

Q&A

Raising the bar on label-friendly sugar reduction



Snack bars – known for their convenience, portability and affordability – have long been a hit with American consumers. While their popularity shows no sign of waning, savvy manufacturers are taking a fresh look at their ingredient statements, giving special consideration to sweetener choices. Cargill food scientist Chad Rieschl, a 20-veteran of the snack bar industry, offers a few insights into formulating for the label-conscious consumer.

What trends are driving the snack bar category?

It's a diverse market segment, encompassing breakfast bars, energy and nutrition bars, fruit bars, granola bars, protein bars and more. While basic granola and breakfast/cereal bar sales are declining, we're seeing plenty of growth in other spaces – especially protein. No longer limited to just whey or soy protein sources, we see formulators attracting consumers' attention with meat bars made with lamb, beef, chicken, bacon and even bison. Also in the protein segment, there's a growing interest in pulses such as beans and lentils, and on the very cutting edge, a few companies are experimenting with insects.

Claims such as organic, non-GMO, and gluten-free continue to gain traction, with some companies boldly touting their simple, recognizable ingredient lists on product packaging. Looking ahead, as consumers scrutinize ingredient statements – and the new Nutrition Facts panel calls attention to added sugar levels – sweetener choices are sure to get more attention.

In this label-conscious environment, which sweeteners are in?

From our proprietary consumer research, we know consumers are attracted to simple, recognizable ingredients, and that they are particularly concerned about added sugars. By combining zero-calorie stevia with label-friendly favorites such as tapioca syrup, brown rice syrup or glucose, formulators can deliver sugar reduction in a great-tasting bar.

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What role do sweeteners play?

Sweeteners provide the flavor and texture that consumers enjoy in bars. Syrups assist with humectancy, keeping bars moist over time. They also help bind the bar, holding all the pieces of fruit, nuts, crisps and oats together, enabling the bars to hold their shape.

When we reduce sugar in bars, we can build back sweetness with a high-intensity sweetener like stevia leaf extract, but to match sugar's functionality, we'll need to combine stevia leaf extract with bulking agents like chicory root fiber, polyols or other sweeteners such as Cargill's Versyra™ corn syrup. Versyra,™ a lower-sugar corn syrup, has a clean flavor profile and optimal viscosity.

What are the challenges when replacing sugar in bars?

Texture is the big thing to watch when we start taking out sugar. The bar may become harder, so formulators need to manipulate other ingredients to maintain a soft texture. Fortunately, there are a number of options that can help, including adjusting the fat, adding glycerin, experimenting with different combinations of syrups, keeping some of the sugar in the formulation, using a small amount of honey or even making changes to processing. All of those factors can impact a bar's texture. Deciding which approach is right often hinges on shelf life, water activity and processing requirements.

It also takes experimentation. I've seen times where a formula works great at the benchtop level, but manufacturers run into problems on the production line. Working with an ingredient supplier such as Cargill can minimize those delays, as customers gain access to our vast formulation expertise. Our formulation and ingredient specialists can look at the entire recipe, leveraging our complete ingredient portfolio to address customer challenges from a multitude of directions.



Do you have any tips for working with stevia in reduced-sugar bars?

In many respects, it's no different than any other application. First, you have to decide how much sugar you want to replace and what is an acceptable list of low- and no-added sugar bulking agents. From there, you build back in the sweetness using stevia.

Given all the work we've done with stevia, once sugar limits are set, we can guide customers on how much stevia to put into the formula. That's groundwork we've done, and can pay significant dividends in time savings during product development.

From there, we hone in on the optimum stevia levels for each customer's unique formula. We've learned that very minute adjustments can yield significant changes. Of course, cost is another consideration, and we can work with customers to select the right stevia product for their sweetener needs and cost-in-use requirements.

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What other considerations go into selecting sweeteners that are label friendly?

It's critically important that formulators understand their consumer target. What are the non-starters for your target audience? Corn syrup? GMOs? Does it need to be gluten-free? We can accommodate each of those considerations, using our Non-GMO Project Verified stevia options as a key sweetener component.

Finally, as much as consumers say they want recognizable ingredients and reduced-sugar products, they refuse to compromise on taste. Snack bars made with stevia make it possible to check all the boxes: label friendly, reduced sugar and great taste.



The Cargill Advantage

Cargill offers a broad range of solutions for reducing sugar. Our portfolio, coupled with our integrated formulation and regulatory expertise, enables product development with friendlier labels while maintaining quality, functionality and cost competitiveness.

Visit cargill.com/labelfriendly or call 1-877-SOL-UTNS (765-8867)