of pre-refrigeration" when fermentation acted as a preservative. In her native cooking, sour tastes come from three sources — vinegar, sour fruits and citrus fruits — used alone or in combination depending on the dish

The Balance of SOUR

Sour plays a balancing act — enhancing sweetness while bringing out aromatics and other flavors. It tames fiery notes, too; vinegar is commonly added to hot sauce to knock down the punch. “The sour taste offers a flavor contrast,” says chef John Csukor. “It unleashes other portions of flavors, increases your perception of sodium and cleanses the palate.”

Rarely can a sour taste stand alone. In a margarita, salt on the rim neutralizes the sourness of the drink, while salad dressings and sauces rely on oil or a swirl of butter to offset the vinegar or reduced wine. Souring agents transform foods by aligning flavors, minimizing fiery or bitter notes and cutting fats.

Effective use of sour profiles requires a greater knowledge of layering flavors, and a subtle hand, Csukor notes. The chef needs to differentiate between citric sourness, the acidity in wine and the acidity in certain dairy products like yogurt. “Sour is not as easily executed as a pinch of salt,” he says.



MCCORMICK

and cooking method. Romy Dorotan, her husband and the restaurant’s chef, mellows the pungency of the vinegary adobo with coconut milk, part of what Besa calls “the focus on balance and harmony of the ingredients” that characterizes Philippine cuisine.

Although tamarind and Philippine cuisine are both trending, a more subtle type of sourness characterizes Ricardo Zarate’s inspired Peruvian cooking at Picca Peru. “Acidity for me is all over,” says Zarate, who prefers to season a dish with a “final touch” of lemon juice or vinegar. He tames the “aggressiveness” of lime with some lemon juice and avoids using the bitter lime rind. One key point he makes is that with Peruvian ceviche, the fish is not marinated for several hours. By adding the acidity immediately before serving, he can better control the flavors. “You want to get some sort of flavor in the back of the mouth,” he says of this seasoning technique.

SOUR AT WORK

Even though John Csukor, chef/founder of KOR Food Innovation, feels that cuisines in which sour is prevalent drive the sour trend, he sees opportunities to use traditional sour ingredients in unexpected ways.

At the Culinary Institute of America’s 2011 Worlds of Flavor conference, he developed a way to concentrate lemon by dehydrating slices before grinding it into a powder. As a garnish, it gave a seared spiced

Sour-Loving CONSUMERS

In a recent study on sour flavor preferences, conducted by Olson Communications’ Culinary Visions Panel, consumers were asked to rank the five tastes in order of their personal preferences, and then to react to a range of menu items to test the consistency of their stated preferences. Here are five takeaways from the study:

1. Grapefruit, vinegar, sauerkraut and pickles were the top foods identified as iconic of the sour taste.
2. The majority of sour-loving consumers were in the 47-65 age group (37 percent) and the 17-34 age group (36 percent).
3. Sixty-one percent of these consumers eat at a casual-dining restaurant several times per month or more.
4. Foodies were abundant in the group of consumers preferring sour flavors, with 60 percent of those describing themselves as always or usually liking to try new dishes and flavors when they eat out.
5. Sour-loving consumers were also shown to have a preference for umami flavors. When they selected specific menu items in the second part of the study, umami-forward items outranked sour among this group.

SOURCE: OLSON COMMUNICATIONS’ CULINARY VISIONS PANEL SOUR FLAVOR PROFILE REPORT, MARCH 2012

lamb cube the flavor push of lemon without the “visual distraction” of the fruit.

“We wanted to get the full flavor of lemon — the overall sweetness from a good lemon, and the bitterness from the zest,” he says. Chefs responded enthusiastically to the intense flavor, which required little technical innovation.

Csukor sees fruit-juice powders, citric acid and spray-dried vinegar powder as part of the modern chef’s toolkit. New York City chef David Bouley uses a rainbow of fruit powders in his cooking: navel orange powder on grilled seafood, passion fruit and grapefruit powders on desserts. At Le Châteaubriand in Paris, chef Iñaki Aizpitarte garnishes deep-fried fish with raspberry powder and crème fraîche. It’s his maverick twist on tartar sauce and a wedge of lemon.

Sour tastes are also making a marked impact in desserts. “Dessert portions are going from over-the-top to petite indulgence,” Csukor says. Sour notes help create impactful dessert flavors in a small format. “I am giving you less ounces per portion so I might as well make them more exciting.” This might translate into reduced white balsamic in a dessert to heighten other flavors or sour cherry compote paired with a miniature gluten-free chocolate torte. “The tartness is intended to cleanse the palate, awaken and cut through fatty flavors,” he notes.

Jesse Powers, executive sous chef at Cavey’s in Manchester, Conn., explains some of the subtle ways sourness is used in classic cooking techniques. In composing a dish, says Powers, he works on harmonizing the five tastes. “We season with the appropriate salt and use sour and acid to brighten dishes up,” he says. This may mean a green apple juice and Prosecco granité on raw oysters. Or he might finish a vegetarian porcini and radicchio polenta with whey from ricotta and lemon juice. The sour notes offset any bitterness in the radicchio.

For Powers, the real value of sour notes is to “let flavors resonate.”

THE THIRST FOR SOUR

“Sour notes are the foundation upon which alcoholic beverages often rest,” says Dale DeGroff, author of *The Essential Cocktail* and

SOURCING Sour

Sour tastes come from a number of sources, including naturally fermented foods as well as underripe fruits. Even apples, gooseberries and nectarines can be surprisingly tart from naturally occurring malic acid in the fruit. Here are some favorite souring agents and ways to use them on the menu.

SPECIALTY CITRUS The type and variety of citrus provide a palette of flavors as diverse as their size, shape and color. The gentle sourness of Meyer lemons means less sugar is needed when it is used in desserts like lemon curd. Blood-orange oil, like its juice, has a flavor deeply resonant of the ripest orange. The fragrant Buddha’s hand citron, infused in vodka, makes a unique aperitif or dessert flavoring. Yuzu gives off a lemon-lime aroma, while calamansi is extremely tart but its rind is somewhat sweet.

VINEGARS AND VERJUS During fermentation, alcohol converts to acetic acid. The acidity in vinegar varies from mellow to explosive. Mild rice vinegar is a good foil for the delicate sweetness of slightly underripe fruit. Use it to extract flavor notes in spices like crushed coriander or cardamom for exotic vinaigrettes or salsas. Fatty proteins can withstand a robust red wine-based marinade. Less syrupy and sweet than traditional balsamic, white balsamic vinegar has a clean finish and neutral color — a drizzle tames the bitterness in grilled endive or radicchio. Authentic aged sherry vinegar from Spain has a complexity and yeasty notes. Verjus is the non-alcoholic juice from unfermented, underripe grapes. Both lightly sour and sweet, it enhances the flavors in ripe fruit like melon and strawberries. Chefs like verjus because it doesn’t interfere with wine; you can easily pair wines with verjus-based vinaigrettes.

DAIRY PRODUCTS Kefir, buttermilk and yogurt are the chef’s invisible assistant when it comes to enhancing animal proteins. Their mild acidity and enzymatic profile tenderize meat without toughening it.

PLANT SOURCES Chefs looking for that foraged flavor might enjoy playing with any number of naturally sour plants. Purslane has a sour bite with some of the flavor of spinach; serve it raw or cooked. Sorrel is a leafy green herb traditionally cooked in creamy soups or sauces, or, when young, served raw in salads or as a complement to eggs, trout, salmon and goat cheese. A mainstay in Middle Eastern cuisine, sumac is a red powder ground from the lemony berries of a Mediterranean shrub. Colonists simulated lemonade using dried sumac. Use it to garnish hummus and tzatziki, or in slow-simmered lamb or pulse stews.

Sour is a critical element in beverages. The Turista (right) at Chicago's Tavernita gets mouth-watering tang from grapefruit and lime, rounding out a flavor-packed blend of tequila, preserved cherries, black pepper syrup and barbecue bitters. At Pok Pok's Whiskey Soda Lounge in Portland, Ore., Som drinking vinegars in flavors like apple, tamarind or pomegranate leave a tart kick (below).



TAVERNITA



DAVID REAMER FOR WHISKEY SODA LOUNGE; WWW.DLREAMER.COM

The Craft of the Cocktail (Random House). And cocktails, which are meant to be “a quick stimulant to the appetite,” are a good place to explore the changing taste for sour. DeGroff sees the proper use of sourness as both pleasing and mouth-watering.

“Sourness or acidity when balanced by other elements creates a pleasant tang on the palate and involuntarily begins the process of salivation that leads to the engaging of the digestive tract,” he explains. He commonly uses lemon, lime, yuzu and grapefruit to bring that sour note to a cocktail. For certain drinks, he may try passion fruit purée, “which

is massively tart before the sugar is added” or fresh cranberries, green apples and other sour fruits.

Vintage cocktails that are both tart and sweet hold strong appeal, none more so than the pisco sour and mojito. And with the DIY mixology movement, there’s been a renewed interest in the shrub, a vinegar-based cocktail. But DeGroff warns that vinegar can be “dangerous” — he advises judicious quantities of quality barrel-aged vinegar or merely lemon juice to avoid an unpleasant taste.

One chef unafraid of vinegar is Andy Ricker, maker of Som drinking vinegars in Portland, Ore., and chef/owner of the growing Pok Pok Thai restaurant concepts. Inspired by Southeast Asian drinking vinegars, Ricker makes his vinegar base in apple, honey, pomegranate and tamarind flavors, and blends it with soda to make a refreshing drink “that tastes like an Italian soda with a tart, vinegary kick.”

Closely related is kombucha, the health-food soda with a lightly sour flavor that is enjoying much popularity nowadays.

“Tart/sour is very satisfying,” says BAO’s Schwartz. “When you add in the great health benefits that people are finding with these sour drinks, it is a win-win.”

Nielsen feels that whether these beverages are touted for their healthful properties or merely as refreshers, they signify a good trend. “Consumers are ready for a sour flavor adventure,” she says, particularly Millennials and others fascinated with global cuisines. And as many culinarians look to expand on the flavor potential of basic tastes in their cooking, the sour profile offers a bright and stimulating sensation to add broad flavor appeal. ☺

Take-Away TIPS

SAVORING SOUR: Research reveals that consumers showing a preference for sour flavor profiles are also more likely to experiment with new flavors while dining out; factor this into appetizer or small-plate menu development.

SOUR SWAP: Switching the source of the acid in a dish can change its profile from Midwestern to Moroccan.

SOUR SIPS: The sour profile is the critical refreshing element in beverages — experiment with sour sources ranging from citrus varieties to vinegars.

PRISCILLA MARTEL, *author, foodservice educator and consultant, provides product- and menu-development and marketing services; info@allabout-food.com.*