#### Nutritional protein beverages Let's capture consumers' love at first-taste



# A protein-rich diet isn't just for body-builders anymore

Protein beverages were once targeted at athletes seeking enhanced performance. Now mainstream consumers are increasingly aware of protein's superior nutritional value and its positive effect on health. This awareness drives an incredible demand of nutritional drinks thus creating opportunities for plant and dairy proteins.

Dairy and plant proteins both offer unique benefits to consumers. Dairy protein casein provides sustained nutrition and energy for pre-exercise while dairy protein, whey, helps with muscle recovery for post-exercise. Plant proteins can deliver similar nutritional benefits as dairy proteins, and additionally, they also provide sustainability advantages.



# What motivates consumers to use protein drinks?

Muscle maintenance

Health

Meal replacement

Nutrition

Active lifestyle

Energy

#### \$13.7B

Global Plant Protein market to grow at 8% CAGR to \$13.7B by 2021

Source: Technavio

#### \$19B

Global Sports Protein market to grow at 7% CAGR to \$19 B by 2022

Source: Euromonitor

#### 1/4 consumers

¹/₄ of US consumers think plant proteins are as effective as dairy proteins

Source: Mintel

#### ⅓ consumers

<sup>1</sup>/₃ of UK consumers had a high protein product in 2017 Source: Mintel

## What do consumers say about protein drinks?

Taste, texture and variety are key factors in the minds of consumers of high protein drinks. Givaudan is right there with you to meet consumers' needs as your innovation partner of choice. Our renowned consumer insights allow us to uncover white space opportunities. Our foundational knowledge of protein and a well connected operational network helps us speed up your innovative product design.

#### Key challenges

#### Taste and texture

"I just tolerate taste and texture of high protein beverages for the functional benefits they offer"

- Health conscious consumer

#### Variety

"Protein shakes offer very few flavours and it's getting boring"

"I wish protein drinks were available in refreshing formats"

– Lifestyle consumer

#### **Faster launch**

"I would like to go to market quickly and like to simplify my process"

- Time conscious customer

### Our solution

Getting first-time consumers to a second purchase through superior palatability is key. Learn about our mission to develop best-in-class protein solutions.



#### Taste and mouthfeel

- Maskers to reduce off-tastes, astringency and bitterness
- Mouthfeel solutions to modulate protein dryness and chalkiness
- Taste solutions for sweetness quality and challenges of high-intensity sweeteners
- Dairy-free flavours for plant protein drinks



#### **Flavour**

 Selection of flavours for enjoyment and inspiration



#### Consumer preferred concepts

- Concept development from shakes to hydration
- Blends of flavour, protein, and other ingredients to simplify product development

# Knowledge leads to great taste

The range and availability of alternative proteins continues to grow and so do the taste challenges that come along with them.

We recently completed an extensive study to understand everything about seven important proteins, their taste attributes and challenges: soy, pea, oat, faba, rice, algae and whey – individually, sourced by numerous suppliers with different isolation processes, and in various combinations. Using our expert sensory panels and language we tested protein off-note descriptors against dozens of flavouring ingredients then developed a system of maskers that allows us to address any taste challenge posed by any of these proteins particularly in high-protein, pH neutral nutritional powders, smoothies, and RTD shakes.

#### What we did

- Profiled the most commonly used, globally relevant proteins from numerous suppliers to identify specific sensory characteristics
- Sensory panel evaluation for deep understanding of masker performance against benchmarks
- Extensively tested protein off-note descriptors against dozens of taste and flavour ingredients from TasteSolutions® programme
- Conducted over 2,000 tasting evaluations for a broad, targeted selection of masking ingredients

#### The result

- Ability to address protein flavour challenges across all sensory descriptors such as aromatic, taste and mouthfeel sensations for improved palatability
- Consumer-friendly labels: Natural, non-GMO, allergen free, palm free, and vegan













### Whatever your challenge with protein, we have the solution

For more information, please contact us: global.protein\_solutions@givaudan.com

