



# Hitting the bullseye in beverage formulation

Consumers now clearly want beverages that do more than just wet their whistles. Today’s new-age beverages must not only taste good and hydrate; they should also include ingredients that are sustainably produced and support a growing list of health goals.

The challenge for formulators is to discern the issues that are motivating consumers – and then tap into the functional and sustainable ingredients to support these goals, while also solving challenges to flavor, taste and mouthfeel.

It’s a tall agenda, but necessary. Plainly, consumer culture around drinking and beverages is changing. This stems from the fact that as they become more educated about diet and wellness, consumers want their beverages to do more. Notably, beverages are now increasingly seen as substitutes for both meals and snacks, according to a recent report on this shifting beverage culture from The Hartman Group. What’s more, the report noted that nearly two in three Americans now say a beverage plays a very important role in their health and wellness, and 44% said they want their beverages to do something for them, such as provide energy, nutrients or other benefits.<sup>1</sup>

Consumers in general are also drinking less alcohol. This means they are looking for substitutes that are more healthful, yet also provide an exciting and fun experience.

These attitudinal shifts have made beverages a quintessential element in the modern diet, checking off all the boxes – nutrition, sustainability, ease of use and portability – along with added health benefits.

This transformation represents a new benchmark for consumer choice and convenience in product development, as brands work to address these expanding demands and challenges.<sup>2</sup>

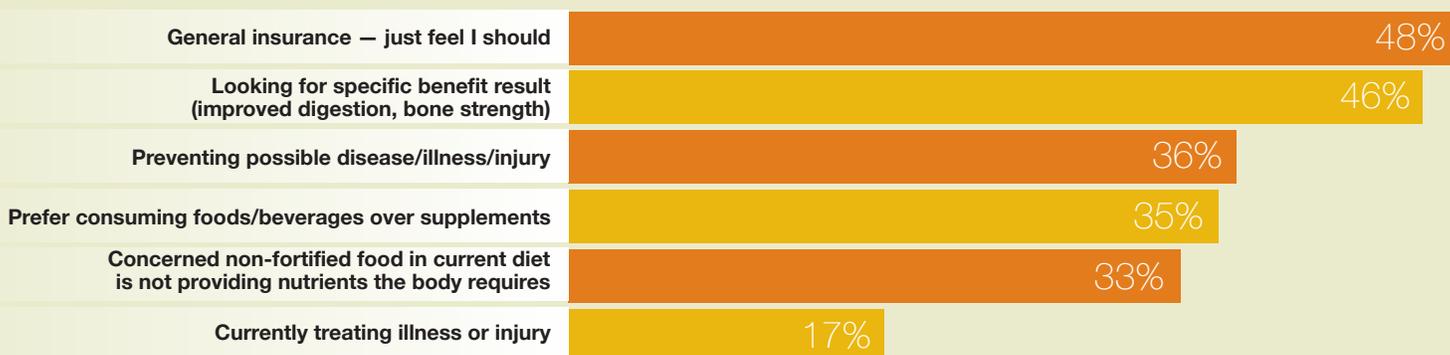
Following are some key insights into these evolving beverage formulation trends:

### Adding function

The notion of beverages with a specific function has been on the rise in recent years, but this trend accelerated in 2020 as consumers became more motivated to support their immune health and overall wellness in the wake of the COVID-19 pandemic. As Innova Market Insights reported in a 2020 consumer survey, six in 10 global consumers were looking for food and beverage products to support immune health, and more than half noted having educated themselves on ingredients that could help.<sup>3</sup>

In the wake of this reboot, 38% of consumers in the U.S. now say they look to beverages as a way to support a specific health aspect of personal interest.<sup>4</sup> Within this receptive group, there are various motivations for using functional products, with the largest group saying they do so for general reassurance, while slightly fewer seek specific benefits.

## Reasons for using functional foods and beverages (among functional food and beverage users)



Source: The Hartman Group. "Motivations for Using Functional Foods and Beverages." *Functional Food & Beverage and Supplements 2020*.

Immunity has certainly been near the top of the list, with a wide range of ingredients in use to support an immune health position for beverages, ranging from herbs to vitamins and antioxidants. A number of these ingredients have become increasingly well-known to consumers, such as echinacea, elderberry, ginger, and turmeric, as well as superfoods like acai, palm fruit, moringa and yerba mate. However, even less-familiar ingredients, such as ashwagandha, are now making their way into beverages for immune support.

But immunity isn't the only health issue of interest. Consumers are progressively looking to beverages as a step towards common health goals, including weight management, fitness performance, energy and digestive health.<sup>5</sup>

Digestive health is among the hot topics in beverage formulation, as consumers get wise to the importance of gut health and microbiome balance. Recognition of probiotics (the good bacteria that populate our digestive systems) has gained ground, and consumers are embracing fermented beverages (like kombucha) that contain them. Further enhancing this concept, beverages are now touting added prebiotics, the non-digestible, plant-based dietary fibers that help probiotics thrive, and are now also known to possess important health benefits in their own right – such as supporting weight management, reducing hunger, supporting gut health, immune health, and bone health by improving mineral absorption.<sup>6</sup>

Protein is another important ingredient for the beverage space, with well-understood benefits for providing energy and improving sports performance. There are several well-established complete proteins from whey or milk that have a long track record in energy and sports nutrition drinks. More recently, plant-based proteins are seeing increased use in beverages for energy and sports performance – often using blends of plant-based proteins from pea, chickpea and brown rice – to make a plant-based protein that contains all nine essential amino acids present in animal-based proteins.

### Keeping it healthy, sustainable and tasty

Beyond adding function, beverages now need to contain ingredients that consumers recognize and view as sustainable, healthy and natural. At the same time, they are generally not willing to compromise taste, flavor or mouthfeel in their beverages. While the list of versatile ingredients is growing, they can introduce formulation challenges, although suppliers and formulators are making many strides on this front.

Plant proteins have become an important option in beverages because they add function with a sustainability story and label-friendly image. Peas, for example, are an important cover crop that reintroduces much-needed nitrogen to the soil, as well as providing an additional cash crop for farmers.

Energy is another sought-after health benefit, and consumers are increasingly interested in ingredients that can provide that energy boost naturally. This is prompting interest in natural caffeine from green tea and green coffee bean that provide a gentle pick-me-up.



As a beverage ingredient, peas have also become useful in that they can meet higher protein goals without impacting taste or texture. Pea proteins from yellow pea varieties are well suited for beverages because they have a clean, neutral taste compared to other peas that can introduce bitter, astringent or grassy off-notes. Yellow peas are also among the more soluble plant-based proteins, which is important in beverage formulation to avoid a chalky or gritty mouthfeel.

Replacing or minimizing sugar is another multi-faceted challenge. Beverage formulators have made increasing strides to create great-tasting, low- and no-sugar drinks using a variety of natural alternative sweeteners. Stevia-based sweeteners and sugar alcohols like erythritol have become top solutions –both individually and as blends – to create beverages that meet taste and sweetness expectations, while also maintaining a natural perception among consumers.

These zero-calorie sugar alternatives have helped create new low- and no-sugar alternatives to traditional alcoholic beverages, such as healthier cocktail mixes and great-tasting low- and no-alcohol beers and wine.

## A look ahead

As consumer attitudes and behaviors continue to evolve, the landscape for functional beverages will change with it as formulators strive to create beverages with nutritional profiles that meet health and wellness goals in the context of convenience and individual choice.<sup>7</sup> Consumers will increasingly demand beverages that meet their specific health targets and fulfill their lifestyle values. Brands and formulators who pay attention to these shifting requirements while also exploring new flavors, styles and ingredients will be poised for success in the fast-moving beverage landscape.

With a full portfolio of ingredients and proven formulation expertise, Cargill can help you create beverages that hit the mark.

Contact us at 1-800-932-0544 or [customerservice@cargill.com](mailto:customerservice@cargill.com).

### References

- <sup>1</sup> The Hartman Group. "Consumers Look for Functional Benefit in Beverages" infographic. April 22, 2019. <https://www.hartman-group.com/infographics/1251327552/consumers-look-for-functional-benefits-in-beverages>
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- <sup>5</sup> The Hartman Group. "Functional Food & Beverage Supplements 2020."
- <sup>6</sup> International Scientific Association for Probiotics and Prebiotics. "Understanding Probiotics and Fiber." <https://isapscience.org/infographic-fiber-prebiotics/>
- <sup>7</sup> Ibid. The Hartman Group. "Modern Beverage Culture."

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