



INSIGHTS REPORT

Plant-charged performance:

High in protein sports beverages that quench consumer's thirst for muscle building and recovery



Consumer passion for products that help build or maintain muscle mass continues to grow, as more consumers are embracing active lifestyles, a trend further fueled by the recent pandemic.

Sports nutrition is no longer the reserve of the elite athlete. More and more “weekend warriors” are placing greater emphasis on their nutritional intake before, during, and after exercise. They understand the need for a balanced intake of carbs, proteins, or a combination of both.

The trick is delivering on these demands without sacrificing sensory appeal, especially when formulating with plant proteins. After all, plant proteins can leave behind an aftertaste and impact texture. INFUSE by Cargill™ help to address these challenges, enabling brands to create high in protein, balanced sports powders that deliver on taste, texture and nutrition.



THE MARKET FOR SPORTS DRINKS

69%

PROTEIN is the top searched ingredient, with 69% of EMEA consumers reporting protein as a key ingredient of interest.

HealthFocus International, 2020

The COVID-19 pandemic has put an even bigger spotlight on the importance of health, with consumers actively looking for healthier foods and beverages. This increased focus on health has also manifested in exercise behavior, with many people taking up (new) sports to keep themselves in shape.

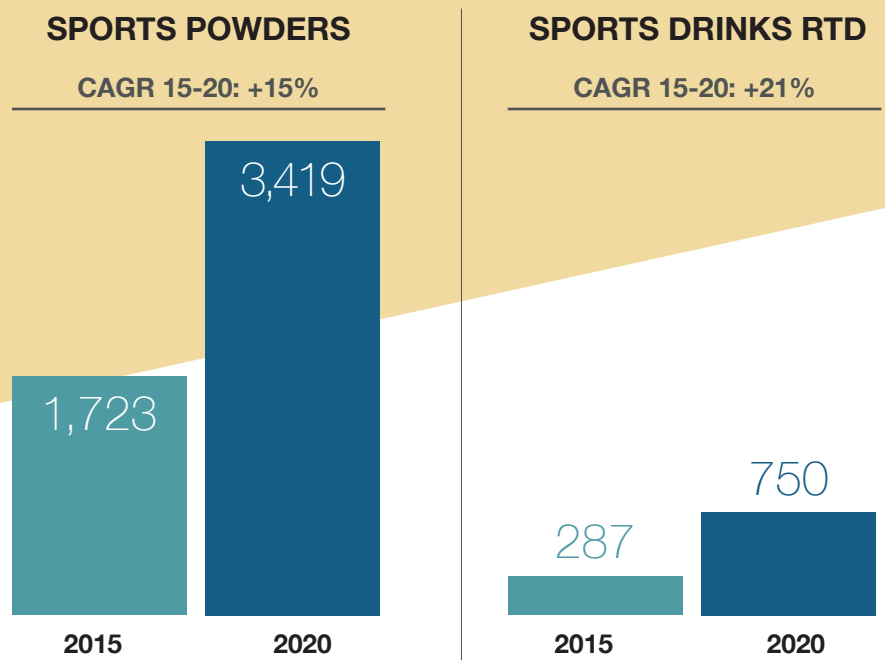
The ever-growing health trend has had a positive impact on the sports drinks category. In Europe alone, Euromonitor is forecasting the category to account for 1,012 million liters in 2021, showing a quick recovery from the pandemic volume dip. The market showed a slow growth between 2015 and 2020, with a CAGR of +1.3%. However, the outlook is predicted to be bright, with a CAGR (2020-2025) of +4.2%.

Those growth predictions align with broader industry-wide trends: Cargill's proprietary TrendTracker™ points to **'Seeking Goodness'** as a key trend. Consumers are seeking functional food and beverages, which for many means products that offer added benefits to their health and plant-based offerings.

Plant-based food and beverages also continue to grow with 36% of EU consumers showing interest, with top reasons being impact on long-term and daily health and prevention of disease (HealthFocus International, 2020). Although already popular in alternative drinks and meat alternative categories, sports nutrition is among the fastest growing categories for new product launches in Europe with a plant-based or vegan claim (Innova, 2020).

Sports nutrition launches are on fire

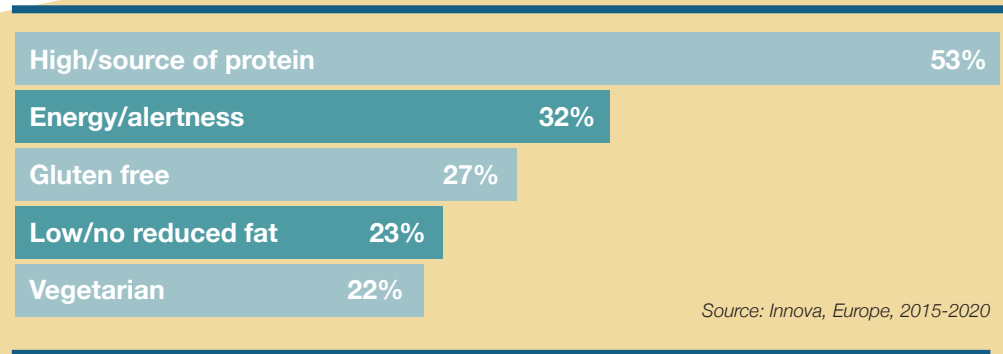
In 2020 alone, more than 6,000 new sports nutrition products were launched, compared to only 3,400 launches in 2015 (CAGR 2015-2020: +13%.) Although all sports nutrition categories have shown launch growth, sports beverages stand out from the pack.



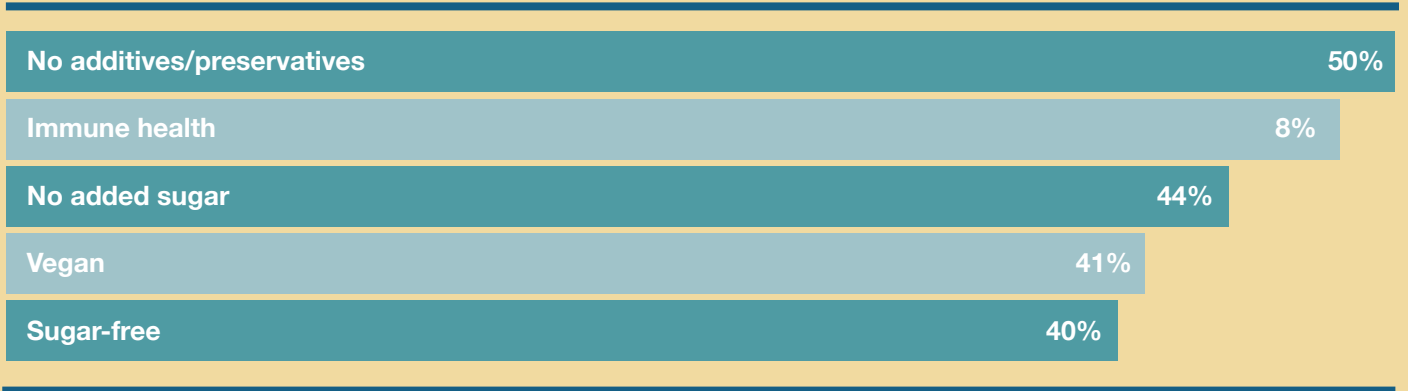
Source: Innova, Europe, 2015-2020

The inclusion of protein in beverages is also proliferating as consumers associate protein with a raft of (health) positives. Of all NPD in 2002, 47% of all sports powders, respectively 58% of all sports RTD contained proteins, and 53% of products making a claim on proteins.

Top claims across sports nutrition (2015-2021)



Highest growth in activity

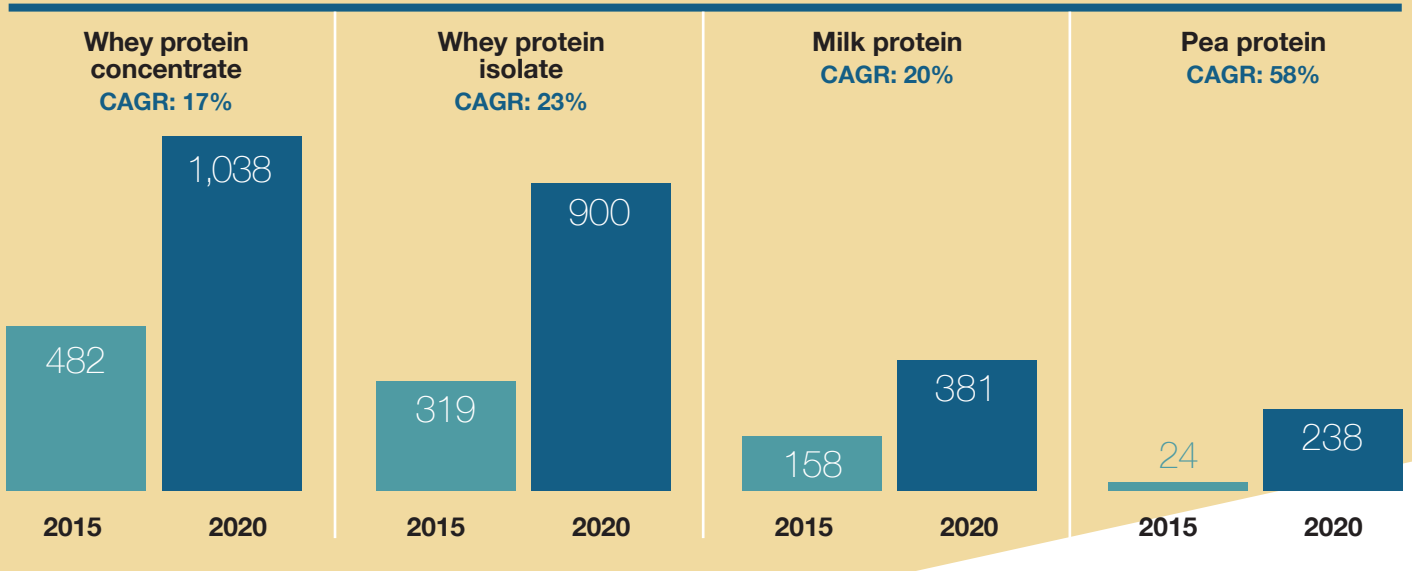


Source: Innova, Europe, 2015-2021YTD:

Plant-based proteins on the rise

The types of proteins are also evolving. Although whey protein remains the top used source of protein, it is not growing as quickly as others. Over the past 5 years, whey protein showed a growth of ‘only’ +18% (CAGR 2015-2020), milk protein +20% and pea protein a whopping +58%, as we see plant-based proteins making inroads into sports nutrition.

Sports drinks RTD, sport protein based RTD and sports powders



Source: Innova, Europe, 2015-2020

WHAT'S NEXT



Given the heightened focus on plant-based solutions, sports nutrition beverages are ripe for reformulation. They've become a real favorite both before or after exercising, but delivering tasty options with high plant protein content can be a challenge.

Typically, sports powders are using whey protein because of its many benefits. But replicating a whey protein fortified product with plant protein is easier said than done. As Beverage Application Specialist Wouter Van Beneden explains, there are both taste and quality challenges to consider when working with plant-based proteins. "Plant-based proteins can have an aftertaste which needs masking and can impact texture as well," he explains. "Additionally, plant-based proteins do not individually have the necessary amino acid profile to achieve a comparable quality to whey for muscle building," Wouter adds.

PLANT-CHARGED

MEET INFUSE by Cargill™

IN FUSE

by Cargill

Achieving consumers' organoleptic and mouthfeel expectations for nutritionally balanced and high in protein vegan sports powders can be a time-consuming challenge but INFUSE by Cargill™ can help.

We do the heavy lifting, combining our unique ingredient blends with effective formulation fine tuning. The resulting custom ingredient solutions help brands create high in protein, vegan and low in sugars sports powders that consumers can enjoy either for muscle growth or recovery purposes.

INFUSE by Cargill™ has created three ingredient blends optimized for use in plant-based sports powders. INFUSE has also proven recipes for other sports nutrition products such as gels, chews and bars.



SPOTLIGHT

IN FUSE by Cargill



INFUSE by Cargill™ is the new service offering model from Cargill Starches, Sweeteners & Texturizers Europe.

It brings together the company's extensive ingredient acumen to rapidly create tailor-made ingredient blends, helping customers speed up innovation and market launch.

Customers in Europe have been using Cargill's functional systems for more than 40 years to achieve custom texturizing ingredient blends. INFUSE by Cargill™ expands on that work, adding sweetness and other specialty ingredients such as proteins and fibers, to address a broader array of customer formulation challenges.

Three pillars serve as the foundation for Cargill's customer focus in Europe:



An unwavering attention to providing on-trend solutions.



A commitment to speed to market.



Access to deep technical expertise to help create tailored ingredient blends.



OUR SOLUTIONS



We leverage three plant-based ingredient blends, which can be used in varying quantities depending the training need.

- **Plant-based protein blend:** Trilisse® MM 100 — a blend of pea protein hydrolysate and rice protein, selected for optimal protein quality. It is designed for products to be consumed before resistance training or as part of a carbohydrate recovery drink
- **Sweetening blend:** Trilisse® QSR 900 — a blend of steviol glycosides from stevia and sucralose designed to deliver a well-balanced sweetness profile without adding to the calorie level
- **Texturizing blend:** Lygomme® KCT 58 — a blend of xanthan and guar gum designed to improve mouthfeel and reduce sedimentation



“The blend of pea and rice protein is an excellent combination that delivers an amino acid content that is closely comparable to whey protein in quality.”

Julie De Vel, Senior Associate Application Specialist

SOLUTION 1: MUSCLE BUILDING



- **High protein:** Over 20% of the calorie level is provided by the proteins
- **Plant-based solution:** 26g of proteins per serving thanks to a unique combination of pea and rice proteins
- **Great taste and texture:** Indulgent chocolate flavor and no graininess

Recipe & Nutritionals: Muscle Building

Ingredients (in %)	Powder preparation
TRILISSE® MM 100	81.71
Cargill Cocoa powder DP70W3	16.67
Natural flavors	0.95
LYGOMME® KCT 58	0.43
TRILISSE® QSR 900	0.24

	Per 100g	Per serving*
Energy (kcal/100g)	391	152
Fats	9	4
<i>of which saturated</i>	3	1
Carbohydrates	3	1
<i>of which sugars</i>	1	0
Dietary fibers	0	0
Proteins	68	26
Salt (mg)	0	0

*Per 38.85g of powder



SOLUTION 2: MUSCLE RECOVERY



- **High protein:** Over 20% of the calorie level is provided by the proteins
- **Balanced nutritional profile:** Low in sugars, with 21g of readily available carbohydrates per serving
- **Plant-based solution:** 20g of proteins per serving thanks to a unique combination of pea and rice proteins
- **Great taste and texture:** Indulgent chocolate flavor and no graininess

Recipe & Nutritionals: Muscle Recovery

Ingredients (in %)	Powder preparation
TRILISSE® MM 100	50.12
C☆Dry® MD 01958 maltodextrin	34.98
Fructose	7.77
Cargill Cocoa powder DP70W3	4.86
Natural flavors	1.07
LYGOMME® KCT 58	0.97
TRILISSE® QSR 900	0.12

	Per 100g	Per serving*
Energy (kcal/100g)	389	194
Fats	4.9	2.4
<i>of which saturated</i>	1.2	0.6
Carbohydrates	43	21
<i>of which sugars</i>	9.5	4.7
Dietary fibers	0	0
Proteins	41	20
Salt (mg)	2.1	1

*Per 50g of powder



C☆DRY® MD 01958 MALTODEXTRIN



Functional

- Low sweetness (low in DP1+DP2)
- Highly and rapidly digestible
- High glycemic index between 85-105



Smooth

- Contributes to the smoothness and the viscosity of the drink thanks to its low DE <10



Sustainable

- Produced from sustainably sourced waxy corn

IN FUSE

by Cargill™



Let's discuss how INFUSE by Cargill™ can enable the success of your next entry in the in the sports nutrition space, with protein-rich and sugar-reduced products designed for plant-charged performance.

Time to get INFUSED

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