

Inspired Snacking

New bases, heat, flavor mashups and healthier options are expanding snack flavor horizons.

According to a 2013 SymphonyIRI Group (www.iriworldwide.com) report, sales of snack nuts, seeds and corn nuts rose 10.9% in 2012. Crackers and salty snacks grew by 6.7% and 4.2%, respectively, in the same period. That year, according to the same report, private label salty snack offerings gained 0.2% marketshare. Meanwhile, consumers showed a susceptibility to price fluctuations. At the same time, consumers have increased the range of hours in which they snack, increasing both frequency and diversity of snacking choices. These snackers are looking for products to deliver health benefits. In fact, a recent ConAgra/SuperMarketGuru report (www.supermarketguru.com/) on 2014 trends noted that “Better for You Snacking” was a key phenomenon, adding, “Healthy options are on the rise. Look for supermarkets to replace high-sugar, high-fat snacks at the checkout with healthier on-the-go offerings.”

Broadening Horizons

In recent years, snack category growth has been driven by the rise of gluten-free diet options and a desire for healthy snacks.

Overall, the snack category is “trying to break out of the standard salty snack that everyone’s used to and broadening horizons,” says AnnMarie Kraszewski, a food scientist at Wixon. “People are more specific and particular about what they want to eat these days. Everyone still likes cheddar and barbecue, but the projects we’ve had coming in have moved beyond that.”

Kraszewski is seeing experimentation with “flavor mashups” that combine different types of flavors together, which attracts a younger generation of consumers.

Sharon Van Horn, senior applications technologist at FONA International, notes that complex, layered flavors are sought-after. These include combinations of sweet, savory and acidic profiles, sweet and salty, and sweet and spicy. She adds that snack food manufacturers are retooling classic flavors to attract consumers, such as modifying a ketchup with a bloody mary profile, a chip with a cheeseburger flavor, or combining a grilled cheese profile with bacon, caramelized onions or spicy pickles for additional sophistication.

International flavors, too, are a key trend, says Kraszewski. While this trend is currently stronger in Europe, it is picking up in the United States.

“We’re seeing a lot of requests for authentic ethnic flavors with global influences,” says Van Horn. “Like spice blends from emerging authentic cuisines from South America, Peru and Brazil, and the Mediterranean.”

“There are a lot of snack bases coming in that are coming in that are not your standard potato chip or puffed corn, says



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Kraszewski. “There are a lot of healthier options [incorporating] different seeds, different grains, a lot more baked as opposed to fried [bases].” In addition, Kraszewski says, manufacturers are even applying pasta bases in the snacking arena.

Van Horn notes that popped snacks, including popcorn, extruded products, chips, cereals, baked items, snack bars, and on-the-go and “nutrition-in-transit” products have grown in popularity.

Kraszewski explains, “Some of the projects we’ve had come in where [the customer] has the healthier base, they’ve asked for a flavor that compliments it, such as a sesame cracker or a rice cracker. If you have reduced sodium you [need] flavors that are bold enough to go beyond salt.”

“When you look at salt reduction, we observe negative hedonic impact among consumers when we pull back on sodium,” says Michael Gundlach, scientist at FONA International. He adds that, while there is no globally accepted recommended level for sodium intake, many use the 500 mg/day figure for individuals aged two and up.

“From a flavor perception perspective, there are actually quite a few tools that we as flavor scientists can use to modulate the perception of sodium,” says Gundlach. “These tools include manipulating even the morphology of the salt crystals ... to change how quickly or completely it dissolves in the mouth.

That can be associated with different time intensity profile perceptions. We also employ tasteless aroma compounds to influence flavor perception. For instance, a savory type flavor might compliment the inherent sodium perception of the salt that's already there."

Natural and Healthy

"It's important to talk to the customer to find out what their definition of 'natural' is," says Krazewski. "It can be rather vague." That definition could ultimately determine how cost-effective a natural flavor system will be. Kraszewski stresses that this has not been a problem due to vendors' awareness of the different "natural" requirements.

"A lot of our [customers] are looking for ways to create consistency of the flavor profile in the finished products," says Van Horn. Using honey as an example, she continues, "It's really messy to work with. There are a lot of inconsistencies in natural honey as far as the flavor profile and appearance. So, using a natural flavor we're able to get a uniform product that's friendly to manufacturing, and produces a consistency in the flavor and appearance." She adds, "Natural flavors tend to be more expensive than natural and artificial or artificial flavors. The challenge for the flavor supplier is creating a natural flavor that is cost effective. It helps that a lesser amount of flavor is needed to create the same flavor impact as the natural honey ingredient."

Van Horn explains that consumer product companies are producing more snack foods that incorporate vegetables, fruits and whole grains. Many of these products are gluten-free, allergen-free or GMO-free. Customers are seeking natural flavor profiles to accompany these products.

Functionality

Meanwhile, manufacturers are incorporating functional ingredients into products for natural energy, including botanicals, spices and herbs. Gundlach explains, "What we're hearing a lot of interest in recently are a breadth of cereal and snack concepts ranging from naturally sweetened, reduced-calorie hot cereals and snack bars, the concept of delivering a full serving of fruits and vegetables in a hot cereal, the concept of 'stealth health,' as well as cereals and snack bars that are designed to deliver a boost in energy or the sustained experience of energy. There are also cereals and snack bars that offer consumers the experience

of satiety. We're looking at opportunities to deliver unique textures to provide the consumer with an indulgent experience. We also hear interest in a lot of other applications that offer mental acuity and alertness, as well as immune-system-boosting applications."

The technologies that make these evolving applications possible include taste modifiers and aroma profiles that signal taste cues without actually contributing to the levels of sodium or sweetener in the product. A basic example of this technique, Gundlach says, is the use of vanilla to evoke sweetness.

"At a low level you can trigger sweetness perception because the odor and taste information are integrated in the same areas of the brain," he explains. "If you look at saltiness, you could use something like a bacon-type flavor to enhance or modulate the perception of that taste."

Meanwhile, technologies such as encapsulation might be used to prevent interaction of active ingredients with the rest of the product. "This allows the consumer to receive the intended benefit of the active ingredient, without any sacrifice of the flavor performance or profile of the finished product," says Gundlach. "We do a lot with encapsulation, but we do almost as much on the taste perception and modification side."

Hot Trends

"I've seen a lot of trends for heat lately," says Kraszewski, "and not just heat that burns your mouth, but complex flavor profiles where you have heat and a lot more flavor behind it." In fact, HeatSync, a project launched by Kalsec Inc. in conjunction with Mintel, tracked the usage of more than 30 different hot peppers in European new retail production introductions and more than 2,400 U.S. restaurant menus in 2012. The research concluded that the peppers' usage increased 16% in Europe and 8% in the United States. Habanero, jalapeno, poblano and cayenne peppers led the field. The research reflected snacking trends, including the incorporation of spicy flavor profiles into corn, potato and tortilla chips, which particularly appeal to younger consumers.

"Everyone's competing to have more spicy heat in their products," says Van Horn.

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