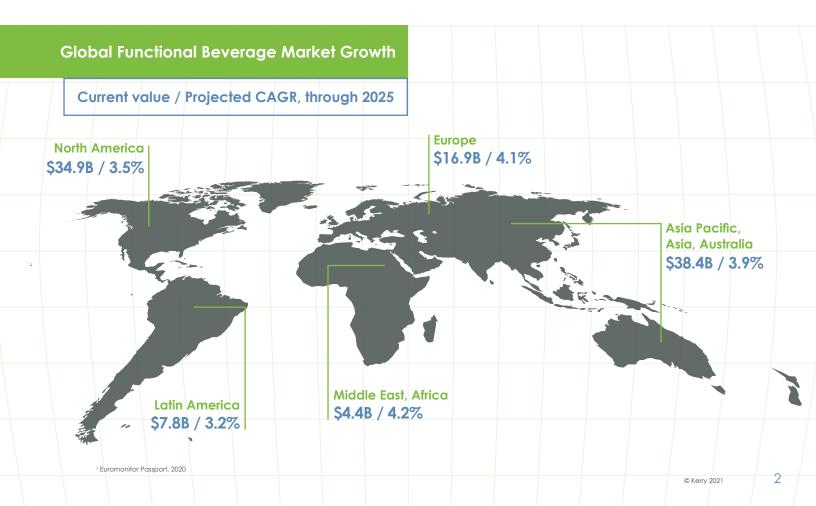
BEVERAGES FOR IMMUNE HEALTH

THE CHALLENGES FACING THE FUNCTIONAL BEVERAGE MARKET AND HOW TO SOLVE THEM



THE THIRST FOR FUNCTIONAL BEVERAGES

Across the world, there is growing thirst for immune health benefits in liquid form. **The global functional beverage market was worth \$102B in 2020**, and growth is predicted at a CAGR of 3.2% through 2025.1



While market sizes are steadily growing, several factors are driving expansion. One is the emergence of functional beverages that use science to meet regulatory requirements and achieve consumer appeal. Another is increasing consumer interest in, and familiarity with ingredients in the category that promote health benefits, including caffeine, ginseng and green tea.

And while there is increasing interest in wellness through nutrition generally, since the pandemic, there has been a surge of interest in the functional beverage category, particularly in some emerging formats.



In a sign of continued growth, the market for beverages with immune health benefits is expected to be valued at \$135B by 2025.³ While immune health benefits have catapulted to the top of the list of demands for functional ingredients, manufacturers face certain challenges. In the increasingly competitive functional beverage space, one of the questions facing manufacturers is how to stand out.

This white paper explains why scientific substantiation is key to product differentiation, especially in complex regulatory environments, and provides insights into:

- **the** *why* behind the emergence of new functional beverage categories
- new opportunities in categories such as bottled water and energy drinks
- current conditions in specific regions and end-use markets

• the opportunities presented by immune

health ingredients with scientifically substantiated benefits

 the support that immune health ingredient Wellmune[®] can offer – from product inception to delivery



As of late 2020

WHY ARE FUNCTIONAL BEVERAGE MARKETS GROWING?

One of the reasons functional beverage markets are growing is consumer interest in wellness—especially immunity—through nutrition generally. Cited as a top-10 trend for 2021,⁴ immune health looks to become a way of life for many consumers worldwide.

Prior to the pandemic, nearly two thirds (65%) of U.S. consumers reported that they sought added functional benefits from their everyday food and beverages.⁶ As well, worldwide, almost seven in ten (69%) consumers had purchased, or would consider purchasing, a fortified or functional food or beverage product.⁷



At the end of 2020, **as many as three-quarters of consumers** in some regions reported that they are interested in functional products that support immune health.⁸

⁴New Nutrition Business, November/December, 2021 ⁵FMCG GURUS: Top Ten Trends for 2021, December 2020 ⁴⁷Kerry, Global Consumer Survey, Digestive & Immune Health, 2019 ⁴FMCG GURUS: What's Next for Immune Health in 2021, January 2021

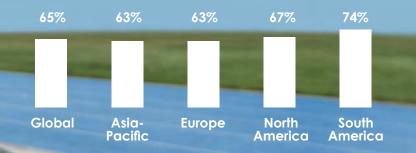


76% of global consumers report associating a poor immune system with being easily susceptible to long-term health problems.⁵



56% of global consumers note the effect of a poor immune system on dayto-day health problems.⁵

Proportion of consumers who say that they are likely to seek out products that support immune health⁸





FUNCTIONAL BEVERAGES PENETRATE NICHE MARKETS, CREATING NEW OPTIONS

Another reason for the growing demand for functional beverages may be the rejection of options thought to be less healthy. Recent regional studies have reported a sharp decline in alcohol consumption among young people, partly because they are concerned about its health risks.^{9,10} There is also evidence that many are turning away from sodas. In fact, some research shows that the youngest consumers are now the least likely to buy traditional soft beverages,¹¹ providing opportunities for manufacturers of refreshing beverages to innovate with functional ingredients to create the beverages consumers increasingly demand.

For those seeking beverages deemed "healthy", an explosion of innovation has expanded the options available, with a growing range of functional beverages springing up across various markets.



The best way for manufacturers across multiple functional beverage categories to create product differentiation in the increasingly crowded immune health space is the use of ingredients supported by research.

Oldham M, Callinan S, Whitaker V, Fairbrother H, Curtis P, Meier P, Livingston M, Holmes J. The decline in youth drinking in Englandis everyone drinking less? A quantile regression analysis. Addiction. 2020 Feb;115(2):230-238

¹⁰ University of Michigan Institute for Healthcare Policy and Innovation 'More young adults are abstaining from alcohol', October 12th, 2020

¹¹Ingredient Communications 'OK, Boomer: Survey highlights gulf between youngest and oldest consumers', 7 December 2020



Energy drinks go natural

In the energy drink space, manufacturers are responding to consumer demand for products with a gentler, more natural functionality than the high-sugar, high-caffeine options that traditionally predominate. They are increasingly formulating with whole food ingredients such as ginseng and gingko biloba, which offer perceived health benefits, and can lend credibility as well as a cleaner label.¹² **Immune health support is a natural fit to enhance the healthy benefits of beverages in this growing category.**



Refreshing new options

Immune health is among the top 4 growing functional claims in refreshing beverages, with over 400 launches of these products with immune health benefits in 2020.¹³ In this category are options like bottled waters, juices, fruit drinks and teas.



Bottled waters – benefits beyond hydration

Bottled waters are a key growth area as consumers look for healthier, fortified refreshment.¹⁴ As a result of significant new product development in this area, functional waters can now provide benefits far beyond hydration. The wealth of ingredients that aid health in beverages now includes protein, vitamins and minerals, electrolytes, fiber, probiotics, and beta glucans. Adding immune health support to the benefits these ingredients supply can help manufacturers offer beverages that meet multiple consumer demands.



Time to convert to a hybrid?

The boundaries between different beverage categories are starting to blur. Hybrid beverages, the result of a combination of two or more drink categories – like flavored waters or sparkling juices – are often seen as healthier alternatives to traditional products. For example, sparkling waters blended with fruit juice can be a reduced-calorie alternative to sodas, while nutrient-enhanced waters combine functionality with hydration.¹⁵

In the hybrid beverages category, immune health now ranks fourth in the list of top ten global health claims, with ample opportunity for market growth, reflecting consumers' level of interest in supporting their wellness.¹⁶

These beverages are capitalizing on the consumer demand for new and exciting options. Innovative manufacturers are also combining different colors, flavors and functional ingredients that provide benefits like immune health to create novel products.

¹² Kerry Digest 'Niche offerings and new flavours for functional beverages', 28 September 2020 ^{13,14} Innova Market Insight, 2020 ¹⁵ Innova Trends Insider, Hybrid Beverages, 2020 ¹⁶ Innova, 2020

WHAT'S HAPPENING IN **REGIONAL FUNCTIONAL BEVERAGE MARKETS?**



Global trends in functional beverage markets include:

- A strong focus on health claims, with many products offering multiple benefits¹⁷
- High interest in immune health - the number-one desired benefit consumers want from healthy lifestyle products¹⁸
- An often challenging regulatory environment

Formulation example

One category generating interest in this region is performance and nutritional beverages that support general wellness. These high levels of interest means there is demand to create beverages that add immune health support to the benefits already inherent in the drinks. For Goodness Shakes® Immunity Super Shot is a 60 ml shot containing Wellmune and other active ingredients like turmeric and ginger.



Across the world, consumers are looking for trusted sources of immune support that fit with their daily routines and help them achieve their health agals.

Here we explore some of the trends and regulatory challenges in regional markets, as well as solutions featuring Wellmune[®], Kerry's branded yeast beta glucan ingredient:

EUROPE

Supporting immune health is a primary concern in this region.

In a 2019 FMCG Gurus survey 87% of Italian respondents, 82% of those in Germany and 64% of those in France reported purchasing drinks with functional benefits.¹⁹ Wellness continues to resonate. with 64% of consumers in Germany. for example, saying improving immune health is a goal over the next twelve months.²⁰

In this region, scientific substantiation is a key driver in influencing consumer purchase decisions. For example, nearly a third of UK consumers who responded to a survey cited researching a product's benefits as a top reason to purchase a healthy lifestyle product.²¹

Overcoming regulatory challenges

Successful product innovation depends not just on the strength of the brand, but also the ability to achieve consumer trust in the science supporting it.²² Choosing a well-researched and well-documented branded immune health ingredient backed by clinical studies is key to communicating product safety and efficacy to consumers.



Formulation example: Sports nutrition brand Myprotein chose Wellmune, which was approved as a novel food in the EU in 2012. for its Myvitamins Defence Shots because of Wellmune's immune health benefits supported by science.

¹⁷ Innova New Products Database, 2019 18,21 Kerry Global Consumer Survey – Digestive and Immune Health, 2019

NORTH AMERICA

In the U.S., the fortified/functional beverages market is expected to grow at a CAGR of 5%, to reach 43.9 billion USD by 2025.²³

Continued growth means that consumers have more choices than ever. In this market, as in other regions, scientific substantiation is a key driver in influencing consumer purchase decisions. In fact, more than half (51%) of U.S. respondents to a recent survey said that they are encouraged to purchase a healthy lifestyle product after doing their own research on the product's ingredients and benefits.²⁴

Notable trends in the region's functional beverage sector include growing demand for products with functional ingredients like adaptogens, and those with "stackable benefits." For example, beverages that offer immune health alongside other benefits, such as energy, are resonating with consumers.

Overcoming regulatory challenges

While creating products that comply with regulatory requirements is paramount, building consumer trust is important to helping to differentiate products while meeting soaring demand. The wealth of scientific evidence for Wellmune's benefits, and its GRAS status can help establish consumer trust in immune health products.

This is particularly important when it comes to children's health. Naturally, parents want to be sure of the safety and benefits offered by functional products for kids.



Formulation example

One example of a product tapping into the demand for multiple benefits in liquid form is **Vital Proteins Vitality™ Immune Booster** which combines collagen and other ingredients with Wellmune for immune support in a liquid beverage enhancer.



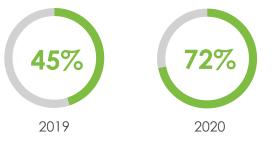


LATIN AMERICA

Consumers in Latin America are increasingly taking a proactive approach to their immune health.

Claims relating to immune health, energy, alertness and digestive health are the fastest growing in the beverage category in Latin America.²⁵ But the regulatory environment is complex, owing to differences in requirements for product labelling among countries.

The number of Latin American consumers saying they have made changes to their diets and lifestyles to improve their immunity has grown substantially in the past year. ²⁶



Overcoming regulatory challenges

The regulatory environment in Latin America is continuing to evolve. Providing clear evidence of the safety and efficacy of immune health ingredients can help manufacturers and consumers understand the ingredient's benefits.

Formulation example

In just one example of expanding formats in this region, manufacturers of dairy beverages are among those increasing the nutritional value of products with vitamins and minerals, fiber and other functional ingredients.

Piracanjuba® Immunoday

milk drink brings yeast beta glucans to a nutritious milk drink which also contains vitamins and fiber.



Asia-Pacific, Middle East and Africa

Functional beverage markets across the APMEA region are increasingly responding to need states related to day-to-day living, for example, fatigue, stress and anxiety. These challenges are closely associated with immune health, and dealing with them is critical to maintaining overall wellbeing. But key to helping consumers choose the products that meet their needs is choosing immune health ingredients with clear benefits.

This is one reason that the region is seeing strong growth in refreshing functional beverages like energy drinks, bottled waters and juices. In particular, demand for energy-boosting beverage options is fueling growth in Asia, with NPD in the region up by nearly 25% in 2020.²⁷

Overcoming regulatory challenges

Regulatory requirements in the APMEA region vary by country. In general, manufacturers should provide as much information as possible on packaging to foster consumer trust.

Kerry, the manufacturer of Wellmune, provides support to help meet regulatory requirements.



An example of a successful product in this region is Taokaenoi Food & Marketing, the Thailand-based manufacturer of **MyWhey Immunity Protein Beverage**.

"Kerry's expertise, reputation and help with samples and testing helped us develop a premium product with benefits supported by scientific research."

- Itthipat Peeradechapan Chief Executive, Taokaenoi Food & Marketing



Formulation example

A product helping to meet the demand for energy benefits with added immune support is **DaVinci Gourmet™ Boost**, which harnesses Wellmune to add immune health benefits to a variety of foodservice beverage applications in the Asia Pacific region.



STANDING OUT IN AN EXPANDING MARKET

A flurry of product launches is now taking place in a variety of functional beverage categories, a trend that has been intensified by the current health environment. Manufacturers need to stand out from the crowd, as well as build consumer trust– and research is central to achieving both these goals.

Product information is key

A recent survey found that half (49%) of global consumers want more information about the nutritional value of products,²⁸ while Kerry research has shown that many now make purchase decisions by looking for ingredients they recognize, or that are supported by scientific data.²⁹



In all regions, **at least half the consumers** Kerry surveyed were more likely to purchase a healthy lifestyle product after seeing the research/scientific data.³⁰

As consumer knowledge grows, this focus on evidence will only increase. However, while formulating with clinically supported ingredients is critical, it is only part of the story.

²⁸ FMCG Gurus 'Evaluating the uncertainty & future outlook of COVID-19', April 2020 ^{29,30} Kerry Global Consumer Survey, Digestive & Immune Health, 2019

> Success depends on the right support during all phases of product development, including navigating complex market environments.



SIMPLIFYING CHOICE FOR MANUFACTURERS AND CONSUMERS



Wellmune[®] is a branded yeast beta glucan that can be incorporated into a wide variety of beverage formats. Wellmune's flexibility makes it perfect for beverage applications, including RTDs, powdered sachets, dairy-based drinks, juices,

smoothies, enhanced waters and sports and energy drinks. Backed by more than a dozen clinical studies demonstrating safety and efficacy, it provides consumers with a clear point of reference when browsing shelves, delivering on transparency and building trust. **Wellmune's** scientific backing makes it easy for manufacturers to deliver on benefits, and helps consumers to choose a product that will meet their needs.

Kerry's technical knowledge and expertise in regulatory environments and manufacturing processes provide a foundation for innovative products across the world.

With Kerry's functional ingredients, **we solve complex challenges in partnership with customers**, supporting them throughout the product development cycle, and helping them navigate regulatory environments.

Learn more about our research into Wellmune's benefits, or find out how we can help you create successful functional beverages.

Email wellmune@kerry.com

This white paper is intended to provide scientific and educational information only and should not be considered medical advice. All claim language presented in this piece is reflective of what is considered appropriate for the US market; please contact us to learn of recommendations for other regions. It is recommended that brand manufacturers work with their legal counsel to confirm the appropriateness of claim language.

