The Market for Beverage Flavors

A seemingly never-ending consumer demand for soft drinks, alcoholic drinks and hot beverages around the world makes beverages a significant category for manufacturers and suppliers of flavors.

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All market information provided herein is sourced from Foodtrending.com, *a global food ingredients market intelligence tool.*

—Editor in Chief

The Global Market for Beverages

The global beverage market now accounts for 30% of all consumer expenditure on food and drink (**F-1**). Alcoholic drinks is the largest category, with sales of all alcoholic drinks, including beers, wines and spirits, worth $1,587 billion globally and growing rapidly at a rate of 8.5% per year (**F-2**).

Soft drinks are the next largest beverage market. Global sales of all soft drinks, including juices, carbonates, bottled water and energy drinks, now total $500 billion, with consumer demand growing at a rate of 5.5% per year.

Finally, the global market for hot beverages, including expenditure in and out of home, now totals $190 billion.

Unlike the majority of food categories, sales of beverages through foodservice accounts for almost half of the total market when analyzed by consumer expenditure.

Trends in Beverages

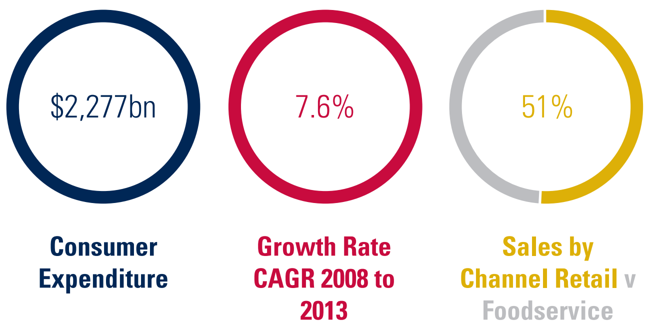
Health, wellness and consumer desire for new and innovative flavors are among the major trends across all beverage markets, with a particular focus on enhancing wellbeing, mood, energy and delivering protein and immunity—all using natural ingredients where possible.

In terms of ingredient trends, delivering new and innovative flavors, sugar reduction and health benefits remain key areas of development, plus an increased focus on quality and sustainability.

Flavor Trends

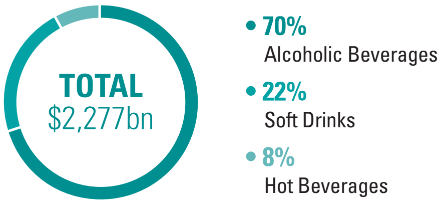
Consumers are increasingly seeking new and exciting taste experiences. Soft drink and beverage manufacturers are using limited editions to deliver surprising and unusual flavor combinations that excite existing customers and raise brand awareness. The growing trends toward sugar and calorie reduction while maintaining flavor profile has also necessitated the

F-1. The global market for beverages, 2013



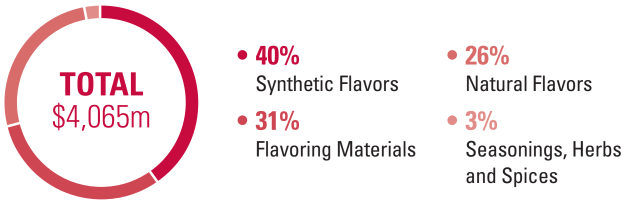
Source: *www.foodtrending.com*

F-2. The global market for beverages by product category, 2013



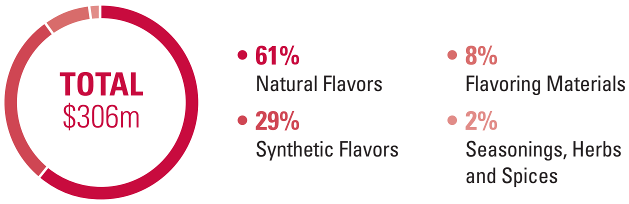
Source: *www.foodtrending.com*

F-3. The global market for flavors in soft drinks, 2013



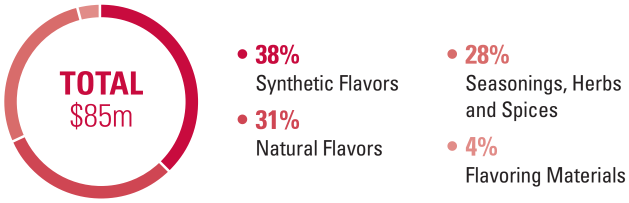
Source: *www.foodtrending.com*

F-4. The global market for flavors in alcoholic beverages, 2013



Source: *www.foodtrending.com*

F-5. The global market for flavors in hot beverages, 2013



Source: *www.foodtrending.com*

ongoing development of flavor masking technologies. Finally, manufacturers are increasingly exploiting the nostalgia trend, incorporating traditional or remembered flavors that evoke memories of times gone by.

Market Opportunities for Flavors

Here, the author analyzes the market for flavors in soft drinks, alcoholic drinks and hot beverages by the following flavor types: natural flavors, synthetic flavors, industrial seasonings, herbs and spices, and flavoring materials.

Flavors in Soft Drinks

Soft drinks are by far the largest user of flavors of all the beverage markets. Global usage of flavors in soft drinks now stands at $4,065 million (**F-3**). As with other areas of the food industry, there is a significant shift toward the use of naturals. As a result, demand for flavoring materials and natural flavors in soft drinks is significant and growing. However, use of synthetic flavors is not yet in decline—in fact, slow growth in synthetic flavors is forecast over the next five years, mainly due to the rapid growth in soft drink markets.

Flavors in Alcoholic Drinks

Although a much smaller opportunity, flavors are increasingly used in alcoholic drinks. Here, the trend towards naturals is also very much in evidence. Usage of flavors in alcoholic drinks is worth $306 million globally, with significant growth forecast in the use of natural flavors and flavoring materials (**F-4**). Again, it is anticipated that the use of synthetic flavors will continue to grow as the consumer market for alcoholic drinks grows. However, it is predicted that synthetic flavors will take a less significant share of flavors in alcoholic drinks over the next five years.

Flavors in Hot Beverages

Use of flavors in hot beverages is a much smaller opportunity by comparison. Use of all flavors in hot beverages totals $85 million globally (**F-5**). Here, use of naturals is expected to grow, although synthetics and seasonings remain important.

Creating Value and Winning Tastes for the Beverage Sector

Naturalness, ingredient stability, sweetness, health and wellness, and more.

In addition to increasing convenience, natural demands, and the rise of influencers such as millennials and the Hispanic population in the United States, beverage product developers are looking to serve new consumption occasions. If a product is typically consumed in the morning, reorienting it for a different time of day offers new product launch possibilities. But whether it's a new twist on an existing product or a new opportunity, flavor technology and formulation expertise play the central role in creating new products.

"We're constantly creating or redefining products for our customers," says Paul Riker, group leader, beverage applications, Symrise (North America).

These products may be developed reactively, using customers' bases and/or concepts, or proactively, employing concepts and bases developed internally by the flavor house. The company's internal marketing group also engages in extensive direct consumer research, from which mega trends are identified and a pipeline of aligned projects is developed. Beverages are also being inspired by culinary trends, in some cases involving research chefs in the development process. This allows formulators to bring an extra touch of uniqueness or sophistication to the final product, particularly for consumers seeking a premium consumption experience.

"You see a lot of it in alcoholic [beverages]," says Riker. "It could be local/regional or varietal ingredients."

This need to stand out is particularly crucial in highly saturated categories like water enhancers. That category, which took off in 2011 upon the release of MiO by Kraft Foods Group, was worth $412 million in the U.S. market in 2013, according to a Zenith International (*www.zenithinternational.com*) report. Further expansion into global markets could spur new innovations, particularly in Western Europe.

At the same time, emerging technologies necessitate new solutions. Recently, the single-serve brewing market has boomed. According to NPD Group (*www.npd.com*), full-year 2013 U.S. brewing systems sales rose 8% to $930 million.

"That's a hugely expanding area," says Riker. "It is with technology that we get ahead and are able to deliver products that will hydrate properly. When you have a [single-serve cartridge] the water's not [exposed] for a long time and you need your product to get in there."

Ensuring Stability and Performance In-application

Encapsulated flavor technologies play a crucial role in single-serve cartridges and other products, offering flavor intensity, solubility, stability in humidity and retention of flavor prior to use.

"A [conventional] spray dry doesn't work as well because it doesn't get fully wet," says Riker. "You need something that's going to wet quickly and dissolve."

He adds, "Stability is always a big issue, understanding how [components] are going to behave."

In a fast-paced product-development environment when everyone wants everything "yesterday," solutions have to be tailored for truncated timelines; ensuring stability thus becomes more challenging.

In the area of citrus, for instance, predicting oxidative stability can speed the creation process. If flavorists can calculate stability throughout the creation process, problems can be "red-flagged" well before a formula reaches the manufacturing stage.

"What [flavor companies] are doing is taking apart the oils," says Riker. "Where they'd traditionally make a hydroalcoholic extract of citrus oils with some enhancement, instead what they're doing is isolating the components and creating the finished flavor from the components rather than the whole and … minimizing the 'bad actors.'"

Natural, Vegetables and More Driving Health & Wellness

The drive toward "all natural," however it might be defined by a given customer, is a key factor influencing the projects that beverage flavor teams are developing.[a]

"Some of our customers are going from products that have been [naturally and artificially flavored] for years to pushing for all-natural products," says Riker.

This may necessitate a price increase in the final formula due to the generally higher expense of natural flavoring materials, such as extracts, essences, from-the-named-food ingredients (FTNF), from-the-named-fruit, etc.

Naturally positioned products may also eschew common flavor solvents like propylene glycol (PG), says Riker.

"That's a solvent that's going to be used in things that aren't going to be flammable," he notes.

Core health juice retailers and brands have led the vegetable juice trend, but there are increasing numbers of mainstream products incorporating fruit-vegetable juice combinations that are aimed at families.

In a product such as a water enhancer, flammability would obviously be highly undesirable. As a result, a natural solvent such as ethanol would not be an acceptable alternative. Finding a third way—perhaps via a natural emulsion or naturally derived solvent—is a central technical challenge for many beverage flavor formulators.

While fruit flavor profiles have always driven natural beverage flavors, Riker says vegetables are now making a mark on the category. Core health juice retailers and brands have led the vegetable juice trend, but there are increasing numbers of mainstream products incorporating fruit-vegetable juice combinations that are aimed at families.

According to Mintel (*www.mintel.com*), vegetable/tomato drinks comprise about 9.7% of the U.S. fruit and vegetable juice market. The category is driven by health and taste, in addition to universal factors such as cost and convenience.

Sugar Reduction

Recently, an article in the American Journal of Cardiology (*www.ajconline.org*) set off a media frenzy when it suggested that sugar, not salt, is associated with high blood pressure and chronic health issues. The authors, James DiNicolantonio, James O'Keefe and Sean Lucan, have even suggested that public health campaigns be aimed more at sugar than at salt. The publication comes at a time when sugar is coming under increasing scrutiny worldwide, with media and medical journals alike comparing the substance to tobacco.[b]

Whatever the veracity of the researchers' claims, Riker says that sugar reduction is indeed a major focus in the beverage sector. Using sweetness enhancers, formulators are able to reduce calories from sugar within flavor systems. These materials can also be used to optimize the sweetness impact and mouthfeel of flavors comprising stevia, monk fruit, erythritol or other sugar alternatives.

At the same time, the quality of sugar alternatives is improving. Riker notes that the stevia encountered by flavorists 20 years ago was vastly cruder than today's counterpart.

"It's gotten better and is [still] getting even better," he says of the material's taste profile. "They're using some of the different [stevia] isomers to help modify the sweetness profile."

Every project is different, Riker notes, requiring its own sweetness enhancement "tool kit." This kit comprises an "igniter," which provides the up-front sweetness impact, a "fortifier," which provides the intensity of the sweetener system, a sweet masker that provides "the finish" to the sweetness impact, and, finally, the "balance," which imparts mouthfeel, richness and other facets lost when sugar is reduced in a formulation.

"When you reduce sugar or fat you tend to lose a lot of mouthfeel, so we have a group that works exclusively on increasing sweetness perception and mouthfeel non-calorically," says Riker.

He adds, "You have to use it on an individual basis. A lot of what we do is customized because the problems that arise from different bases and products tend to be customized. There's never one solution that fits all."

Taste modifiers and maskers also play a role in health-enhanced products that contain proteins or vitamins. Working with sensory groups, formulation teams validate products throughout the creation process to ensure the product remains

[a] U.S. regulations regarding natural are accessible here: *www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/cfrsearch.cfm?fr=101.22*; E.U. natural definitions are available here: *http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:354:0034:0050:en:PDF*

[b] *www.nature.com/bdj/journal/v216/n7/full/sj.bdj.2014.282.htm*

aligned with consumer liking and customer goals. In addition—as with high-PH or vitamin-enriched beverages—the flavor/formulation team must mimic customers' production parameters to ensure the proposed solution will work in a real-world scenario.

"We have to understand the matrix and how our flavors are going to perform," says Riker.

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Influential Freshness

Freshness—what it is and how it can be achieved—is a major point of focus for beverage formulators, says Riker.

"Consumers are shunning synthetic and artificial ingredients for fresh and 'natural' alternatives across all product categories," Datamonitor (*www.datamonitor.com*) noted in a 2013 report. "The challenge for manufacturers is to overcome the barriers to traditional sports nutrition, where powders and supplements with an abundance of scientific claims are often perceived as anything but natural."

The report continued, "Freshness attributes are even more important [to European consumers than "natural"], with 82% of consumers that actively buy sports nutrition saying that the claim of 'fresh' is highly influential. This insight supports the importance of the fresh and natural sub-trend to the sports nutrition category. If brands want to reach mainstream consumers, a fresh and 'natural' approach is desirable."

Symrise (*http://in-sight.symrise.com/*) recently published research on its exploration of freshness, which comprises the central themes of cleanliness, natural, relaxation, enjoyment and vitality. The company acknowledges that no one concept is universally defined around the world, but that a fresh product should generally deliver on facets such as "purity" and "simplicity."

"Launching a product with a 'fresh' flavor or fragrance profile in the USA, Japan or Brazil that contained artificial ingredients would probably not fare well," Symrise's "The Five Worlds of Freshness" explains. Flavors that regularly fell into the fresh category for natural included "mint and herbal, honey, chai tea and fruity," in addition to "citrus" in Japan. Meanwhile, flavors associated with the cleanliness facet included mint, lemon, citrus, spicy, fruity and floral. The report adds that flavor profiles are generally perceived as more natural if they are subtle, rather than bold.

Hispanic Market

According to projections released by PewResearch (*www.pewresearch.org*), Hispanics will make up about 29% of the U.S. population by 2050. A continuing boom of Hispanic immigrants, paired with a broad base of consumers with roots in the region, continues to create dynamic beverage segments in the United States.

"While Hispanics over index on nearly all non-alcoholic beverages, they are most likely of any ethnic/race group to consume thirst quenchers/sports drinks, as 56% report doing so versus 38% of white consumers, 50% of black consumers and 39% of Asians," according to Mintel. Aguas frescas, fruit-based coolers, have particularly grown in the United States.

Looking ahead, shifting demographics, a focus on local tastes, exotic/novel flavor experiences, health, naturalness and functionality will continue to drive new product development for flavor houses and their customers.