KERRY

Tomorrow begins Today

Creating premium functional beverages
using insights and powerful ingredients

Contents

Introducing Innovation for Premium Functional Beverages

Consumers are increasingly turning to food and beverages for functional benefits, with 65% of consumers influenced by their health and wellness when choosing what to eat or drink.

Today's consumers still expect great taste, but also consider what value a beverage brings to their overall wellbeing.

The functional beverage space presents massive opportunity for growth and premiumisation of existing products to cater for consumer needs. It also provides opportunity for collaboration, as creators of beverages can enhance their products with supplements and offerings already on the market.

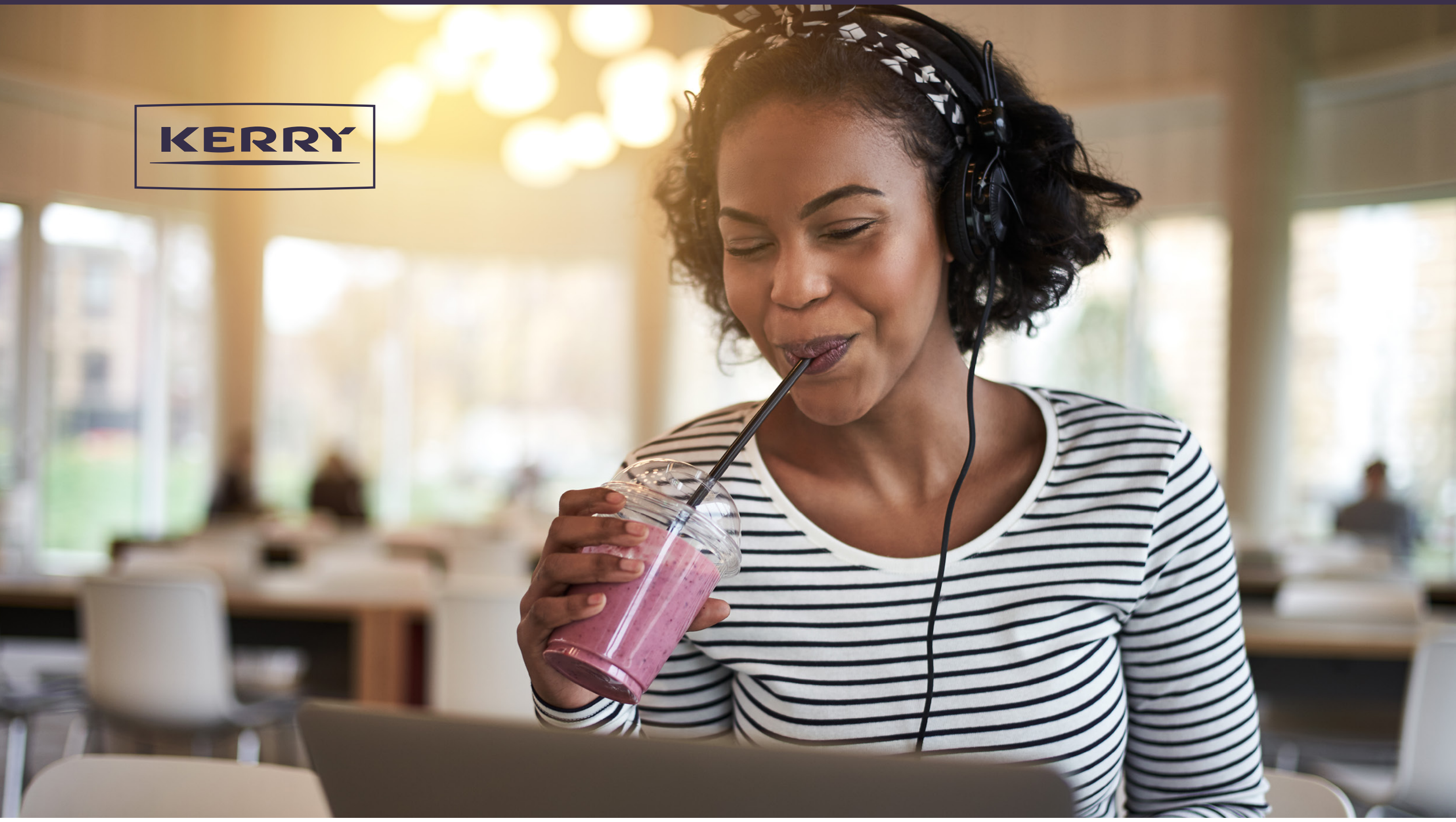
As beverages become associated with disease prevention and health management, the credibility of claims made in relation to health benefits will be increasingly important.

A gap exists between what consumers believe is the functional benefit versus the actual science. Now more than ever, it is important for brands to effectively communicate the advantages of products.

To stand out in a crowded marketplace, they will need to stay in tune with changing consumer needs and deliver innovation using powerful functional ingredients with proven scientific benefits.

This content has been sourced from a multitude of Kerry proprietary research and global sources.

This eBook outlines key market and consumer trends in this space, and the powerful ingredients and technologies that will help you to create winning premium products.



Functional Beverage Market on the Rise

Beverages such as Kombucha and fortified waters were non-existent on the marketplace up until a few years ago. Now, with consumer mindsets shifting to health and wellbeing, these products are appearing on retails shelves across the world.

Global product launches with functional claims grew by 19% between 2014 and 2018 as brands introduced more functional additive ingredients to meet rising consumer demand.

This market is broad and reaches almost all kind of beverages. Functional claims can be applied to waters, energy and sports drinks, juices, protein powder and RTD protein, dairy and dairy alternatives, and hot drinks such as tea and coffee.

These categories have seen growth in recent years, with demand only set to increase.

Enhanced Waters Value
↑ 10% CAGR 19-24

Protein RTDs Value
↑ 9.2% CAGR 19-24

Protein Powders Value
↑ 7.8% CAGR 19-24

Sports Drinks Value
↑ 5.7% CAGR 19-24

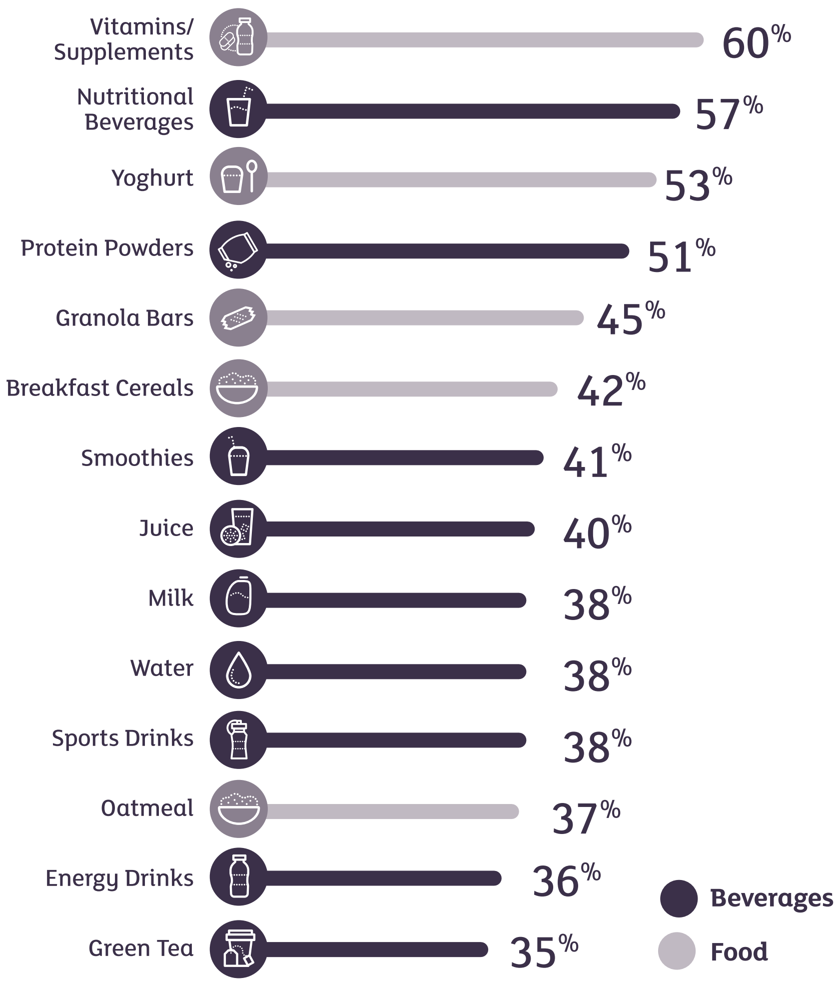
FF Juices Value
↑ 3.5% CAGR 19-24

Consumers are willing to pay a premium for drinks that include ingredients associated with health and wellness benefits. Functional beverages also offer brands and manufacturers the opportunity to innovate and add value to existing products.

These beverages were previously targeted towards a niche audience but are now widely available across multiples channels. Distribution channels for functional beverages include:

- Supermarkets and smaller retailers
- Gyms
- Health stores
- Foodservice
- Online

CATEGORIES CONSIDERED FOR ADDED FUNCTIONALITY



Functional coffee and tea may be the next growth category.

Learn more here.

Consumer Needs Driving Growth

Changing consumer needs are driving demand for functional beverages. From immunity to sustainability, a number of trends are contributing to the rise of premium functional beverages. While consumers are willing to pay more, they are also expecting more claims and benefits from their drinks.

There are key need states that consumers are interested in improving or addressing through the consumption of functional beverages. The following should be considered when creating a premium product.

Convenience

Functional beverages using protein are already popular amongst fitness enthusiasts. There is space for innovation in creating convenient performance nutrition beverage products for consumers on-the-go, who would like to consume products following exercise or playing sports.

Only 3% of performance nutrition beverage products in the last five years carried an "on-the-go" claim, while 13% called out "ease of use".

Energy levels

Functional beverages which claim to provide an energy boost are growing in popularity. The market for pre-work out blends is also growing, which provides a great opportunity for caffeinated sports beverages in a ready-to-drink or powder format. Meanwhile, non-coffee caffeinated applications can work across a number of categories, including sparkling water and blended juice.

Immunity

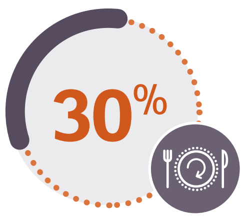
Immunity is surging ahead as a key claim in the European market, while a total of 68% of European consumers claiming they would like to consume food and beverages with immune health benefits at breakfast time. This presents an opportunity for outlets to create smoothies and snacks with functional claims.

Gut, digestive and heart health

1 in 4 people are following or interested in the gut health trend with many consumers taking probiotics and prebiotics. This is set to increase, with a 30% rise in Google searches related to the term 'gut health' in the last year alone.

Digestive health can be the next big functional crowd-pleaser, and brands can tap into this to create products consumers will pay more for.

30% of people cite improving gut health as a reason to change their diet.



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Heart health is another important reason why consumers turn to functional food and beverages, with 39% of consumers in Germany and 36% in France utilising products for this purpose.

Mental wellbeing and stress management

Ingredients such as Omega-3, iodine, caffeine and L-theanine are believed to have a positive impact on cognitive function. With 79% of consumers preferring to consume health enhancing ingredients through foods or beverages, there is an opportunity to incorporate these into functional drinks.

79%

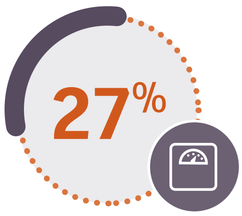
of consumers prefer to **consume health-enhancing ingredients through foods or beverages.**

Consumers are also keen to tackle their stress and anxiety levels through what they eat. Brands are responding by launching formulations which claim to offer relaxation using ingredients such CBD, chamomile and reishi.

Weight loss

They are also looking for smarter ways to indulge, seeking products that are healthy and yet tap into their treat mentality. It is important to keep sugar levels low in beverages with added functionality.

27% of consumers in Germany use functional food and beverages for **weight management.**



Cosmetic health

Launches of juice drinks which contain collagen have flourished in Europe. This ingredient is linked with improving the health of skin, hair and nails.

Flavonoids, linked with protecting the skin from damaging environments, are also widely found in cosmetic skincare products.

Sustainability

With sustainability coming to the fore, brands could begin to apply a 'waste-free' ethos. This can be done by creating reusable packaging and using misshapen fruits and vegetables that are commonly wasted.

TOP FIVE MOTIVATIONS FOR USING FUNCTIONAL FOOD & DRINK[8]

Sample Size	France 1045	Germany 1003	Italy 1212	Poland 1458	Spain 1431
IMMUNE SYSTEM	34%	52%	47%	47%	40%
ENERGY LEVELS	35%	40%	42%	48%	38%
DIGESTIVE HEALTH	34%	54%	39%	45%	45%
HEALTHY HEART	36%	39%	34%	39%	36%
BRAIN FUNCTION	30%	33%	29%	42%	24%

Innovating Across Beverage Categories

With consumer expectations always changing, manufacturers and brands need to be aware of new delivery formats for functional beverages. Here, we look at recent innovation in the sector.

Smoothies and juices

Consumers are already very familiar with juices and smoothies. However, health concerns may drive demand for these functional, health-halo beverages. Immunity supporting ingredients will drive growth, with recent launches including immune defence smoothies and juice shots. Seeds such as chia, flax and hemp can also add texture and perceived functional benefits to smoothies. Juices containing activated charcoal are also available on the market – these are associated with detox.

With high sugar content associated with these beverages, manufacturers will need to stress the benefits of their products, including sugar reduction and powerful ingredients linked to good health.

FLAVOUR TRENDS

Smoothies and juices

- **ORANGE**
- **LEMON**
- **CELERY**
- **WATERMELON**
- **BEET**
- **KALE**
- **SPINACH**

Functional waters

Functional water is a beverage that provides additional functions other than pure hydration. These products are targeted towards consumers interested in transparency and clean labelling, as well as improving their health.

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Digestive claims are most common in new product development, including kefir waters, but launches in this space range from waters with beauty benefits to detox drinks.

FLAVOUR TRENDS
Functional waters

- LEMON
- ORANGE
- RASPBERRY
- PEACH

Plant-based super drinks

Consumers who are interested in sustainability and their own personal health are moving towards plant-based products. These products will be clean label and offer nutritional benefits. Launches with innovative bases such as oat, pea, quinoa and hemp are becoming increasingly common here, while consumer interest in holistic health and superfoods can serve as a source of innovation.

FLAVOUR TRENDS
Plant-based super drinks

- CHOCOLATE
- VANILLA
- STRAWBERRY
- BANANA
- COCONUT
- MANGO
- PINEAPPLE

Energy drinks

The energy drinks market is growing across Europe, with consumers looking for products with natural functionality rather than high sugar and caffeinated formats we are accustomed to.

They are seeking products with no or low calories and sugar, with younger consumers interested in exciting flavour combinations.

FLAVOUR TRENDS
Energy drinks

- GRAPEFRUIT
- PINEAPPLE
- COFFEE
- CINNAMON
- AGAVE
- PEAR
- COCONUT

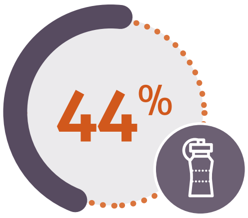
TOP CLAIMS IN BEVERAGE NPD INCLUDE:

- 51% CLEAN LABEL
- 24% REDUCED
- 38% FREE FROM
- 23% FUNCTIONAL
- 24% VEGETARIAN/ VEGAN

Addressing Taste and Texture Challenges

Health conscious consumers expect products to meet their nutritional needs while also providing a great taste experience. Unfortunately, the balance between taste and nutritional content can be a challenge for manufacturers of functional beverages.

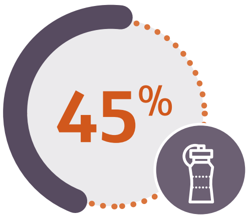
44% of UK sports nutrition users say that they **struggle to find products that taste nice.**



One of the key issues associated with making fortified products is that it often has a negative impact on taste, with texture and mouthfeel also playing an important role in enjoyment of a product.

Developing food and beverages with proteins, minerals, vitamins and natural or artificial sweeteners creates undesired off notes in the final product.

45% of French consumers agree that products labelled as 'high in protein' **do not taste as good as standard products.**



Taste is a top driver influencing consumer repurchasing behaviour. When looking for ways to improve taste and texture for the lifestyle user, the following should be considered.

- **Rebalancing** the overall flavour profile, as the characteristic tonalities can be challenged from the different ingredients.
- **Deliver clean sweetness** and mouthfeel of sugar without the addition of it in nutritionally optimised beverages.
- **Masking and reducing of off-notes** caused by proteins, minerals, vitamins and natural and artificial sweeteners.

Kerry Solution

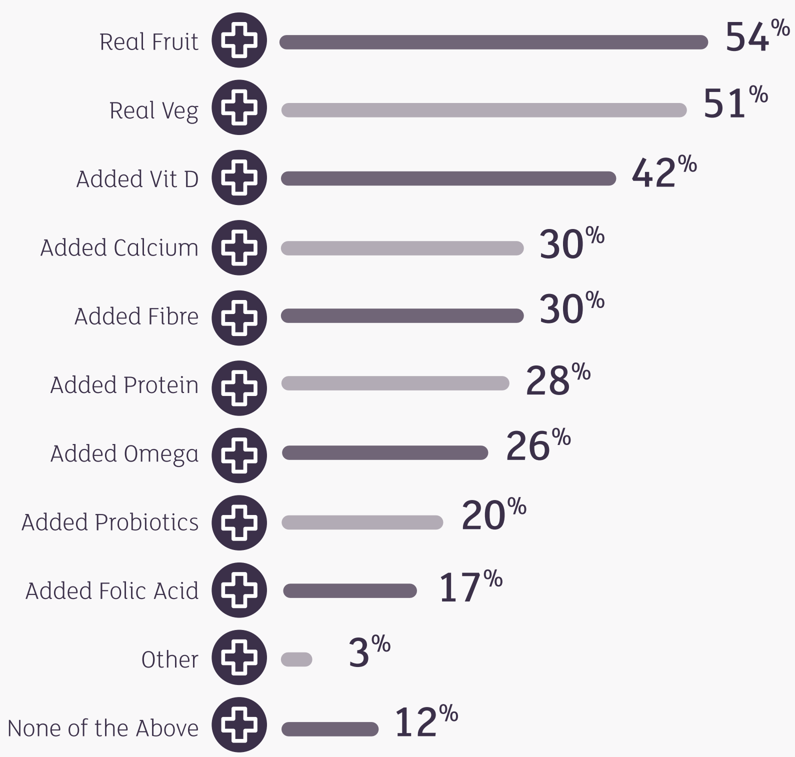
TasteSense™ technology helps create nutritionally optimised products with great taste.

Learn more here.

Nutritional beverage consumers are willing to pay more for naturally healthy products, with 32% of launches in the last three years including a 'natural' claim on packaging.

NATURAL FORTIFICATION

Ingredients sought in fortification of food & drink



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Expert Protein Solutions

In the past, functional beverages containing protein were viewed for just fitness enthusiasts. However, new consumer segments are emerging in this space.

These consumers, which include healthy agers, vegetarians and vegans, and millennial women, are interested in pursuing a healthy lifestyle but are not necessarily focused on performance goals. Beverage manufacturers are responding to consumer interest by adding protein to various products, including juices, waters, smoothies, coffees and more.

So how can new products stand out? Taste is key here, with 44% of UK sports nutrition users say that they struggle to find products that taste palatable. New consumers are also aware of the importance of clean label and sustainable products. There are opportunities in targeting new consumer groups, but companies will need to work harder to win market share across a number of need states to create premium and great tasting products.

CONSUMER NEED	CONSUMER TYPE	PRODUCT MIX
Performance Nutrition	Core Users	Sports protein powder; sports non-protein
Active Nutrition	Casual Users	Powders (whey or plant-based); bars; RTDs
Healthy Living	Lifestyle Users	Sports protein bars; sports protein RTDs

THE CHANGING ROLE OF PROTEIN

- MUSCLE GAIN
- WEIGHT LOSS
- DIETARY SUPPLEMENTATION
- ANTI-AGING
- HOLISTIC WELLBEING

Protein Beverage Trends
Learn more here.

COMPANIES NEED TO WORK HARDER TO GET MARKET SHARE

- FLAVOUR & MOUTHFEEL
- SUSTAINABILITY/ TRANSPARENCY
- PERFORMANCE (GUT HEALTH, IMMUNITY)
- PERSONALISED NUTRITION
- PLANT-BASED PROTEIN
- CONVENIENCE & NEW OCCASIONS
- NATURALNESS

Plant-based protein

A desire for healthier and more sustainable lifestyles is motivating consumers to seek plant-based options. In the 12 months to October 2019, 13% of total launches in performance nutrition featured a vegan or no animal ingredients claim, an increase of 7% since 2014.

However, some plant proteins are lacking in amino acids and can be harder to digest than animal protein. There is an opportunity for brands to boost the quality of the protein offered by creating products with complementary amino acids.

When choosing ingredient to optimise your plant-based products, it is also essential to consider the following:

- Taste
- Solubility
- Stability
- Process tolerance

Kerry Solutions

ProDiem™ Complete is a plant protein solution optimised for nutrition, taste and texture.

Learn more here.

ProDiem™ Refresh is an allergen-free clean label vegan protein. It offers a clean taste and light texture for use in waters, juices and energy drinks.

Learn more here.

Grass-fed protein

Dairy and protein products from grass-fed cows are in demand due to consumer concerns around traceability, sustainability and animal welfare.

Multiple scientific studies have confirmed increased nutritional value of milk produced by grass fed cows compared to that produced by grain fed cows.

Improved nutritional value of grass fed dairy

- Higher Conjugated Linoleic Acids [1,3]
- Higher levels of Vitamin E[2]
- Higher levels of Beta Carotene[2]
- Optimal ratio of omega-6 to omega-3 fatty acids2,3

Protein drinks in this guise come in the form of flavoured milk, with chocolate, vanilla, strawberry and banana, which are popular among consumers.

When developing protein product using grass-fed dairy, manufacturers need to consider the following claims sought by consumers.

- All natural/ 100% natural
- Non-GMO
- Organic
- No additives/ preservatives
- Made with real ingredients
- Sustainably produced

FLAVOURED MILK

€2.2bn 2018 Value	€130mn KG 2018 Volume
4.2% CAGR 18-23	1.9% CAGR 18-23

Kerry Solutions

Ultranor™ is an ultra-filtered, complete intact, spray-dried and non-GMO milk protein.

Learn more here.

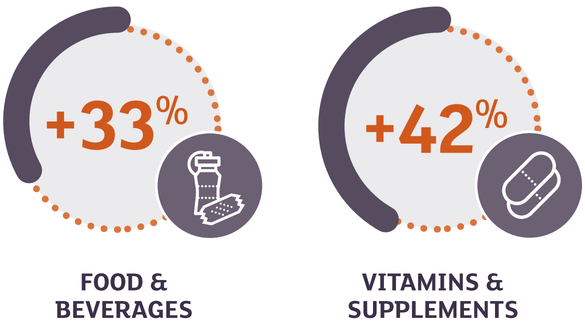
The Rise of Proactive Health and Immunity

Immunity support is the most desired health benefit that European consumers want from healthy lifestyle products. This is seen through a steady rise in food and beverage launches with immunity support claims, rising 12.9% in the year-to-date ending April 30, 2020 and up from 5.4% in the previous 12 months.

This was an important trend in the pre-Covid-19 world, and is expected to accelerate as consumers become even more health conscious.

Growth in products launched with **immune health claims** validates consumer demand.

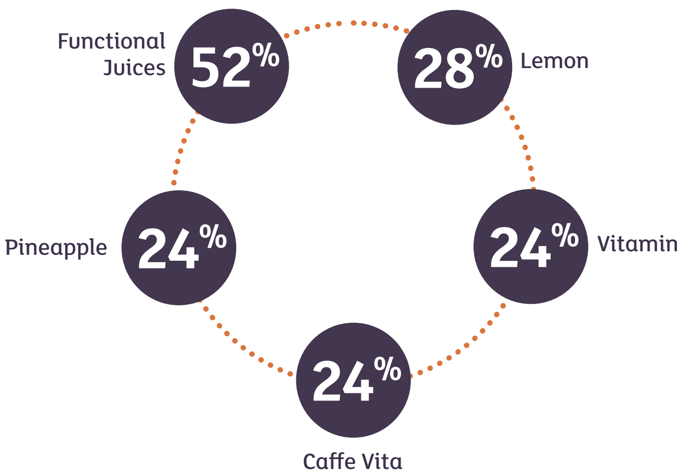
Growth 2014-2019



It can be difficult to stand out in a crowded marketplace, however opportunities to innovate do exist. Only 4% of beverage powder launches in Europe during the past five years carried immunity benefits, representing a gap to create premium beverages to fulfil this need state. Immune enhancing soft drinks are also an untapped market for brands to explore.

In the foodservice sector, operators can win by including beverages with immune benefits on their menu and give consumers another place to find functional beverages outside of retails shelves.

IMMUNE SUPPORT BENEFITS ARE MOST OFTEN PAIRED WITH THE FOLLOWING ON MENUS:



Kerry Solutions

Wellmune® is a natural yeast beta glucan for food, beverage and supplement products which is clinically proven to help strengthen the immune system.

Learn more here.

Creating a premium immunity supporting beverage

Our proprietary research has found that there are three key parts to a winning fortified beverage that supports immunity: the welcome mat, the halo and the hero.

- Welcome mat ingredients are ones that are familiar and will entice the consumer, such as strawberry or coffee.
- A halo ingredient is a trending ingredient which provides a perceived benefit to the immune system, such as lemon or ginger.
- The hero is an ingredient that is scientifically proven to support immunity such as Wellmune® or probiotics.

Did you know?

- Between 2015 and 2020, global food and drink launches with immune health claims saw a CAGR increase of 8.2%.
- 56% of European consumers have made changes to their diets and lifestyles in order to improve their immune system.
- 77% of global consumers are interested in products with Wellmune® and believe it is worth paying more for.

Immunity Smoothie

STRAWBERRY[1]
& SICILIAN LEMON[2]
+
WELLMUNE®[3]
AND
VITAMIN C

1 | The Welcome Mat
The ingredient that attracts the consumer

2 | The Halo
Trending ingredients with an associated benefit to the immune system

3 | The Hero
Ingredients scientifically proven to support immunity

Proactive health and immunity are rising in the foodservice sector.

Watch our webinar now.

Optimising Gut Health through Probiotics and Prebiotics

Digestive and gut health are commonly cited by consumers as one of the key reasons for using functional food and drink products. The digestive system can be supported by prebiotics and probiotics, which both have an important role to play in maintaining good gut health.

The demand for products which support digestive health is highest in the mid-morning and afternoon, presenting an opportunity for brands to create beverages such as smoothies to fulfil these needs.

Probiotics

Some probiotic strains, or cultures as they're often referred to in Europe due to strict regulations, have scientific evidence that shows they can improve gut health by fostering a balance between good and bad bacteria. Some also have immune benefits.

Europe is the second largest market for probiotic products, with 67% those who consume these products doing so maintain their gut health.

Europe is the second largest probiotic growth market in the world, despite current labelling regulations

67%

67% OF PROBIOTICS CONSUMERS TAKE THEM TO MAINTAIN A HEALTHY GUT

3.5%

THE MARKET IS EXPECTED TO GROW BY 3.5% CAGR THROUGH 2022

Probiotics are live microorganisms that can deliver a health benefit when consumed.

Prebiotics are a form of non-digestible fibre that feed good gut bacteria.

Kerry Solutions

GanedenBC^{30}® is a spore-forming, natural probiotic that can help provide the good bacteria needed to support digestive health and immunity.

Learn more here.

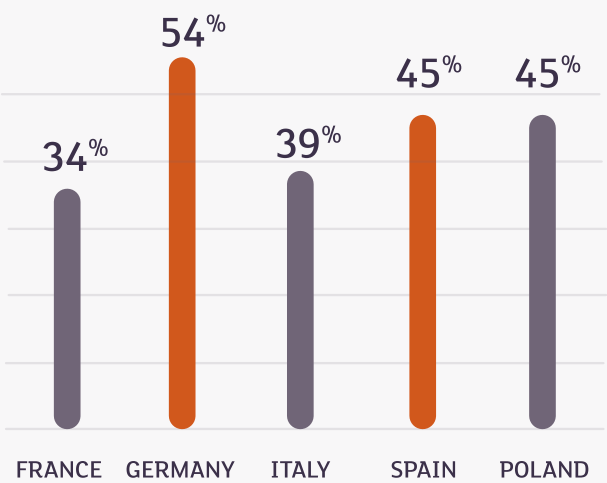
Prebiotics (Fibre)

Fibre is the largest nutrient deficiency in Europe, with 80% of people consuming less than the recommended amount of 30g per day.

47% of UK adults aged 65+ follow a fibre-rich diet; adults aged 65+ are more likely to follow a fibre-rich diet than younger adults

DIGESTIVE HEALTH DRIVES GROWTH OF FUNCTIONAL PRODUCTS

European consumers mention the improvement of their **digestive health** as one of the key reasons for using functional food and drink products



As a natural prebiotic, it has a role in supporting digestion and weight management, as well as preventing cardiovascular disease and cancers.

Key considerations when selecting ingredients for products using probiotics and prebiotics

Stability

- Prebiotics are food components and tend to be resilient. However, because probiotics are alive it's important to work with a strain which can sustain manufacturing processes.

Satiety

- It is important to select ingredients that will satisfy consumer needs. Consumers seek products which deliver a feeling of fullness and reduce hunger levels between meals.

Texture

- The perfect texture can be difficult to achieve in products containing prebiotics and probiotics. Manufacturers should opt for ingredients which carry mouthfeel and smoothness enhancement.

Shelf life

- Look for a product with a shelf-life of up to three years.

Kerry Solutions

Emugold™ Fibre - a natural, Non-GMO source of soluble dietary fibre obtained from the acacia tree.

Learn more here.

Sources

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Tomorrow begins Today

Get ready for tomorrow's world by leveraging our leading insight-led innovation and powerful functional ingredients.

Talk to your Kerry Account Manager or **contact us** today for more information.

Learn more at Kerry.com