

How Bold Can You Go?

Opportunities for confectionery flavors in health and wellness, flavor sophistication, trigeminal sensations, and more

A 2009 *Research and Markets* report predicts that the global confectionery market will reach \$147.7 billion by 2013 (2008: \$127.9 billion). Last year, the confectionery segment—baked goods, sugar confectionery, chocolate and chewing gum—accounted for 18% of Givaudan's flavor sales, powered by core flavors such as vanilla, mint and chocolate; the demand for more sophisticated and nuanced flavors; flavor modifying technologies and ingredients that allow for healthier, tasty foods; and growth in developing markets. According to Scott Harris, Givaudan Flavors' director of marketing, the opportunities will continue to grow and evolve. "If you break out the [confectionery] space, first and foremost ... it seems to be economically resilient," says Harris. Like liquor, the category tends to be somewhat recession-resistant, though for different reasons. Confectionery products are available at modest price points, providing simple discretionary gratification. Many consumers are willing to experiment with new and even limited-time products that offer more exotic flavor profiles—particularly in gum and mints—and the category can provide a kick of nostalgia, which can boost basic candy bar and similar product sales. "It's a small indulgence, a memory of your childhood, and it makes you feel safe and secure," Harris explains. In addition, he says, "There's a basic understanding that gum has some inherent benefits, whether it be related to malodor or plaque removal—things that have now been grounded with consumers.

"Now," he concludes, "they're looking for 'what else?'"

Health and Wellness Opportunities

According to the US Census Bureau, there are approximately 78.2 million baby boomers in the United States. As they age, these consumers are increasingly looking for functional benefits in food and beverage products. In the confectionery category, gum's strengths as a carrier make it an obvious candidate. "When you have a carrier with such a significant flavor profile," says Harris, "you can add other functional ingredients to it and mask or cover up those off notes." And even chocolate products are beginning to launch with functional ingredients such as Omega 3 (ex: *Bija White Chocolate Maple Omega Truffle Bars* and *Dina's Organic Chocolate 74% Dark Chocolate with Omega 3 Flax*). Such innovations dovetail well

with Givaudan's global mandate on health and wellness solutions focused on taste modification and sugar and sodium alternatives, among others. "Everyone's looking for a silver bullet," says Harris. Yet, he acknowledges, creating healthier products that actually taste good is a significant technical challenge. Products today, for a number of reasons, do not taste identical to the same product 10 years ago; in other words, gold standards no longer exist. The question then is: How do flavor suppliers get their customers back to that gold standard while meeting contemporary health and wellness parameters using ingredients available today, all the while satisfying current guidelines and restrictions? Harris concludes, "It creates a lot of opportunities for [Givaudan]."

In addition to the masking of bitter and off notes associated with some functional ingredients, the confectionery category has evolved to require an increasing amount of sugar-free products due in part to heightened awareness of issues surrounding glycemic index. Much of Givaudan's work in this area has been conducted via its TasteSolutions sweetener program, which "uses proprietary technology and ingredients to create flavors that provide sugar-like notes, modify unfavorable taste notes from artificial sweeteners, and contribute mouthfeel and other sensory characteristics." Harris notes that sugar-free solutions might employ the sugar alcohol xylitol, which has spread from the European markets to the United States, or even stevia. The availability of such sweeteners has in turn made it possible for flavor systems to be simultaneously sugar-free and natural. But along with stevia comes the need for ingredients that can enhance the material's sweetness while masking its associated off notes. How intensive of an enhancer-masking solution is needed depends on the grade of stevia used. Givaudan has submitted patents in this area, focusing on the discovery of the bitter taste receptor triggered by stevia-derived sweetener rebaudioside-A.

The original spate of stevia-touting launches, says Harris, has wet the consumer's appetite and will only increase. "The awareness of stevia had to first undergo the challenges from the current artificial sweeteners market," he says, "but the reality is that people are looking for natural solutions and cleaner labels, and if you can have a natural sweetener, the industry is tracking that way. That is across all segments."

Novelty and Intensity of Experience

Adventurous flavors are a hallmark of the confectionery category, as previously mentioned. “It’s the medium that lends itself to exploring,” says Harris. “Consumers feel safe in it.” Similarly, confectionery is the home to trigeminal experimentation, from heat to tingling to numbing to cooling effects that, says Harris, highlight the consumer’s desire for an “intensity of experience.”

“We saw a bit of a rise in demand for bold flavors a couple of years ago,” says Harris. “I don’t think that’s gone completely. I think what we [see now are] the more individualistic characteristics of flavors being more pronounced. No longer are you able to just call something a ‘tropical’ flavor.” Instead, he says, consumers increasingly want to taste the individual components comprising that flavor—mango, pineapple, etc. “Consumers are becoming more savvy. They want to be able to experience the individuality of flavors.”

Harris adds, “Today there are some tropical flavors that bring out the true sulfury notes that are in tropical [fruit] flavors that five years ago you never would have experienced. You’re really getting to natural and true authentic versions of flavors in fruits. That is part of [the flavorist’s] job—understanding how to deliver that authenticity through mediums day in and day out, whether it’s a boiled candy, a gum, etc. From our flavorists’ perspective, what’s really helping now is the complete understanding of the interactions of flavors.”

That means an increasingly sophisticated understanding of how flavor materials work together, which ones are subdued, and which do and do not play in a given medium. “That knowledge is really what’s helping our flavorists be more successful,” says Harris. “For instance, you can’t just take three flavors, mix them together, drop them into a system and expect them react. There are things like inherent fat or [other] attributes of a particular product that will not allow those flavors to just come

through. They need to be adjusted; you need to figure out the right balance.”

Developing Markets: Innovation Springboard

Developing markets “are definitely more exploratory,” says Harris. While in years past many of these markets may have sought to capture aspects of Western culture in product launches, Harris explains that now they seek to create their own identity. “I see fewer requests for ‘what’s going on in the United States’ to potentially launch a ‘like’ product in Asia,” he says. “I actually see more of the reverse.”

On the functional ingredient side, Harris adds, developing markets across all food and beverage categories are much more sophisticated and advanced than developed markets, for example incorporating ingredients such as collagen into “beauty foods.” This discrepancy, he says, highlights how different cultures view and use various ingredients. An Asian market might include a collagen-infused gum, while US consumers continue to think of the ingredient solely as a cosmetic. Similarly, says Harris, US consumers view aloe primarily as a salve, while some Asian consumers consider it a hydration element and Latin American consumers employ it as a digestive aid. Awareness of these key differences is crucial to serving the increasingly important developing markets.

Harris considers developing markets a springboard for future innovation, delivering ingredients such as star anise from obscurity to the mainstream. “I think in the next five years we’ll be talking about [developing markets] as predictors,” he adds.

“Certainly the adventurous side of consumers is really what’s caught me by surprise. It hasn’t been a slow gain. It’s been very fast and I wonder what the next step is. How bold can you go?”

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