



New opportunities in functional  
beverage markets:

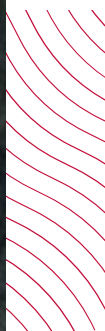
## **Plant-Based**



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# Unlock functional drinks' potential with plant-based opportunities

Health has become a key priority for consumers all over the world since the pandemic, leading to a significant increase in demand for functional products.<sup>1</sup>

More than seven in ten shoppers worldwide now say it is important or very important to choose food and drink products that positively boost nutrition or benefit how the body functions.<sup>2</sup>

Plant-based beverages are perfectly placed to capitalise on this growing opportunity. The plant-based trend has been enjoying spectacular momentum in recent years and these drinks offer a health halo that makes them an ideal platform for functional ingredients.

Research carried out by Mintel shows that the majority of US shoppers see food and drink with plant-based claims as healthy (56%) and natural (53%) – outperforming regular products and those with all-natural claims on both counts.<sup>3</sup> The International Food Information Council's 2021 Food and Health Survey, meanwhile, found that more than four in ten shoppers see plant-based options as healthier even when two products have the same nutrition facts label.<sup>4</sup>

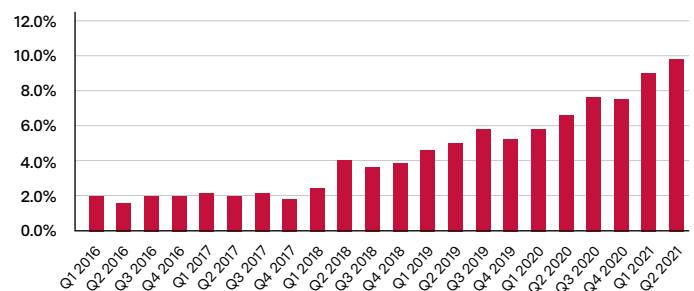
In this white paper, we explore the growing demand for plant-based beverages, their vast potential across a range of different formats, and the best ways to deliver the functional benefits that modern consumers want to see.

# Plant-based is booming

The global market for plant-based foods and beverages is reaching new heights. The category is expected to record a compound annual growth rate (CAGR) of 11.9% between 2020 and 2027, when it will reach a value of \$74.2 billion.<sup>5</sup>

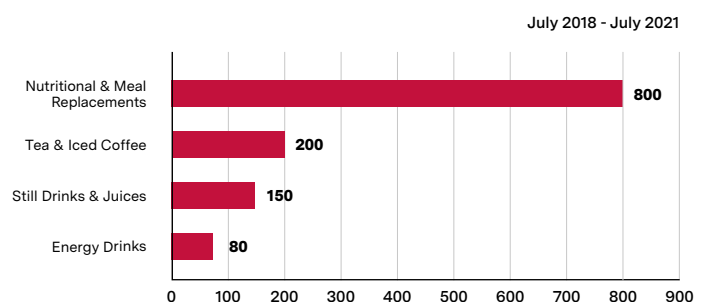
The trend's popularity is leading a growing number of manufacturers to promote their drinks' plant-based credentials, with the proportion of beverage launches featuring these claims reaching nearly 10% in 2021.<sup>6</sup>

## Percentage of global drink launches featuring plant-based claims



Milk alternatives have played a key role in growing the plant-based beverage market and they alone are now estimated to be worth \$17 billion a year globally.<sup>7</sup> However, they represent only part of the category's success story. Beverage brands have been utilising plant-based claims to boost a range of different products in recent years, from meal replacement drinks to fruit juices.

## Number of global beverage launches featuring plant-based claims across product types







## 'Plant-forward' consumers focused on health

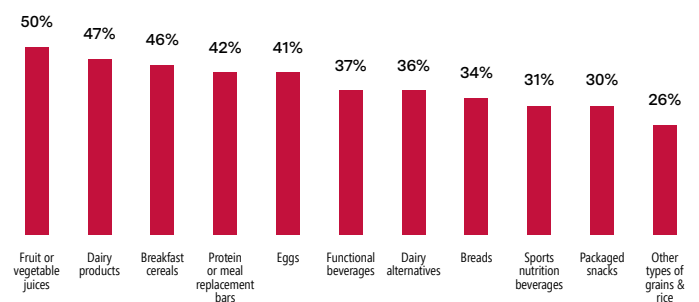


The appeal of plant-based drinks goes far beyond their traditional vegan base. In fact, a remarkable 71% of consumers worldwide say they consider plant-based claims to be somewhat or very appealing.<sup>8</sup>

Sales of plant-based products are being fuelled predominantly by the increasing numbers of 'plant-forward' shoppers – those who consume animal products but also like to enjoy the benefits of plant-based. According to Innova's 2020 Consumer Survey, the top four reasons for considering plant-based products are health, variety, sustainability and taste. Health was named by 53% of respondents, making it the clear leader.<sup>9</sup>

Beverage brands can cater to these expectations by using on-trend functional ingredients to create healthy, tasty and sustainable plant-based products. Research carried out by the International Food Information Council shows there is currently significant demand for functional benefits in plant-based drinks including fruit and vegetable juices (50%) and dairy alternatives (36%).<sup>10</sup>

The most sought-after types of fortified foods/ beverages are juices, dairy products and breakfast cereals





## Functional benefits across different formats

There are opportunities to provide functional benefits across a broad range of plant-based beverages including:



### Juices & Shots

Widely consumed all around the world, fruit juice drinks are plant-based, natural, tasty, nutritious and refreshing. However, sales in most developed markets are static or even in decline.<sup>11</sup> Globally, the number of new fruit juice and juice drink products launched in 2020 fell by 10% compared with 2019.<sup>12</sup>

The key reasons for this are the maturity of the category and ongoing concerns about sugar content. Two-thirds of UK shoppers say that sugar concerns have limited the amount of fruit juice, juice drinks or smoothies they drink.<sup>13</sup> Mintel analysis shows that brands are responding with sugar-reduced, vitamin-enriched and nutritious juice drinks, while 'wellness shots' are gaining noticeable traction.<sup>14</sup> Immune health is also a key priority for shoppers in the wake of the pandemic, while incorporating additional functional ingredients can resonate with consumers.



### Plant-based dairy drinks

Plant-based milk analogues are big business, with the global dairy alternative market projected to grow at a CAGR of 11.4% from \$21.4 billion in 2020 to \$36.7 billion by 2025.<sup>15</sup> A range of plant sources are used for milk alternatives but coconut dominates. Recent advances in processing technology mean that some of these products taste just as good as, or even better than, cows' milk. However, plant milks can lack some of the nutritional benefits of dairy, so it is important to incorporate micronutrients such as vitamins B12 and D and calcium.

These beverages can also be adapted to include additional functional ingredients. For example, research shows that European consumers agree that drinking yogurts with live bacteria can help to support the immune system.<sup>16</sup> Plant-based dairy alternatives enriched with probiotic bacteria could tap into this opportunity.



## Energy Drinks

The market for energy drinks continues to post positive growth rates.<sup>17</sup> However, there remains some resistance to energy drinks among consumers who are concerned about the ingredients they contain. For example, 41% of Spanish adults say they would drink more sports and energy drinks if they contained fewer artificial ingredients.<sup>18</sup>

Brands are already making use of additional nutrients, with 52% of global energy drink launches in 2020 featuring added vitamin/mineral claims.<sup>19</sup> There are also many plant-based ingredients that make the perfect addition to energy drinks with a natural positioning. They include natural caffeine from yerba mate, green tea, green coffee, guarana and ginseng.



## Fortified waters

While the global bottled water market has been struggling for growth, the fortified water trend is on the rise. In Asia, for example, 16% of bottled water launches featured vitamin/mineral fortification claims in the year up to May 2021 – up from 11% in the previous 12 months.<sup>20</sup> In the UK, four in ten consumers now say they would be interested in bottled water that supports the immune system.<sup>21</sup>

Flavoured waters are also making increased use of fortification. In 2020, 20% of flavoured water launches globally featured vitamin/mineral fortification claims while 17% featured functional claims – a record high share.<sup>22</sup> Worldwide, the most popular micronutrients across fortified water launches in 2020 were vitamin C (12.8%), B6 (11.2%), niacin (10.3%) and B12 (10%).<sup>23</sup>



## Protein-based sports drinks

The market for protein-based sports nutrition products is no longer restricted to bodybuilders and athletes. With nearly half (45%) of shoppers worldwide saying they monitor their protein intake on a daily basis<sup>24</sup>, these products now appeal to a much broader range of health-conscious consumers.

Demand for natural, plant-based sports nutrition products is rising, too, and the number of plant-based protein RTD launches globally increased by 92% from 2017 to 2019.<sup>25,26</sup> FMCG Gurus research has even found that more active nutrition consumers consider plant protein (57%) to be more appealing than whey protein (55%). Plant-based protein sources that can be used in beverages include:

- **Soy:** Soy is the most commonly used vegan protein source and is commonly used in nutritional beverages
- **Pea:** A natural high protein source, rich in amino acids, pea protein is widely used in beverages and nutrition products
- **Oats:** Easily digestible with a desirable mouthfeel, oats have been clinically shown to reduce the risk of heart disease by lowering cholesterol
- **Lentils:** Rich in amino acids, polyphenols and antioxidants, lentils have various health benefits including a lowered risk of high cholesterol, diabetes, cancer and cardiovascular disease
- **Flax:** Ideal for beverage formulations, flax is a good source of omega-3 fats with healthy-heart benefits
- **Sunflower Seeds:** Versatile and suitable for use in a wide variety of product formulations, sunflower seeds' health benefits include antioxidant and anti-inflammatory properties as well as providing a good source of minerals and amino acids



## Keto drinks

The keto trend is growing in popularity, with many consumers adopting the diet during the pandemic as a way to maintain a healthy weight and stay fit and healthy. Combining plant-based and keto-friendly credentials can boost products such as meal replacement shakes. Nevertheless, while keto represents an excellent opportunity for plant-based nutrition companies, it remains outside of the mainstream. As such, it makes sense not to market beverages with an overtly keto position. Instead, adopt a keto-friendly approach, highlighting the factors that will resonate with keto adherents, without putting off other consumers.

Prinova offers a range of value-added capabilities for plant-based products, including full product development support for plant-based beverages





## Powerful plant-based ingredients

Functional botanicals and superfoods are natural and authentic plant-based ingredients that can significantly boost beverages' appeal. The most exciting ingredients in this space include:



### Ginseng

Ginseng is one of the most popular medicinal herbs with energy-boosting effects. This extract may help stimulate physical and mental activity and reduce stress. It can also lower blood sugar and cholesterol levels.



### Turmeric

The golden-hued rhizomes of the turmeric plant have been revered for thousands of years not just in culinary dishes but in natural remedies as well. The unique chemical compounds of turmeric — known as “curcuminoids” — have the ability to support health and wellness, including antioxidant and anti-inflammatory properties.



### Green Tea

Green tea has been consumed for centuries for its numerous health benefits. It naturally contains caffeine and polyphenols that act as powerful antioxidants. Catechins make up most of the solid part of the green tea leaf and these are the plant-based nutrient and specific type of flavonoid (from polyphenols) that are said to provide the most health benefits.



### Green Coffee

Green coffee bean extract is taken from unroasted coffee beans, whose primary active compound is chlorogenic acid – a powerful antioxidant and anti-inflammatory. Since the product contains caffeine, it is used as an energy booster and appears to be beneficial for weight loss.



### Yerba Mate

Sourced from the dried leaves and twigs of the *Ilex Paraguariensis* plant, yerba mate is used to make a traditional South American beverage that is said to have the strength of coffee, the health benefits of tea, and the joy of chocolate.<sup>27,28</sup> It is also widely used in supplements and, due to its caffeine content, it can help increase mental focus and energy levels.



### Guarana

Guarana, also known as *Paullinia cupana*, is a plant native to South America. Guarana extract contains caffeine, which stimulates the central nervous system, heart and muscles, and is mainly used as energy booster and weight management.



### Rhodiola Rosea

*Rhodiola rosea* is a herb that grows in cold regions of Europe and Asia. Traditionally used for its anti-fatigue properties and as an adaptogen compound, it may help relieve stress and anxiety. The health benefits may be linked to its anti-inflammatory properties.



### Ashwagandha

Ashwagandha is one of the most ancient herbs in Ayurvedic medicine. It is mainly used for stress relief, enhancing concentration and increasing energy levels. Its content of withanolides may also help in treating anxiety and depression.



### Berry Extracts

A variety of superfood berries can provide functional benefits. Acerola, for example, is a cherry that is high in vitamin C. The extract powder is mostly used as a supplement to prevent vitamin C deficiency, but it can also help to support the immune and digestive systems. Acai berries are commonly used to support the immune system as they are rich in antioxidants. Studies have shown that acai may enhance memory and reduce risk of heart attack. It can also be used as anti-aging in personal care to heal damage skin cells and revive skin. Goji berries, meanwhile, are packed with nutrients including vitamins A and D and iron.

Prinova is one of the world's leading suppliers of **botanical and superfood extracts**, offering a vast array of functional ingredients for different health claims

# Big opportunities for micronutrients

Vitamins and minerals are an important aspect of many plant-based drinks, whether providing a replacement for the micronutrients present in animal products or delivering additional functional benefits. Some of the most popular micronutrients for plant-based beverages include:

## Vitamin B6:

Commonly included within energy drinks, B6 is a water-soluble vitamin. It is used by the body to break down and release energy from food and keep the nervous system healthy.

## Vitamin B12:

B12 is absent from virtually all plant-based foods. It is important for the brain and nerves, and for the production of red blood cells.

## Vitamin D:

Vitamin D is the world's hottest micronutrient due to growing knowledge and awareness of how important it is for wellbeing and its association with immune health. Further benefits include promoting cardiovascular health, boosting mood and providing weight-loss support.

## Calcium:

Calcium is required to maintain strong bones and teeth as well as supporting bodily functions including muscle movement. As dairy products provide the main source of calcium for many number of consumers, it is an important addition to plant-based alternatives.

## Folic Acid:

Folic acid is a water-soluble B vitamin. It is used by the body to form red blood cells and reduce the risk of central neural tube defects.

## Pantothenic Acid:

Also known as vitamin B5 or calcium pantothenate, pantothenic acid is one of the most crucial B vitamins for humans. It is necessary for making blood cells and helps convert food into energy.



Prinova offers an extensive range of *vitamins and minerals* with vegan-friendly options.








# Prinova: Bringing you the best branded ingredients

Prinova’s branded ingredients can help plant-based beverage brands stay ahead of consumer trends.

Here is a selection of some of the most exciting branded ingredients on offer for plant-based beverages:



	<p>Aquamin™ is a marine multi-mineral complex product range, providing highly bioactive minerals such as calcium, magnesium and 72 other trace marine minerals. The Aquamin product range is natural, plant-based and clean label, backed by 15 years of scientific research.</p>
	<p>Clean Cream® is a clean-label, highly soluble, plant-based vegan cream powder that adds a natural, rich taste and creamy texture to applications including protein and meal replacement shakes. Clean Cream® contains monounsaturated fatty acids, such as high oleic sunflower oil, that may help protect your heart by maintaining levels of good HDL cholesterol. Clean Cream® improves off notes, such as gritty or earthy plant proteins, and offers a dairy-like taste and fatty mouth feel.</p>
	<p>This low-glycaemic starch carbohydrate is derived from pea starch and has little effect on blood sugar or insulin. Its prebiotic properties contribute to a healthy gut microbiome, while low osmolality enables it to speed through the stomach to reduce bloating. With minor shaking, Carb10® dissolves in water, making it easy to incorporate into edible products.</p>
	<p>This suite of low-carb fat powders can promote a full feeling and help maintain blood sugar in already healthy ranges. goFAT® powders include conjugated linoleic acid, coconut, and olive oil and improve the taste, texture and functions of applications including shakes, coffees and keto products.</p>
	<p>goMCT® fuels the body with healthy fats that enhance ketone production, supporting alertness, awareness and focus. It also contains acacia fibre, a prebiotic that aids in gut health. goMCT® helps with weight management, increased energy and overall wellbeing.</p>

Prinova's *innovative branded ingredients* offer excellent value and can give you the edge in NPД

# Prinova: Creative concepts for brilliant beverages

In addition to Prinova's vast selection of ingredients, we can deliver bespoke premixes to bring the best out of your beverages. Here, we showcase a range of innovative plant-based concepts across different beverage formats:

## Energize Juice

A plant-based blend of five fruit juices, purees and extracts with added magnesium and vitamins.



- Aquamin™ Magnesium from pure Irish sea water
- B vitamins and magnesium contribute to a reduction in tiredness
- Added ginseng and ginger for energy and stamina

### Nutritional info per 150ml serving

Energy KJ / Kcal	281kJ / 66Kcal
Protein (g)	0.2
Carbohydrates (g)	16
Of which sugars (g)	13
Fats (g)	0
Of which saturates (g)	0
Salt (g)	0
Magnesium	56mg (15% NRV)
Thiamin B1 (Thiamin)	0.42mg (38% NRV)
Riboflavin B2 (Riboflavin)	0.48mg (34% NRV)
Vitamin B6	0.6mg (43% NRV)

**Ingredients:** Fruit Juices and Purees (94%) [Apple Juice (62%), Orange Juice (15%), Carrot (5%), Banana Puree (12%)], Lemon Juice, Aquamin™ (a Natural Magnesium Source [Magnesium Citrate]), Ginseng Root Extract, Ginger Root Extract, Vitamins (B1, B2, B6)

## Plant Based Milk

A **soya** drink that is easy to digest and contains vitamins lacking in plant-based diets.



- Aquamin™ is a plant-sourced natural calcium source from Lithothamnion seaweed
- Vitamins B2, B12 and D3
- Low in sugars and free from dairy and gluten

### Nutritional info per 100ml

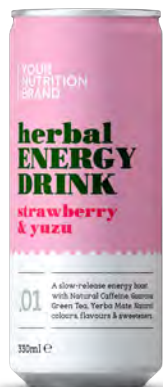
Energy KJ / Kcal	177kJ / 42Kcal
Protein (g)	3.3
Carbohydrates (g)	2.7
Of which sugars (g)	2.5
Fats (g)	1.9
Of which saturates (g)	0.3
Salt (g)	0.10
Vegan D3	0.75 µg
Riboflavin (B2)	0.21 mg
B12	0.38 µg
Calcium	120 mg*

**Ingredients:** Water, Hulled SOYA beans (8.7%), Acidity regulators (Monopotassiumphosphate, Dipotassium phosphate), Aquamin™ a Natural Calcium Source (Calcium Citrate), Sea salt, Stabiliser (Gellan Gum), Vitamins B2, B12, D3.

\*A 250ml glass would provide the same amount of calcium as a glass of dairy milk (293mg)

## Herbal Energy Drink

A strawberry and yuzu-flavoured energy drink containing plant-based ingredients including yerba mate.



- 100mg of natural caffeine per can
- Mixture of extracts including trending yerba mate
- Primary natural caffeine coming from green coffee extract

### Nutritional info per 330ml can

Energy KJ / Kcal	200kJ / 48Kcal
Protein (g)	0
Carbohydrates (g)	10
Of which sugars (g)	9
Fats (g)	0
Of which saturates (g)	0
Salt (g)	0
Natural Caffeine	100mg

**Ingredients:** Purified Sparkling Water, Beet Sugar, Lemon Juice from Concentrate (4%), Herbal Extracts (Green Tea, Guarana, Green Coffee, Yerba Mate), Natural Flavourings.

## Immunity Shot

Concentrated 60ml juice shot with vitamin C and Saberry®.



- High in vitamin C for immunity claims
- Superfood berry extracts and juices provide renowned antioxidant protection
- Saberry® amla berry extract backed by clinical research

### Nutritional info per 60ml serving

Energy KJ / Kcal	113kJ / 27Kcal
Protein (g)	0.7
Carbohydrates (g)	6
Of which sugars (g)	4.5
Fats (g)	0
Of which saturates (g)	0
Salt (g)	0
Vitamin C	265mg
Saberry®	200mg

**Ingredients:** Apple juice, Acerola Cherry, Elderberry, Acai Berry, Saberry® (Amla Berry Extract), Ascorbic Acid.

\* Please note that specific nutrition and health claims are regulated and they need to be authorised for the relevant market





# Prinova Europe: Your ideal plant-based beverage partner

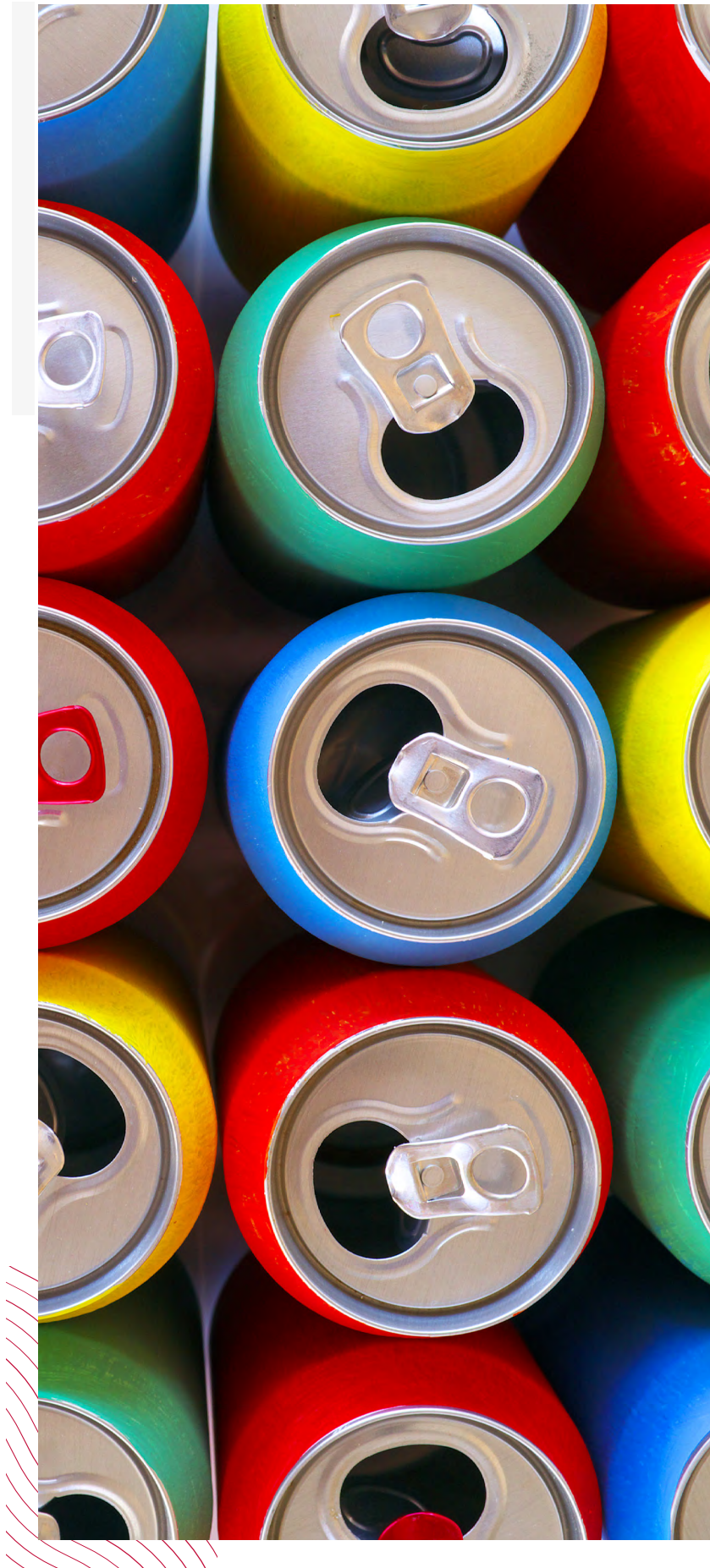
Prinova can deliver the cutting-edge ingredients and formulations you need to create a wide variety of on-trend plant-based beverages.

Leaning on our insight into the latest market and consumer trends, we can collaborate with you to create a unique concept that differentiates your brand. Our experts then turn your concept into a formulation, evaluating and refining your product until the desired sensory response is achieved.

Prinova offers a wealth of knowledge and experience in the plant-based sector – including 8% of the global market share of pea protein. We can provide vegan-friendly versions of many of our ingredients, including amino acids, proteins and hydrocolloids, in addition to our specialist premixes for the plant-based sector.

**Contact us now and discover how we can help you create market-leading plant-based beverages:**

[info@prinovaglobal.com](mailto:info@prinovaglobal.com)



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