Functional gummy boom reflects consumer health goals

New sweetener option addresses label, sugar content concerns

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No longer relegated to health food stores, dietary supplements have gone decidedly mainstream. It's a reflection of broader trends, implicit in today's label-conscious consumer mindset.

Consider the results of a recent Council for Responsible Nutrition Consumer Survey on Dietary Supplements, which found the number of U.S. adults using multivitamins and other nutritional supplements up 10 percent over the past decade. In the 2018 survey, three out of four adults reported taking dietary supplements, up from 65 percent in 2009.

"Consumers are looking for foods and beverages they believe will positively impact their health," explains Pam Stauffer, Cargill's global programs marketing manager. "Interest in nutritional supplements is a natural extension of that desire."

In part, the category's continued growth can be attributed to the rise of functional gummies. Alternatives to pill-form supplements (including gummies, powders and liquids) accounted for 47 percent of category sales in 2017, up from 33 percent in 2011, according to the Nutrition Business Journal (NBJ).

Research from Transparency Market Research suggests the global market for gummy vitamins will continue to rise at a steady CAGR

↑5.2%

from 2017 to 2025.

"Gummy supplements provide a more enjoyable experience than traditional pills, combining great taste with convenience, two key factors for the format's popularity," explains Ravi Nana, one of Cargill's technical service managers. "Plus, their chewy nature is a boon for those who have difficulty swallowing pills."

Still, the segment isn't immune to larger trends in the food and beverage marketplace, including interest in label-friendly and reduced-sugar options.

Sugar Redux

"Consumers are paying closer attention to ingredient lists in all kinds of products, functional gummies included," Nana admits. "Fortunately, we've been attuned to this evolving marketplace, and have solutions that fit with the changing consumer demands – including non-GMO*, organic, vegan – and still provide approaches to reduce sugar, yet still deliver great taste."

It's that last point, label-friendly sugar reduction, that's been a focus for Scott Helstad, a technical service advisor for Cargill. He's found Cargill's newest addition to its sweetener product line, a reduced-sugar tapioca syrup, can assist with sugar reduction in a number of applications, gummy supplements included.

"Sugar reduction has been on many of our customers' minds for several years now," Helstad explains. "They want a product that handles like a high DE syrup, but without all the sugar carbohydrates."

In response, Cargill created the Versyra® line. The company's first product, a reduced-sugar corn syrup, minimized mono- and disaccharides (DP1 and DP2) components, while at the same time, breaking down the higher saccharides to reduce viscosity. The resulting reduced-sugar syrup was a hit with customers, prompting Cargill to expand the line.

"The consumer 'clean label' trend has some of our customers looking for ways to remove corn syrup from the label, but they still have an eye on sugar content," Helstad continues. "For them, a reduced-sugar tapioca syrup fits their needs to a T. Consumers are familiar and comfortable with tapioca syrup; it's non-GMO, and we'll even be offering organic options."

Just how much sugar reduction formulators realize depends on the specific sweetener being replaced. On a dry basis, Versyra reduced-sugar tapioca syrup contains a maximum of 25 percent sugar.

Swap out sucrose (table sugar) and you'll get a 75 percent reduction in sugar with a one-to-one replacement. If you're replacing a 43 DE corn syrup (typically 33 percent sugar), it's a more modest reduction of 20 percent. Nevertheless, given consumers' hyper-focus on sugars, that 20 percent reduction can help move a formulation from double-digit to single-digit grams of added sugars.

"Regardless of the application, formulators are being pushed harder than ever before," Helstad contends. "Consumers want it all – simple labels, familiar ingredients, less sugar – but it still has to taste great and deliver on texture and mouthfeel expectations. Our reduced-sugar tapioca syrup is another tool to help customers meet those competing demands."

Global Connections

Cargill's tapioca syrup options wouldn't have been possible without the company's global supply chain. Tapioca syrup comes from the cassava plant, a tuberous root grown in parts of Asia, Africa and South America. To create the reduced-sugar syrup, Cargill extracts the starch from the cassava plant, then uses enzymes to break down some of its mono- and disaccharide sugars.

"To bring these products to market, we challenged our R&D and processing teams to develop straightforward replacements for our existing syrup options," Helstad explains. "We wanted to provide options that wouldn't require a lot of development work to be effective in our customers' formulations. By all accounts, we succeeded."

Cargill's new tapioca syrups perform nearly identically to the company's existing corn syrups. As a result, customers who currently use Cargill's Versyra reduced-sugar corn syrup will find switching to the new reduced-sugar tapioca option is essentially a one-to-one replacement, with similar functionality thanks to nearly identical carbohydrate profiles. Moving from a low DE syrup to a reduced-sugar option may require a bit more work. Still, Helstad advises customers to start with a one-to-one replacement.

"You might see a minimal change in viscosity or hygroscopicity," he acknowledges, "but these are all changes that can be managed with minor adjustments."

Nutritional gummies are one space where the company's reduced-sugar, label-friendly tapioca syrup holds great promise. Nutritional bars, another segment facing calls for both "clean label" and reduced-sugar formulations, are another prime application for the sweetener. Here, the reduced-sugar sweetener serves as an adhesive, binding all the grain, fruit and nut inclusions together in a way that isn't overly sticky.

Regardless of the application, consumers' increased scrutiny of product labels shows no sign of abating. To keep up, ingredient suppliers will need to continue to invest in research and development programs that span the globe.

"Our ability to bring this line of tapioca sweeteners to market is really a testament to our international experience," Helstad emphasizes. "We saw how tapioca syrup was being used by our colleagues in other parts of the world and brought that knowledge and experience to the U.S. market."

* There is no single definition of "non-GMO" in the USA. Contact Cargill for source and processing information.

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