Forward Thinking: Liquid Assets, Part 1

Top trends in the flavor and beverage industry.

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Editor's Note: This is the first of a two-part series. Part 2 will appear in the November 2015 edition of Perfumer & Flavorist.

he beverage category encompasses a large group of segments, including non-alcoholic and alcoholic beverages. Market activity is being driven by bottled water, artisanal sodas, fortified protein beverages, tea and matcha, cold brew coffee, craft beer and cider, premade mixers, craft cocktails, and flavored whiskeys. Several key trends are impacting these beverage segments, according to industry experts.

First, consumers' desire for healthier multifunctional beverages with clean ingredient labeling is forcing manufacturers to be more authentic and transparent.

Tess Martin, marketing manager, Givaudan Flavors Corp., says, "Not only are consumers today looking for more in-depth flavor combinations, they are looking for more function than ever from their beverages. In addition to refreshment, consumers expect beverages to hydrate, protect, defend, detox, revitalize, restore and replenish."

In addition, consumers are trading in high-fructose corn syrup for natural sweetener alternatives, such as sugar cane and stevia, but still demand great tasting beverages and products that deliver expected mouthfeel.

"We are seeing more products featuring fresher, cleaner, wholesome ingredients as consumers keep pushing for less processed foods," says Gladys Slovis, flavor applications manager at Comax Flavors.

Finally, sustainability plays a significant role in brand communications and packaging. And technology drives innovative packaging and interactive billboards in the beverage area.

Watering Hole

According to a recent Transparency Market Research report^a, the bottled water market was worth \$157.3 billion in 2013, and is expected to reach \$279.7 billion by 2020, growing at a CAGR of 8.7% from 2014 to 2020. Driven by the continuing shift away from soda, Beverage Marketing Corporation reported that the bottled water market is expected to surpass carbonated soft drinks as the number one packaged drink in the U.S. as early as 2016. Flavored, carbonated, natural, and ingredient specific waters continue to be introduced with new claims.

Fueled by the backlash against sugary sodas, consumers are turning to healthier choices and trading in soda for sparkling waters and seltzers. As a result, flavored waters remain popular, while there's been a flood of activity in flavored carbonated water. According to Beverage Marketing Corporation (www.beveragemarketing.com), Americans' consumption of unsweetened seltzer jumped 29% over the five years between 2008 and 2013; compared to a more than 7% drop for carbonated soft drinks overall during the same five-year period.

Alpa Roman, senior flavor chemist, Flavor & Fragrance Specialties Inc., states, "Sparkling flavored water, which most of the time contains all natural flavors, and sparkling tea seems to be popping up to replace some of the sodas as a healthier alternative."

Marissa Piazza, senior flavor chemist at H.B. Taylor Co., agrees, "Ready-to-drink (RTD) products are trending toward 'clean labeling' with natural flavors, colors, and high intensity sweeteners. Enhanced water beverages can contain light carbonation, low or no sweetness, and low levels of refreshing flavors such as cucumber melon, peach, or ruby red grapefruit."

In June, Cascade Ice announced that the brands' USDA-certified organic sparkling flavored waters like *Organic Mixed Blueberry* and *Organic Citrus Twist* are available in select Target stores nationwide. Original New York Seltzer, the popular 1980s beverage, is returning to market after a two-decade absence. Ahead of its time, the Original New York Seltzer contains no artificial flavors, colors or preservatives and is available in *Black Cherry, Lemon Lime, Peach, Raspberry, Root Beer* and *Vanilla Cream* flavors. San Pellegrino Sparkling Fruit Beverages added a new flavor, *Ficodindia e Arancia*, which is infused with prickly pear and orange. SweetLeaf Stevia Sweetener added *SweetLeaf Water Drops* to its range. Offered in *Lemon Lime, Peach Mango, Raspberry Lemonade* and *Strawberry Kiwi* varieties, the products contain zero calories, zero carbs, and no artificial ingredients.

For purists, the origin of natural water sources and the pH level are popular marketing stories propelling new introductions.

Not specific to the water category, Simon O'Brien, marketing manager, ADM WILD Flavors and Specialty Ingredients, says, "The evolution of the natural trend has really driven the consumer to expect more in terms of ingredient transparency and brand authenticity. We recognize that more consumers want the ability to see and taste nature in their beverages, so we are continually adding to our portfolio of natural color and flavor solutions including extracts, distillates, named-source varietals, and certified organic ingredients. This technical approach offers

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^a"Bottled Water (Still, Carbonated, Flavored, and Functional) Market—Global Industry Analysis, Size, Share, Growth, Trends and Forecast, 2014–2020"; www.transparencymarketresearch.com

sustainable differentiation for our customer's brands and the authenticity that consumers are demanding."

Likewise, Kari Manze, market manager, beverage, FONA International Inc., notes, "There is an increased desire for simple, authentic beverages. Transparency of ingredients, packaging, and production process is important to consumers, as well as sustainability."

Nothing Water launched in June and is sourced from the Isbre Springs beneath the 5,000-year-old Hardanger Glacier in the Osa Valley of Hardanger Fjord, Norway. **Jeju 16** by On Corporation Inc. is a natural volcanic mineral water from Mt. Halla, which has passed through 16 layers of volcanic bedrock

with a natural pH of 7.7. The water is mineral-rich because of the natural filtration through scoria, a basaltic volcanic rock, which fortifies the water with calcium, potassium, magnesium and vanadium. Core Hydration, the new ultra-purified water, uses a sevenstage proprietary process including



Asarasi is an all-natural, tree-filtered, sparkling tree water that comes directly from maple trees.

UV, carbon filtration, reverse osmosis and ozonation. According to the company, the water has a "Perfect pH" of 7.4 and is balanced with a blend of electrolytes and minerals. Additionally, the bottles are 100% recyclable and BPA-free.

Coconut water continues to grow, but the newest player in the natural, health arena is Canadian and U.S. maple water. With introductions from brands such as Drink Maple, Happy Tree, Vertical Water, Sap on Tap, SEVA and Wahta, 2014 was the year of maple water. Touted as generating natural hydration, maple water is said to be low in calories, gluten-free, dairy-free, vegan and non-GMO. Asarasi, named after the Latin word for the maple family, "Aceraceae," is "the world's first and only provider of all-natural, tree-filtered, sparkling tree water that comes directly from maple trees." The company uses eco-sensitive and environmentally-friendly harvesting methods to remove the sugar and leave behind a naturally pure, tree-filtered, sparkling water. From April to June 2015, Robeks, the fruit smoothie chain, offered a limited edition of three fitness smoothies made with maple water. **Anytime Fit Refresher** featured raw spinach, raw cucumber, maple water, vanilla almond milk, all-natural yogurt, pineapple sherbet, pineapple and a drizzle of maple syrup. With 17 grams of protein, the **Pre-Workout Fitness Fuel** highlighted maple water, peanut butter, proprietary whey protein, a shot of espresso, a dash of cinnamon, all-natural yogurt and a drizzle of maple syrup, while the Post-Workout Fit Recovery contained 13 grams of protein with proprietary whey protein, maple water, vanilla almond milk, raw spinach, blueberry, banana, coconut and a drizzle of maple syrup.

Launched in 2014, *True Nopal* is "an all-natural, naturally sweet beverage made from the prickly pear cactus that contains all 24 powerful betalain antioxidants." True Nopal carries half the calories, half the sugar and double the flavor of coconut water, according to the company. It is also believed to help reduce inflammation and fight many hangover symptoms. Essence of Fresh Peach and Essence of Cucumber & Mint join the Recovery Water line. Formulated with a patented nano-bubble technology, Recovery Water "enables cells to process at a higher level, which in turn relieves general muscle soreness, pain and fatigue." The company's research suggests that those who drink Recovery Water experience a reduction in pain and inflammation along with accelerated recovery from injury and muscular stress. Dave Asprey, the man responsible for the Bulletproof coffee craze, entered the water market with the introduction of Fatwater. Combining Asprey's signature ingredient Bulletproof XCT Oil with water, Fatwater is "meant to hydrate you more quickly and give you an energy bump." Fatwater is available in Unflavored, Berry, Lemon and Orange varieties sold in 16 oz bottles or packets that you can mix into water. Launched in 2013, Blossom Water is a flavored water line infused with flower essences offered in Grapefruit Lilac, Lemon Rose, Plum **Jasmine**, and **Pomegranate Geranium** variants. To develop unique clear beverages and flavored waters, Firmenich has created Solessence M, a new microemulsion technology. "The technology creates natural flavors utilizing all the flavor oil, which is therefore more sustainable than the more conventional flavor oil extraction processes," explains Ronald Skiff, director beverage innovation & design, flavors at Firmenich. Not a water, but an interesting new product is Clear Coffee, "a transparent coffee designed to appeal to health conscious consumers—in particular, those who want to keep their teeth white," developed by a Slovakian entrepreneur. The formula has no preservatives, artificial flavors, stabilizers, sugar or sweeteners and has only 2 calories per 200 ml.

Artisanal Sodas

Although carbonated soft drinks remained the biggest liquid refreshment beverage category, they continued to lose both volume and market share.

"Due to the rise of artisanal craft products across the beverage spectrum, smaller brands are flourishing," notes Manze.

Family owned and operated, Galco's Soda Pop Stop in Los Angeles, California stocks more than 500 soda flavors and styles. Owner, John Nese, loved soda as a kid and started increasing his assortment of sodas partly to protest some of the larger soda companies that were not offering him the same prices as his larger competitors. The store's collection has more than 50 kinds of root beer alone, as well as imported soda from Central and South America and Europe.

Beverage Marketing Corporation reported that carbonated soft drinks' volume slipped by 1% from 12.9 billion gallons in 2013 to less than 12.8 billion gallons in 2014, which lowered their market share from slightly less than 43% to just above 41%. To compete with healthier choices, soda manufacturers are launching premium craft sodas, replacing high-fructose corn syrup and diet sweeteners such as aspartame with natural ingredients and cane sugar. Within the beverage category, Piazza

predicts that over the next few years "the amounts of sugar and high-fructose corn syrup will be reduced gradually and artificial high-intensity sweeteners such as acesulfame potassium/ aspartame and artificial colors and flavors will be omitted and replaced with natural high-intensity sweeteners, such as stevia and natural colors and flavors."

Manze concurs and sees the introduction of different alternative caloric and non-caloric sweeteners as a challenge for flavor suppliers.

"In unsweetened or low-sweetened products, getting flavor impact to come across can be challenging to carry through the profile or meet consumer expectations of that flavor," she says. "Sucrose is the gold standard for sweetness profiles and mouthfeel that consumers are used to. With non-caloric sweetners, such as stevia or monk fruit, up-front sweetness is lacking and back-end flavor notes can occur. Replacing the standard sucrose with other more naturally perceived caloric sweetners, like agave, honey or rice syrup, may create a challenge due to the strong flavor components and different relative sweetness associated with each of them."

Similarly, Skiff acknowledges that "closing the taste gaps between no / low calorie beverages and their full sugar counterparts, as well as masking vitamins and minerals in functional waters and energy drinks is challenging." To meet these demands, Firmenich has developed receptor-based taste modulation innovations and TasteGEM $^{\rm c}$ technologies.

Hotlips is a family-owned pizzeria business with six locations in Portland, Oregon. To complement their pizza menu, the family began to brew their own soda. The pizzerias serve new flavors on tap such as *Honey* soda and partnered with local brewery, Pints Brewing, to craft the Seismic Squeeze with Seismic **IPA** and Hotlips **Lemon Soda**. In 2005, the company began bottling sodas made from fresh fruit, organic lemon juice, cane sugar and water. Black Raspberry, Hawaiian Ginger Ale, Lemon, Marionberry, Pear and Red Raspberry varieties are available online or at select retailers. Cold Front in Minneapolis serves coffee, ice cream and handcrafted sodas. The all-natural signature sodas are offered in **Blood Orange** & Beetroot, Chai Vanilla, Lemongrass Sass, Pomegranate Ginger and Strawberry Balsamic flavors. The retailer offers a minni-soda flight from which customers can choose any three flavors to sample. Brooklyn Soda Works uses cold-pressed juices, fresh herbs or spices, and CO2 to make it bubbly. Flavors are seasonal and for the summer Brooklyn Soda Works offered Cucumber, Lime & Sea Salt, Grapefruit, Jalapeno & Honey, Red Currant & Shiso, and Watermelon & Tarragon flavors on tap. Sky Valley Sparkling Sodas are new to the market, exclusively sold at Whole Foods Market nationwide. Made with organic juices and sugar cane, the sodas are available in nine flavors: Black Cherry, Concord Grape, Elderflower, Green Apple, Ginger Brew, Honey Green Tea, Mandarin Orange, **Pear** and **Root Beer**.

In the fall of 2014, PepsiCo introduced *Caleb's Kola*, the company's first craft soda made from cane sugar, kola nuts from Africa, spices and a hint of citrus. In March, Mountain Dew released *Mtn Dew DEWShine*. Playing on the trend to moonshine, the non-alcoholic clear, citrus soda is packaged in a glass bottle with a kitsch label. In June this year, PepsiCo announced plans to roll

^bSolessence is tradename of Firmenich

^cTasteGEM is a tradename of Firmenich

out Stubborn Soda, a craft soda line, which is expected to launch in food service outlets. Formulated with fair trade certified cane sugar and natural flavors, the flavors include Agave Vanilla Cream, Black Cherry with Tarragon, Classic Root Beer, Lemon Berry Acai, Orange Hibiscus and Pineapple Cream. The sodas will be dispensed in new soda fountain machines using a "tap-like pouring ritual" similar to craft beer. Gusto Cola, created by Green & Black's founder, is dubbed as Europe's first fair trade, low-calorie cola that's "complex, refreshing and authentic." It is formulated with a blend of botanicals and spices including, cola nut, vanilla, neroli, cinnamon, nutmeg, coriander, organic cane sugar, organic stevia leaf extract, and organic agave inulin. Quick service restaurants are also engaging in the artisanal soda movement with new offerings. Sonic recently introduced a line of made-to-order sodas prepared with sparkling filtered water with real fruit or fruit flavors, including **Blackberry-Pineapple**, **Peach**, and **Raspberry** selections. Starbucks' take on the trend is the company's Fizzio Handcrafted sodas, which are caffeine free and contain no high-fructose corn syrup, no artificial flavors and no preservatives. They offer three flavors: Golden Ginger Ale, Lemon Ale and Spiced Root Beer. For at-home use, SodaStream unveiled a new electrically powered machine with three pre-programmed presets, which allows consumers to customize levels of carbonation and can be used to produce a range of more than 50 varieties of sparkling water.

"We are really excited about the continued expansion of the artisan and craft movement," says O'Brien. "We have seen how radically the craft segment has changed the alcoholic space and watching that evolve more into the non-alcoholic, carbonated and adjacent category spaces should lead to some really interesting products."

Protein Plus

According to a November 2014 Beverage Industry (www.bevindustry.com) article titled, "Protein use in beverages up 10 percent," protein supplements, meal replacement drinks, sports nutrition powders and ready-to-drink beverages are expected to grow 9.6% in the U.S., and breakfast meal replacement beverages with protein are expected to grow 97% to \$57 million this year.

"The overall protein market is growing about 7% each year and protein usage in beverages is growing about 10% each year," says Sam Wright IV, chief executive officer of The Wright Group, the producers of fortification and nutritional premixes.

This data concurs with findings from Beverage Industry's annual New Product Development Outlook survey published in January 2015. The report revealed "high protein" and "natural" as most likely to be the leading trends for 2015, while "high protein" moved up from the No. 10 spot to the No. 1 spot, with 42% of respondents listing the product attribute as a "latest trend." Protein drinks are primarily marketed to athletes and active consumers or as meal replacement drinks that are high in protein, high in fiber and will leave consumers feeling satiated. Protein is the buzzword across food and beverage categories and segments are blurring. New products advertising fortified protein are launching to meet consumers' needs for convenient and functional protein consumption.

"Driven by the health and wellness trend, beverages with the claim 'plus' are essential, for example, the addition of added protein, fiber, vitamins and minerals, or probiotics," says Manze.

Martin adds, "I think there will still be room for 'bad stuff out' style refreshment drinks, but the industry growth will come from 'good stuff in' functional and refreshing drinks."

Trendincite's "Forward Thinking: Milking It" article, which appeared in the August 2014 issue of *Perfumer & Flavorist* magazine, discussed milk's new identity and the push to communicate its protein benefits.

Cathianne Leonardi, senior flavorist at Allen Flavors Inc., describes this trend as "active nutrition" driven by fitness fanatics. Leonardi mentions products like Fairlife LLC as "an emergence of engineered milk that contains less fat, less sugar, more calcium and more protein compared to regular milk."

Organic Valley, the organic milk producers of dairy products free of GMOs, antibiotics, synthetic hormones, toxic pesticides and artificial sweeteners, added milk protein shakes to their range. Organic Valley Organic Balance is offered in *Dark Chocolate* and *Vanilla Bean* flavors packed with 16 grams of protein and minimally sweetened with organic stevia and unrefined, fair trade organic cane sugar. Organic Valley Organic Fuel contains 26 grams of protein and is available in *Chocolate* and *Vanilla* varieties.

Piazza believes that "the [conventional] milk and dairy market will start to be replaced with coconut and almond milk."

To meet consumers demand for a balance of protein, V8 extended and launched Protein Shakes and Protein Bars. The shakes come in **Chocolate**, **Chocolate Raspberry** and **Vanilla** flavors and blend dairy, soy, pea, brown rice, and quinoa proteins with honey and sugar. Campbell's claims the shakes have 12 grams of protein, 3 grams of fiber, a quarter cup of vegetables, no high-fructose corn syrup, and as much calcium and Vitamin D as a glass of milk. Dannon Light & Fit Protein Shakes launched in January and come in four flavors: Banana, Mixed Berry, Strawberry and Vanilla. Each 10 oz beverage is formulated with 12 grams of protein, 5 grams of fiber, and 0% fat. Slingshot Yogurt Protein Drinks are described as a "handy drinkable yogurt wrapped with a chia- and almondpacked granola tube," which consumers are instructed to open, add and shake into their bottle. Flavors include **Blueberry**, Peach, Plain, Strawberry and Vanilla and each bottle with the granola delivers 20 grams of protein.

Slovis sees products like these as having a "healthier" halo because they are being positioned as products that provide extra protein. She adds, "We are also seeing more alternatives to milk; rice, almond and cashew milk products have a larger presence on supermarket shelves."

CocoProtein, touted as "Nature's Recovery Drink," is a hybrid product by MusclePharm Corp. The gluten-, lactoseand dairy-free beverage blends coconut water and 20 grams of protein in two flavors: *Chocolate* and *Piña Colada*. Similarly, Nature's Best Cocotein - Coconut Water Protein combines coconut water with 100% pure whey protein isolate. Fruit **Punch** and **Tropical Punch** are new additions to the Nature's Best Cocotein line. Starbucks even wants a piece of the action and at the beginning of the year introduced RTD Doubleshot Coffee & Protein drinks. Boasting a tagline of "The lift from coffee and the power of protein," the beverages come in Coffee, Dark Chocolate and Vanilla Bean variants with 20 grams of protein each. From a marketing perspective, this line is a disconnect for consumers, as it does not appear as authentic. A notable and odd release is Wayback Burgers' limited Oreo Mud Pie Cricket Protein Milkshake made with Peruvian chocolate-flavored cricket powder. The cricket infused drink started as an April Fools' joke and the consumer demand was so high, with lines out the door, that Wayback Burgers debuted the milkshake as a limited-time menu item on July 1st. It's being offered until the end of September with the possibility of becoming a permanent menu item. The fast casual burger chain also introduced a *Jerky Milkshake* with barbeque, maple syrup and hickory spice flavors garnished with a Slim Jim.

Protein fortified products often have off-notes and can be challenging to work with.

"To help mask some of the grainy, protein notes found in high protein beverages, Flavor & Fragrance Specialties Inc. offers bitter masks, sweetness enhancers, salt reducers, and mouthfeel enhancers," says Roman.

Recognizing the demand for protein enriched products, Allen Flavors Inc. is "defining ways to develop systems to deliver pumped up levels of protein along with great taste and satiety," notes Leonardi.

Manze predicts, "Protein fortification to continue and go mainstream with a broader selection of beverage products, protein types and range to appeal to broad markets."

Tea Party

Trendincite's "Forward Thinking: Health Matters" article, which appeared in the March 2013 issue of *Perfumer & Flavorist* magazine, addressed tea trends. Tea continues to be an area of growth and interest with unique launches. Mintel reported U.S. retail sales of tea and RTD tea grew 19.8% to \$7.3 billion between 2009 and 2014. Mintel (*www.mintel.com*) predicts that the tea category will experience double-digit growth at a slightly slower pace than it has the last few years. The Tea Association of the USA cited that 85% of tea consumed in America is iced tea, and loose leaf iced tea is gaining in popularity. There are a myriad of new flavor tea extensions and new brands; here are a few examples of some notable products.

Inspired by the wine region in Northern California, Republic of Tea released three new herbal iced teas made from fine wine grape skins from Sonoma County. The products are caffeine free, non-alcoholic and have no calories. **Sonoma Chardonnay** with Pineapples and Peaches features chardonnay fine wine grape skins, while Sonoma Cabernet with Oranges and Currants uses Cabernet Sauvignon fine wine grape skins. Sonoma Rosé with Strawberries and Apples is formulated with Sonoma pinot noir and Sauvignon blanc fine wine grape skins. A *Mulled Zin* hot tea with cinnamon, ginger and orange is also available. Across the pond, Ovvio debuted a new range of cold brew teas sold at Harvey Nichols. Lovely Rose is a Harvey Nichols exclusive crafted with rose petals, buds, mint and hibiscus. Other flavors include Ginger Herbs, Matcha Latte, Pure Darjeeling, Pure Oolong Tea, Pure Green Tea, Pure Rooibos, Turmeric Herbs and Yunnan Black Tea. **Brew**, the UK's first tea pub that serves only loose-leaf tea and tea-based cocktails such as Earl Grey and tonic, oolong martinis, and lapsang souchong old fashioned, launched a Crowdcube campaign to support its slated 2015 fall opening. Wendy's and Honest Tea partnered to offer Wendy's customers an exclusive **Tropical Green Tea** sweetened with organic fair trade cane sugar and includes hints of mango and pineapple. For the summer, Wendy's offered Fruitea Chillers, a limited-time handshaken beverage made with fruit juices and purees and Honest Tea Tropical Green Tea in Orange Mango and Blueberry Pineapple varieties.

Leonardi predicts that "tea will expand in the U.S. to include RTD tea types well-known in the east, yet new to western markets."

Roman foresees hybrid beverages, such as fruit-enhanced tea drinks and flavored lemonades with tea similar to the Arnold Palmer as the next evolution of tea products.

"As consumers seek beverages that have perceived health benefits, we see cross-category products blurring traditional category lines such as a fruit juice + green tea energy drink," adds Martin.

Coffee byproducts are spilling over into tea. *Coffee leaf tea* is made from coffee leaves, which are turned into a tisane. Coffee leaf tea is reported to have 17% more antioxidants than green tea. The flavor is described as "the body



Wize Monkey specializes in the production of coffee leaf tea.

of black tea and the sweetness of rooibos [with] earthy notes of green pepper, licorice, and honeycomb, with a little astringency and a slightly effervescent quality." Vancouver, Canada's Wize Monkey is a startup company specializing in the production of coffee leaf tea. Founders Max Rivest and Arnaud Petitvallet discovered that the coffee leaf can be harvested all year round versus just the coffee bean, which is harvestable for only three months out of the year. Partnering with Nicaragua farmers Wize Monkey is creating a sustainable and profitable model to revolutionize the coffee industry. Another byproduct of coffee is the skin and fruit surrounding the bean known as cáscara or coffee cherry tea. Verve Coffee in Santa Cruz, California sells packaged Los Lajones Gesha Cáscara Tea, while select Blue Bottle Coffee locations offer Cáscara Fizzes, which are made with cáscara tea, sparkling water, simple syrup, and a wedge of lemon.

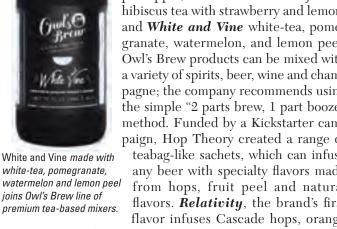
Tea is brewing on cocktail menus and pairs well with alcohol. Owl's Brew is a line of premium tea-based mixers self-described as "the first-ever artisanal tea crafted for cock-

> with lemon and lime; Coco-Lada black tea, chai spices and coconut pieces with pineapple; Pink & Black Darjeeling hibiscus tea with strawberry and lemon; and White and Vine white-tea, pomegranate, watermelon, and lemon peel. Owl's Brew products can be mixed with a variety of spirits, beer, wine and champagne; the company recommends using the simple "2 parts brew, 1 part booze" method. Funded by a Kickstarter campaign, Hop Theory created a range of

tails." The line is available in four offerings:

Classic English Breakfast and lemon peel

teabag-like sachets, which can infuse any beer with specialty flavors made from hops, fruit peel and natural flavors. Relativity, the brand's first flavor infuses Cascade hops, orange



peel and coriander seeds. The sachet can be used up to four times and is biodegradable. Other expected flavors include Pumpkin, Peach, and Double IPA.

Identifying consumers' desire for natural flavors, Firmenich developed the Naturomed range, such as Honey Naturome and Tea Green Naturome, which Dirk Lettany, senior flavorist & creation director cold beverages Europe at Firmenich, describes as "a ground-breaking range of volatile recovery-based extracts that will change the way the entire beverage industry uses natural extracts and will provide more freedom in the formulation of flavors." The versatile technology can be used in a wide range of beverage applications, including carbonated soft drinks, still drinks and alcoholic drinks.

Matcha Madness

Matcha, the fine-ground, high-quality caffeine laden green tea known for its antioxidant properties is experiencing a renaissance. According to the Sage Group, U.S. retail sales of Matcha green tea powder reached 54.9% in 2014. The company predicts sales of matcha products in the U.S. and Canada will continue to grow 25% annually between 2015 and 2018. Matcha madness is occurring in New York City with cafes specializing in this ingredient such as MatchaBar in Williamsburg, Brooklyn, Chalait in the West Village and Matcha Café Wabi in the East Village.

Matcha is emerging in the RTD market; expect to see more beverages readily available. "Tea products have incorporated Chinese-inspired flavors, such as matcha green tea, hibiscus, and Pu-erh tea," says Piazza. Motto Sparkling Matcha Tea "is

the world's first bottled matcha drink" made with premium matcha, honey, organic agave, apple cider vinegar, and fresh lemon juice. Teapigs offers a Matcha Super Power Green Tea Drink in three formulas: Apple, Elderflower, and *Grapefruit*. Jade Monk offers on-thego, flavored and lightly sweetened, powdered



Motto Sparkling Matcha Tea is formulated with premium matcha, honey, organic agave, apple cider vinegar and fresh lemon juice.

matcha tea based beverage available in four flavors: *Chai Spice*, Cranberry Blood Orange, Lime Blossom and Palau Peach. In March 2015, Jade Monk launched a line of certified organic, Project Non-GMO verified, cold brewed, andhigh pressure processed matcha green teas sold exclusively at select Whole Foods Markets. The beverages are available in *Unsweetened*, Slightly Sweet, Mint + Honey and Matcha Cleanse. Wittily named Matchia, Republic of Tea introduced organic matcha tea combined with chia seeds. Leonardi states, "Matcha is being welcomed to western continents with the powder showing up on Trader Joe's shelves. Cleverly marketed as Matcha Latte, this type of tea is being whipped to create froth, instead of steeped, helping to bridge the cultural divide. From a flavor perspective, matcha differentiates itself from green tea by having a pronounced fresh green taste that can complement new twists on fruit and tea tastes to include apple, pear, mint, and tropical blends." Sharp Electronics launched the Tea Ceré, a matcha making machine, at the World Tea Expo in May and won the "Best New Product Award for Innovation." According to Sharp, the appliance was designed with leading Japanese tea experts to make the matcha experience authentic and easier to prepare. Tea Ceré "grinds, brews, whisks, and pours matcha all in one convenient device."

This brightly colored green ingredient is also appearing in cocktails. For example, Café Clover, the health-focused New York restaurant, offers a *Harajuku Gimlet* crafted with Tanqueray No. Ten, yuzu-sake cordial, matcha, and shiso while Gracias Madre in Hollywood, California serves *Matcha Do About Nothing* made with tequila blanco, ceremonial-grade matcha, coconut milk, toasted sesame-infused agave tapioca pearls cured in a savory edamame syrup, housemade lime bitters, and a cherry blossom garnish. The Garret in New York City has a different take and formulated the *The First Lady* with gin, Combier, lemon, egg whites, and fresh basil. In Japan, Green Tea Restaurant 1899 Ochanomizu opened an all-you-can-drink beer garden, which serves three matcha beers, including a stout and non-alcoholic blend mixed with powdered green tea. It opened in June and will close September 30.

^dNaturome is a tradename of Firmenich

Over Ice

In the U.S., dollar sales for the cappuccino/iced coffee category rose 10.7% to \$1.3 billion, while RTD coffee sales were up 25.4% to \$169 million for 52-week period ending August 10, 2014, according to IRI (www.iriworldwide.com), a Chicago-based market research firm. Furthermore, according to findings from the U.S. Department of Agriculture biannual coffee report, U.S. consumers are forecast to spend \$12.8 billion on coffee in 2015 and \$13.6 billion in 2016, up from \$11.9 billion in 2014. Trendincite's "Forward Thinking: Milking It" article, which appeared in the August 2014 issue of Perfumer & Flavorist magazine, addressed coffee trends including flavored dairy, nondairy creamers, and RTD iced coffee introductions. Recognizing the importance of coffee flavors, Firmenich developed Coffee Firade, a natural coffee ingredient used in many Firmenich flavors. "In cooperation with a Brazilian instant coffee manufacturer, Firmenich captures streams generated in the brewing process and uses proprietary technology to recover these volatiles and concentrate them to create authentic natural coffee flavors," says Lettany. The newest activity in coffee is the cold brew phenomenon. Cold brew coffee, also known as cold press or toddy coffee, is coarsely ground coffee that has been steeped with room temperature or cold water over a 12 to 24-hour period of time. By omitting the heat, the coffee is less acidic, more flavorful and highly caffeinated. According to Todd Simpson, founder of Toddy Cold Brew System, cold brewed coffee is 67% less acidic than hot brewed coffee. There a variety of cold brew recipes and methods that can be seen in different cultures, such as Scandinavia and Japan. For example, Dutch Coffee is made with a cold drip maker and brewed with cold water between 3 to 6 hours. Similarly, Japanese slow-drip cold coffee often referred to as "Kyoto" style, uses elaborate equipment such as the Yama Cold Brew Tower and takes about 8 hours to make.

Several coffee houses, both independent retailers, such as Blue Bottle Coffee, Intelligentsia, and Joe, and mass retailers like Starbucks, are offering cold brew coffees. Philadelphia based La Colombe offers *Pure Black Cold Brew*, a cold-pressed bottled coffee while Starbucks serves a **Cold Brew Blend**, which combines coffee from Latin America and Africa, "specially designed by the Starbucks coffee team for this brewing method." Cold brewed coffee flavors are being influenced by the growing multicultural population and younger demographics. For example, New Orleans-Style (NOLA) coffee uses chicory in the steeping process and is offered at shops like Grady's in Brooklyn, while Vietnamese-Style cold brew includes sweetened condensed milk, like Sweetleaf's signature drink, Voodoo Child. A new hybrid beverage is Coffee Juice engineered by D.B. Miller Inc. and Toddy LLC. It's cold brewed coffee sweetened with cane sugar and blueberry juice available in Coconut, Original, Salty **Caramel** and **Sweet Vanilla** flavors. To take advantage of this trend and target the on-the-go millennials, Maxwell House released Iced Coffee Concentrate made from coffee beans and available in three flavors: Caramel, House Blend and Vanilla.

The latest interpretation is the cold brew tonic, which features cold brewed coffee blended with tonic to create a bubbly effect. Last year, Box Kite in New York City offered the *Spro and Tonic*, which featured espresso, tonic, muddled grapes and sorghum syrup. Now the café offers a simplified version,

which highlights Fever Tree tonic, a shot of espresso and ice. This summer, Stumptown introduced *Cold Brew Tonic*, which is formulated with double-filtrated, 12 hour, slowly steeped, single-origin Ethiopian Yirgacheffe Chelbessa coffee, with two parts Fever Tree tonic water over ice, cherry syrup and a Luxardo maraschino cherry as garnish. Everyman Espresso added the *East Village Special* to its lineup that combines espresso, lemon, tiki bitters, orange-cream citrate and soda. Illy, the Italian coffee brand, promoted the *Espressoda* recipe, which combines Illy espresso, club soda and vanilla syrup.

Craft coffee is taking cues from the craft beer movement and cold coffee is being offered on tap. Nitro is the emerging cold brew application aptly described by Bon Appétit as "pulled from a tap, nitro is cold brew infused with nitrogen to create a smoother, creamier drink." District: Donuts. Sliders. Brew. in New Orleans offers a nitro brew on tap, while Chocolate Fish Coffee Roasters of Sacramento dubs their nitro brew as *Morning Beer*. Stumptown features a nitro cold brew on tap, which is described as a "bubbly coffee drink that has a head of foam, similar to a pint of brew." In April, the company released a *Stumptown Nitro Cold Brew*





Stumptown Nitro on tap and Cold Brew Nitro canned.

in cans in their Portland and Los Angeles cafes. Similarly, Texas Cuvée introduced the **Black & Blue** nitro-canned version of its nitrogenated coffee. The newest iteration is La Colombe's **Draft** Latte, which is "the first-ever iced latte on tap" and highlights cold pressed coffee and frothed milk from a keg. Launched in June at La Colombe's Fishtown cafe, the technology is expected to roll out to other cafes and cities over the next few months. Keurig announced plans to release Keurig KOLD, "a revolutionary cold drink machine," which the company claims will make beverages perfectly chilled without a single cube of ice and will make carbonated sodas and seltzer without a CO2 canister. For those who prefer the real beer experience and enjoy the taste of coffee, craft brewers like Goose Island offer the Bourbon County Coffee Stout collection. Since 2010, Goose Island has partnered with Intelligentsia to create new annual flavor profiles. Last year's release was infused with Intelligentsia Zirikana from Rwanda. Another example is *Narragansett Autocrat*, a custom blend of Narragansett's bittersweet milk stout with coffee extract from Autocrat Coffee. Starbucks even toyed with the coffee and beer idea. Test marketed in 2014, Starbucks' Dark Barrel Latte was inspired by Guinness and served with a chocolaty, stout-flavored sauce, whipped cream, and dark caramel drizzle.

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