

2020

WEBINAR SERIES

CLEAR PROTEIN BEVERAGES: TRENDS AND FORMULATION SOLUTIONS

PRESENTERS

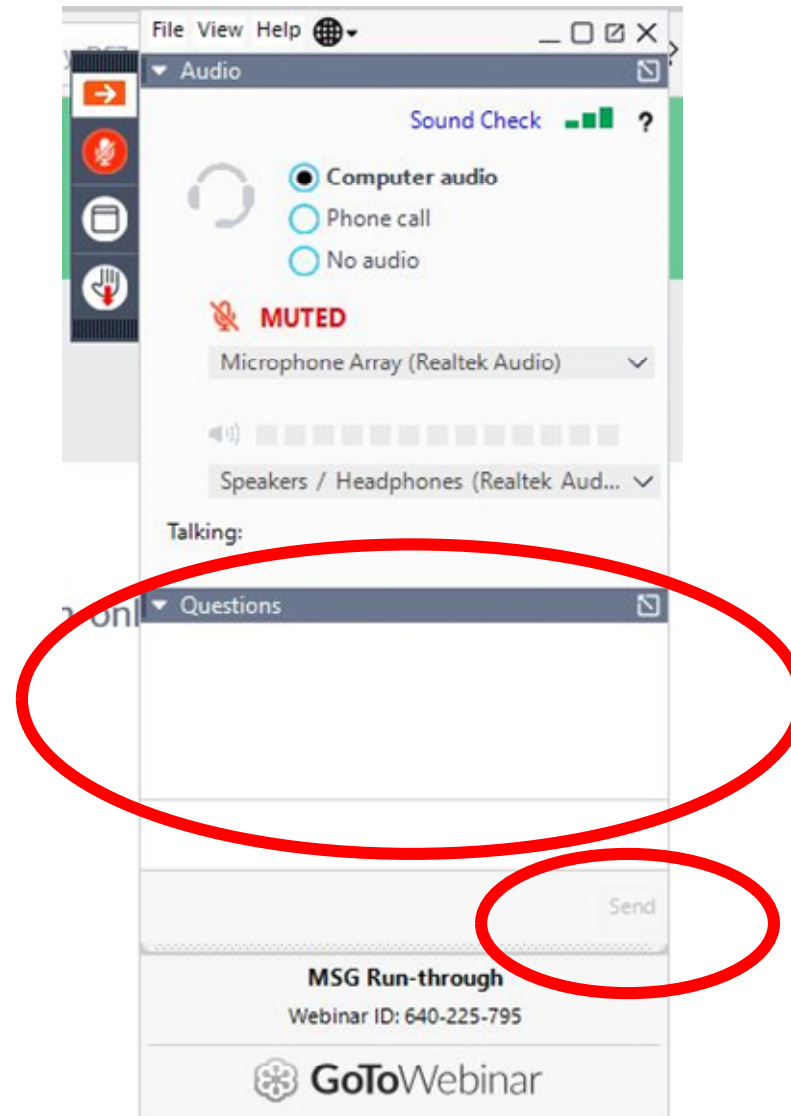


Merris Greiber
Marketing Lead



Suvash Kafley
VP Research & Development

LIVE QUESTIONS & ANSWERS



Type your questions in the “questions” text box and send.

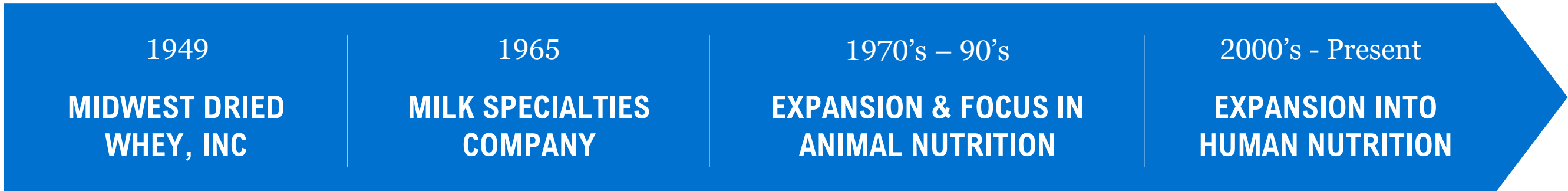
All questions will be answered live, not in a written response.



MILK SPECIALTIES

GLOBAL

A LEADER IN DAIRY PROTEIN PRODUCTION



HUMAN NUTRITION

- Sports Nutrition
- Food Manufacturing
- Health & Wellness



ANIMAL NUTRITION

- Dairy Animals



CO-MANUFACTURING

- Sports Nutrition
- Food Manufacturing
- Animal Nutrition



CORE HUMAN NUTRITION INGREDIENTS

WHEY PROTEIN

- **Whey Protein Concentrate 34%-80%**
 - Regular and Instant
- **Whey Protein Isolate 90%**
 - Regular and Instant
- **Whey Protein Hydrolysates**
 - DH 3-20
 - Regular and Instant
- **Heat Stable**
 - WPC 70 & 80

MILK PROTEIN

- **Milk Protein Concentrates 70%-80%**
 - Regular and Instant
- **Milk Protein Isolate 90%**
 - Regular and Instant
- **Calcium Caseinate**
 - Regular and Instant
- **Sodium Caseinate**
- **Casein**

BRANDED INGREDIENTS

PRObev™

BARsoft™

MultaPRO™

PROriz™

ZERLAC™

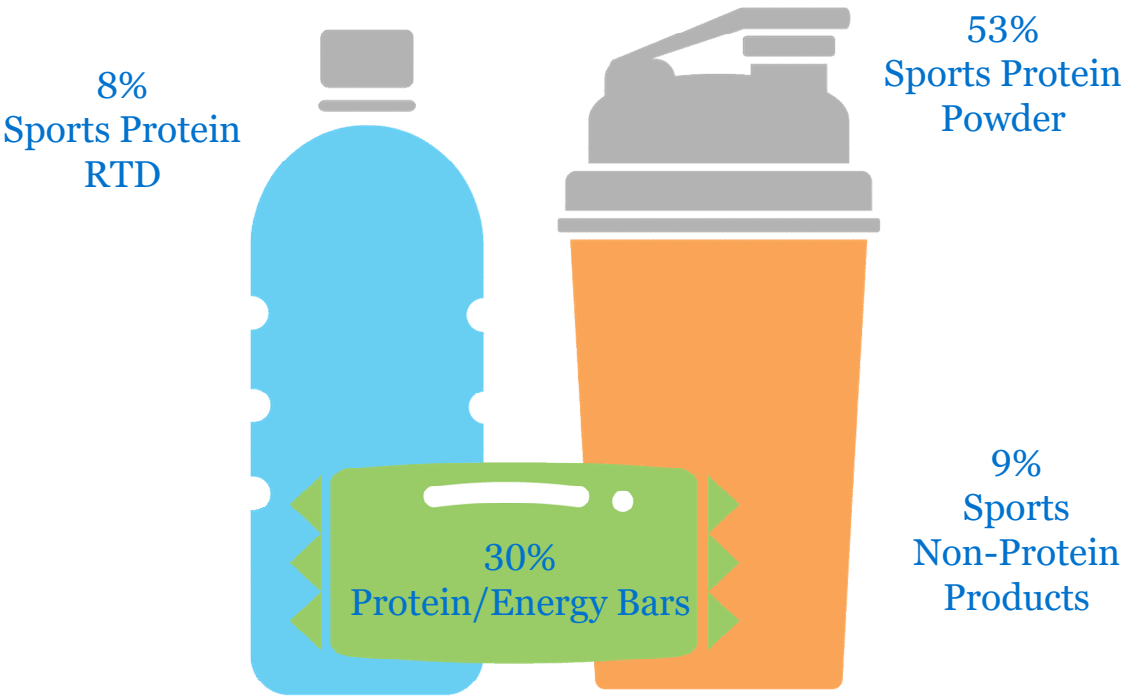
CASPRO™

MusclePep™

PROTEIN BEVERAGE TRENDS

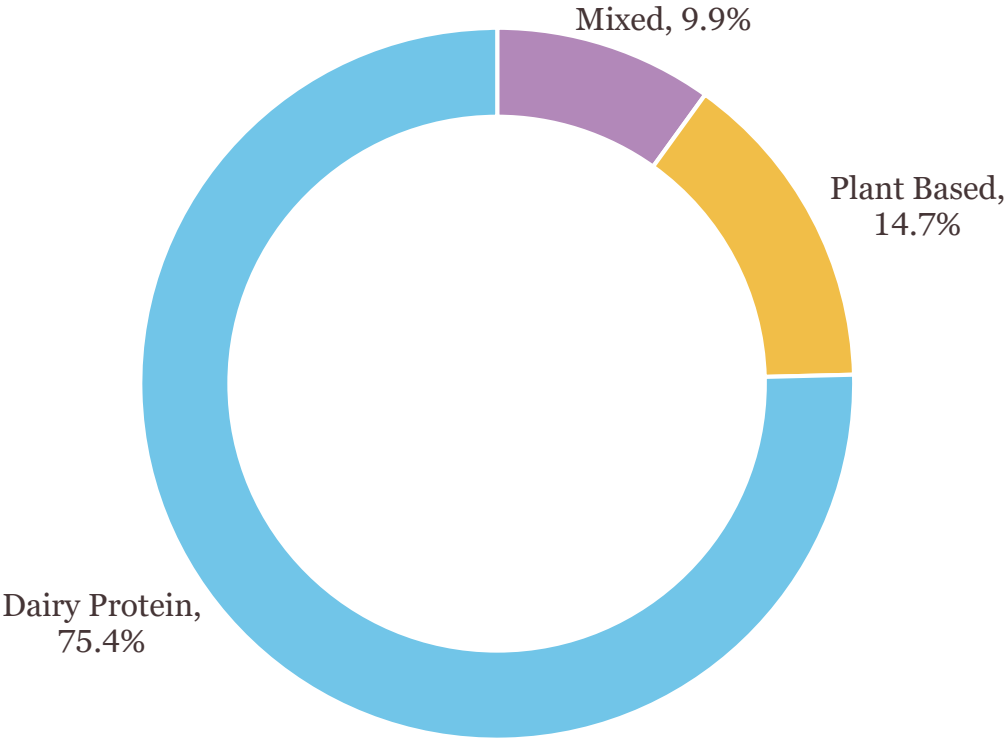
SPORTS NUTRITION – PROTEIN IS STRONG

US Sports Nutrition Market Summary Sales by Subcategory (2019)



Source: Euromonitor International. (2019). Sports Nutrition in the US.

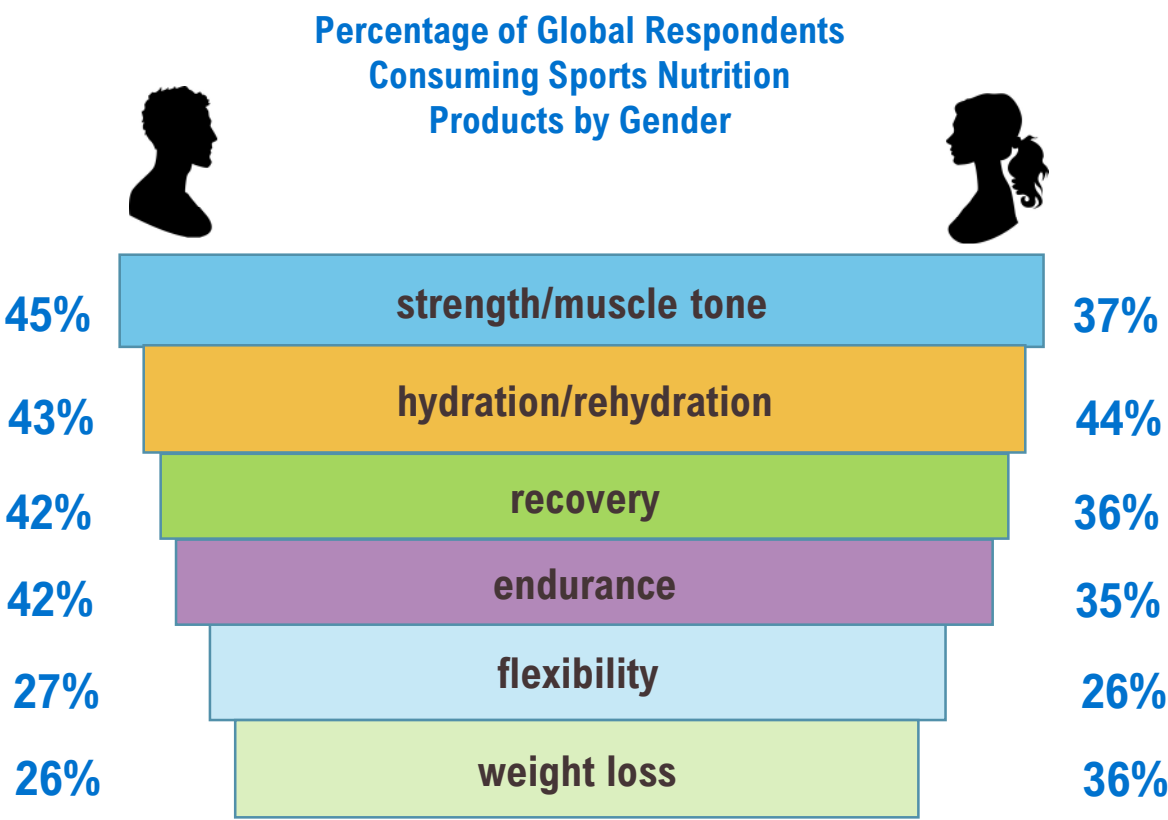
Dairy Protein Dominant



Source: Lumina Intelligence, 2018

DRIVERS OF CONSUMER CONSUMPTION

Reasons for Sports Nutrition Consumption



Source: Euromonitor International. Global Health & Nutrition Survey, 2019

Top 3 Product Claims Important to Consumers



68%
“All Natural”



67%
“No Additives/Preservatives”



59%
“Sourced in the U.S.A.”

Source Mintel. (2019). Sports, Nutrition and Performance Drinks – US – March 2019

EXPANDED AREAS FOR SPORTS NUTRITION



NATURAL: Its role is increasingly important for consumers of sports nutrition. Natural ingredients change the artificial perceptions that consumers sometimes have about certain sports products.



BALANCED NUTRITION: Nutrition information on sports nutrition products such as sugar content, fats and calories are being looked at very closely by today's consumers who want to adopt healthier eating habits.

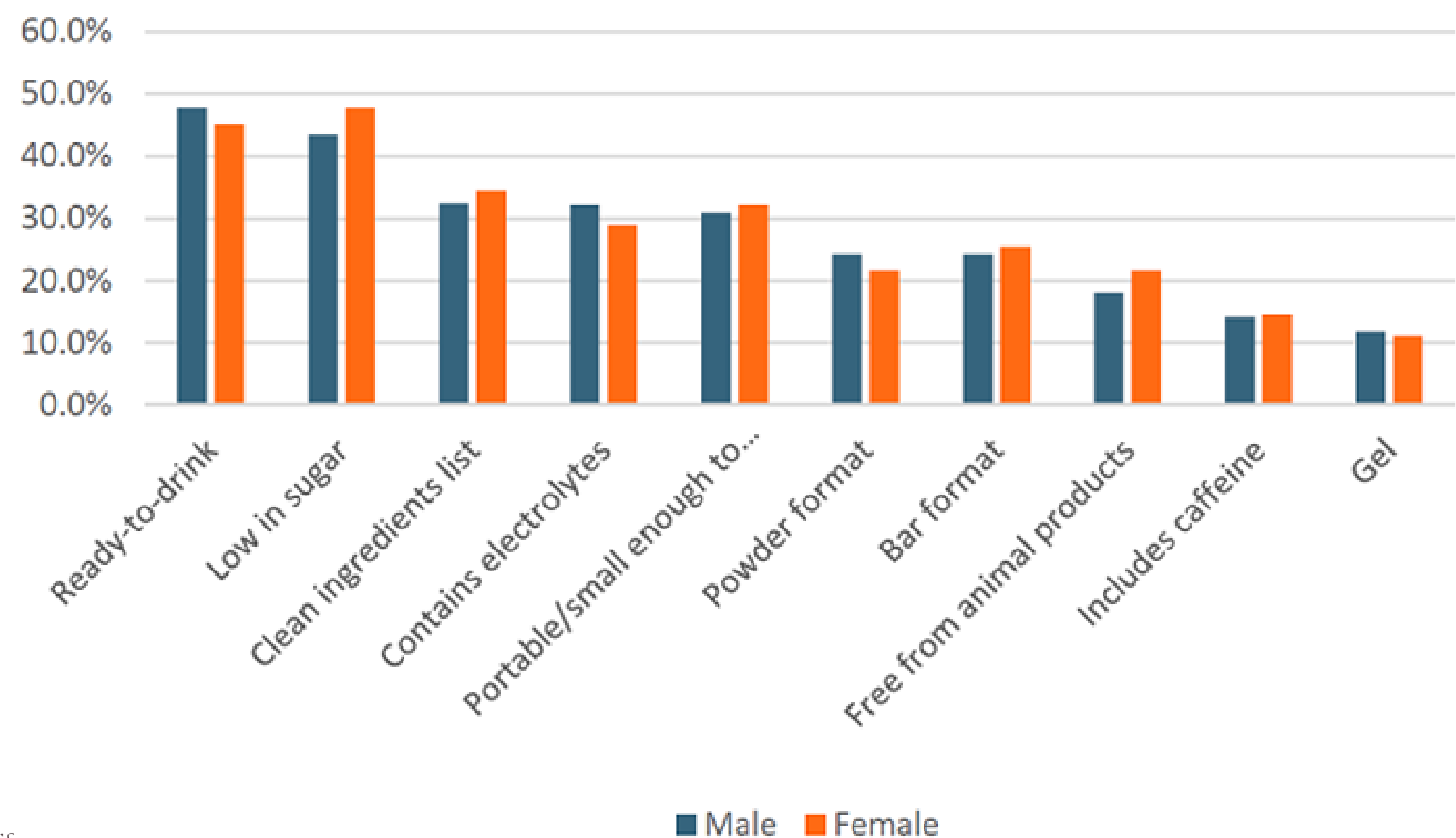


EMPHASIS ON INNOVATION AND TASTE: For consumers, the good taste of sports nutrition products and the innovation of flavors are as important as the functionality of the product. They are interested in the nutritional benefits but above all, the good taste of the product.



TARGETING SPECIFIC NEEDS:
Complex formulations can intimidate consumers. Products should target specific needs and use simple messages that highlight the health benefits of each product.

SOUGHT-AFTER SPORTS NUTRITION FEATURES



LOW PH PROTEIN IS DRIVING GROWTH

What is Low pH RTD & RTE?

- pH between < 5
- Dominant Protein is Whey-Based
- Process:
 - Formulation
 - Aseptically/UHT or retort/canning processed
 - Hot-Fill (shelf-stable RTD)
 - Blending (Ready to Mix)

Low pH Growth Drivers

- Shelf Stable Convenience
- Less likely to achieve consumption fatigue
 - Pleasing taste, clean texture & fruity, acidic flavors
- Adaptable levels of protein to meet targeted consumers
- Modifiable for specialized functional attributes

Applications

- Ready to Drink
 - Protein Beverage
 - Functional Beverage
 - Protein Fortifier (Fruit Juice, Coffee, Tea)
- Ready to Mix (Protein shakes)
- Gummies
- Gels
- Ice Pops/Frozen Desserts

CLEAR PROTEIN: SPANS BEHAVIOR & DEMOGRAPHICS

Provides mainstream athletes and health seekers with benefits that support their overall health and wellness goals...

Sports Nutrition

Active Nutrition

Functional Foods



CLEAR PROTEIN SENSORY CONSIDERATIONS

Texture

- Extremely low viscosity
- Modifiable for the medium

Mouthfeel

- Low astringency
- No Graininess
- Not Milky/Chalky

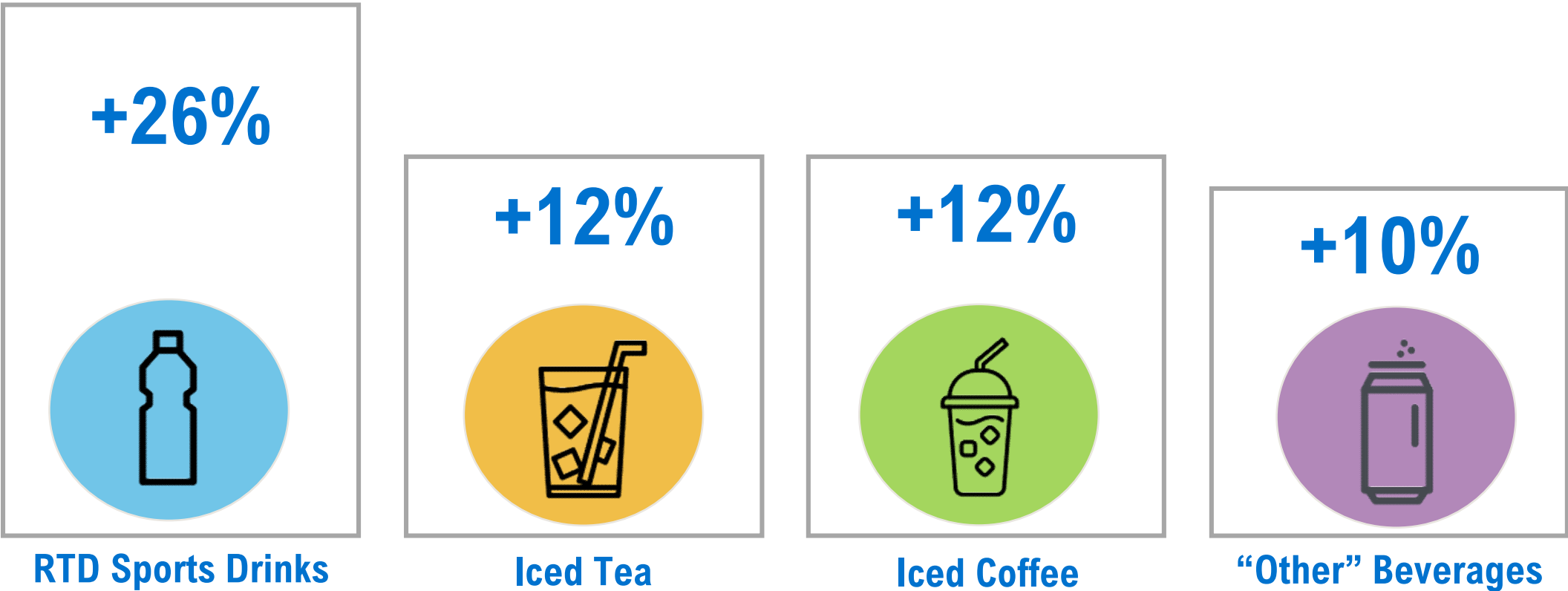
Taste

- Lacks protein “taste”
- Supports acidic flavor profiles



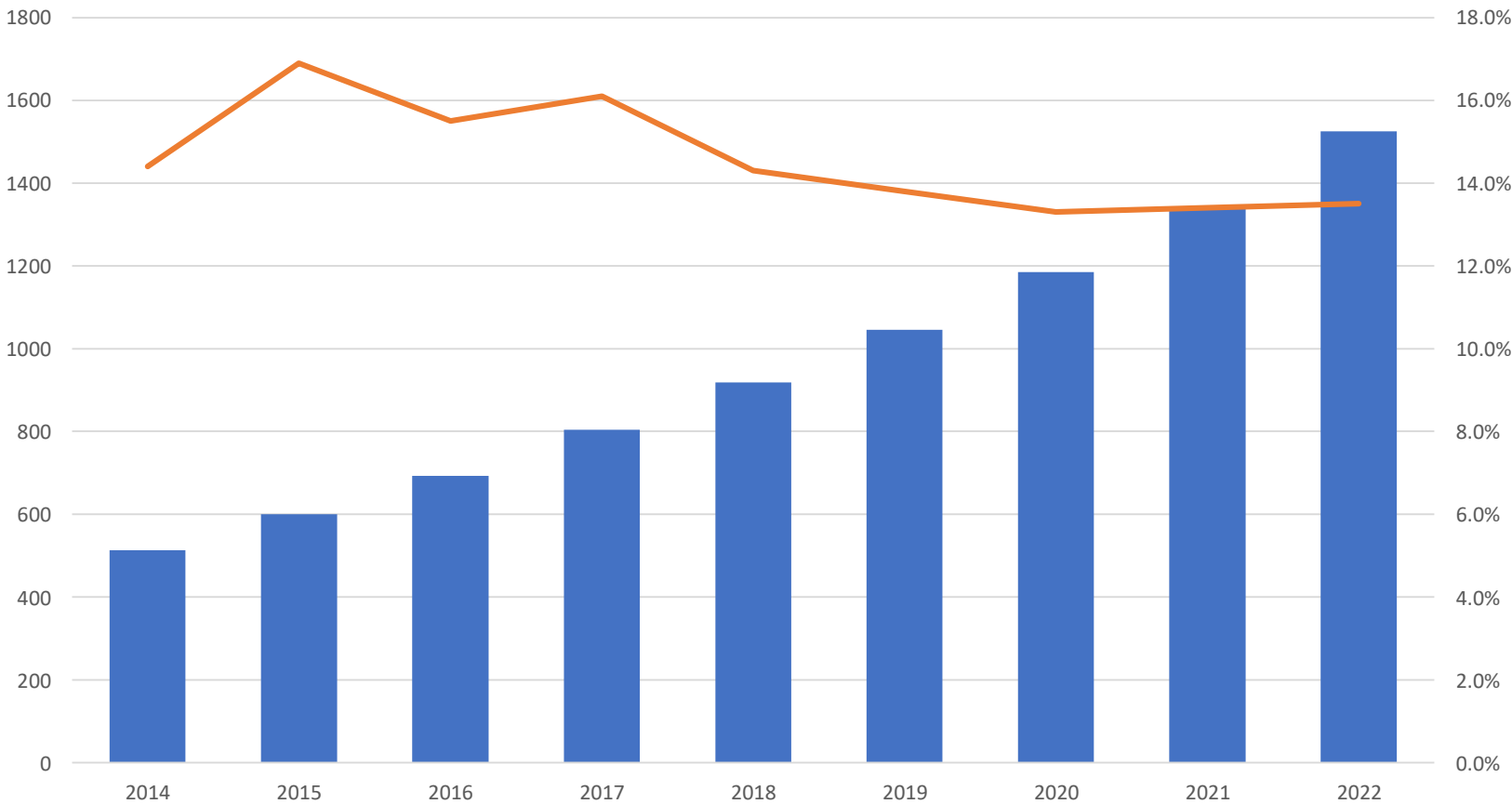
RTD SPORTS DRINKS LEAD GLOBAL INNOVATION

Global Beverage New Product Introduction: Fastest Growing Beverage Categories



RTD CONTINUES TO LEADS GROWTH

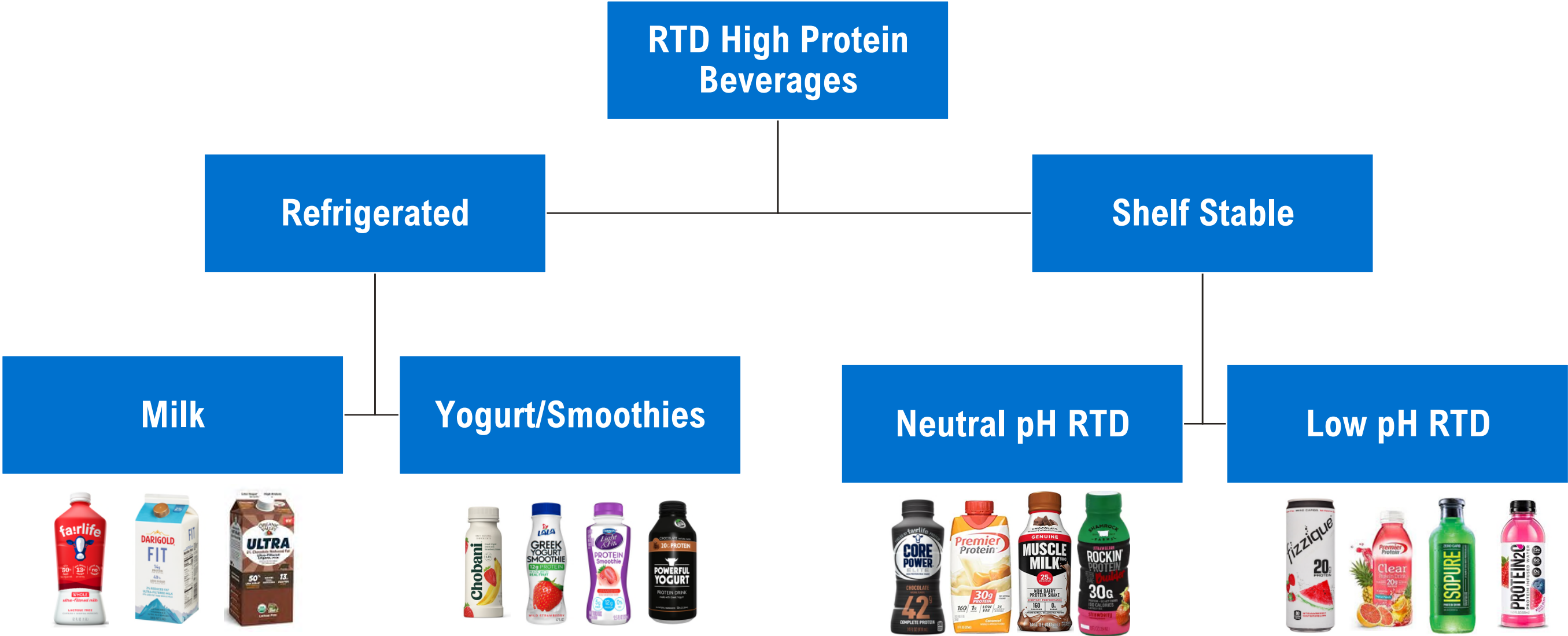
RTD FUNCTIONAL BEVERAGE SALES & GROWTH 2014 – 2022 (PROJECTED)



RTD Functional Beverages

- 2.2% of Total Sports Nutrition & Weight Management Category
- Category Growth +14.3%
- \$919 Million Annual Sales (2018)
- Mainstream consumption driving growth
 - Convenience
 - Meal Replacements
 - Protein Fortification

DIVERSITY IN RTD SUB-CATEGORIES

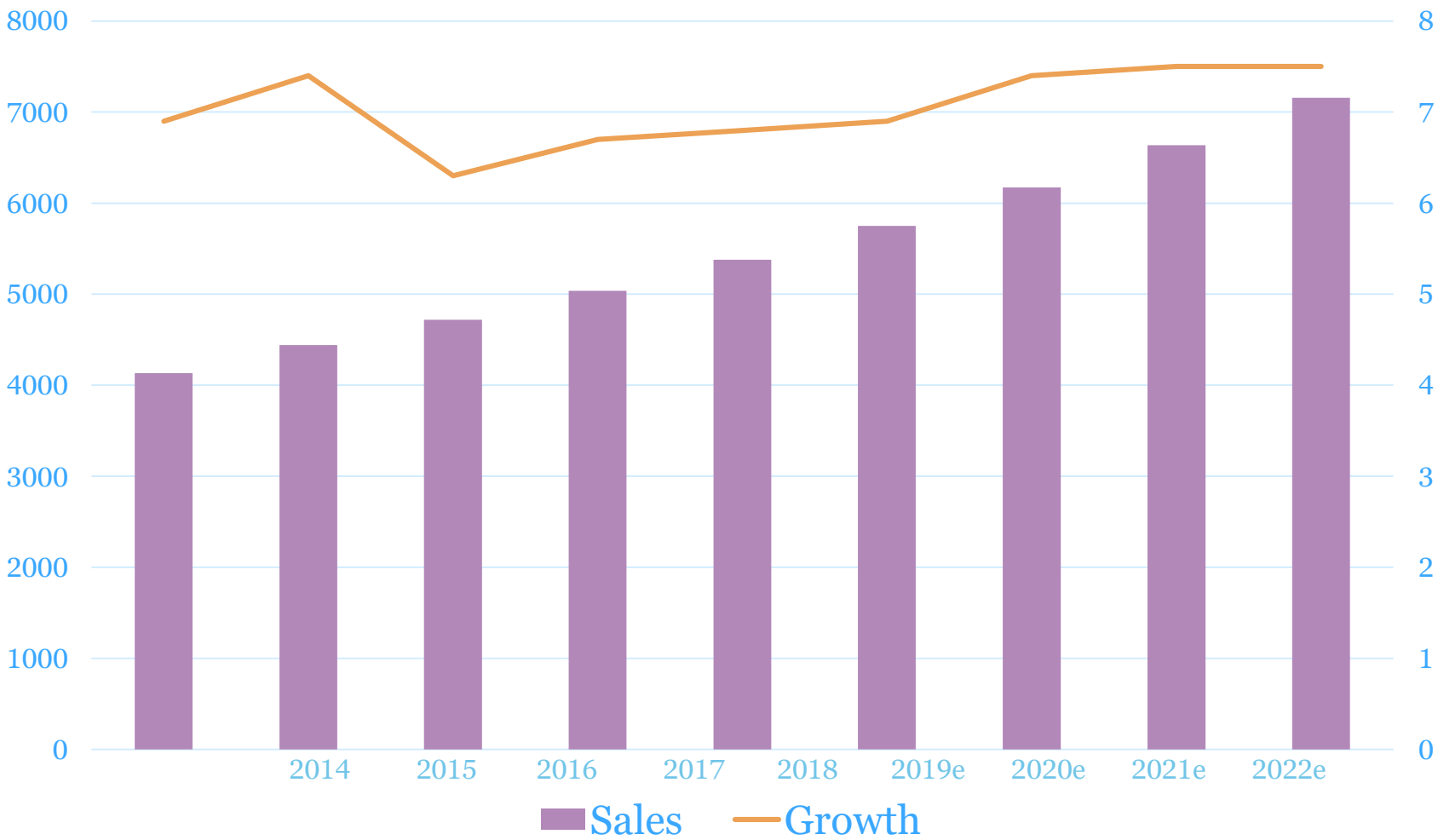


RTM PROTEIN POWDERS

RTM Protein Powders

- 12.7% of Total Sports Nutrition & Weight Management Category
- Category Growth +6.9%
 - Growth expected to remain relatively flat
- \$5.7B Annual Sales (2019)
- E-Commerce driving sales
- Become a “Pantry Staple”
 - Meal Replacements
 - Protein Fortification

SPORTS NUTRITION POWDERS SALES AND GROWTH 2014-2022e



PROTEIN POWDER – A PANTRY STAPLE

Protein Powders are leaving the weight room and entering the shopping carts...

FUNCTIONALITY

- Meal Replacement
- Functional health
- Satiety
- Protein “health halo”
 - Smoothies
 - Baking
 - bars

TRANSPARENCY

- Ingredients
- “Clean Label”
- Sourcing

INNOVATIVE OFFERINGS

Added Benefits

- Fiber
- Additional nutrients
- Physiological effects

Source/Form

- Clear vs. Milky
- Flexitarian / Vegan



DIVERSIFICATION IN FLAVOR

“Traditional” Milky Protein

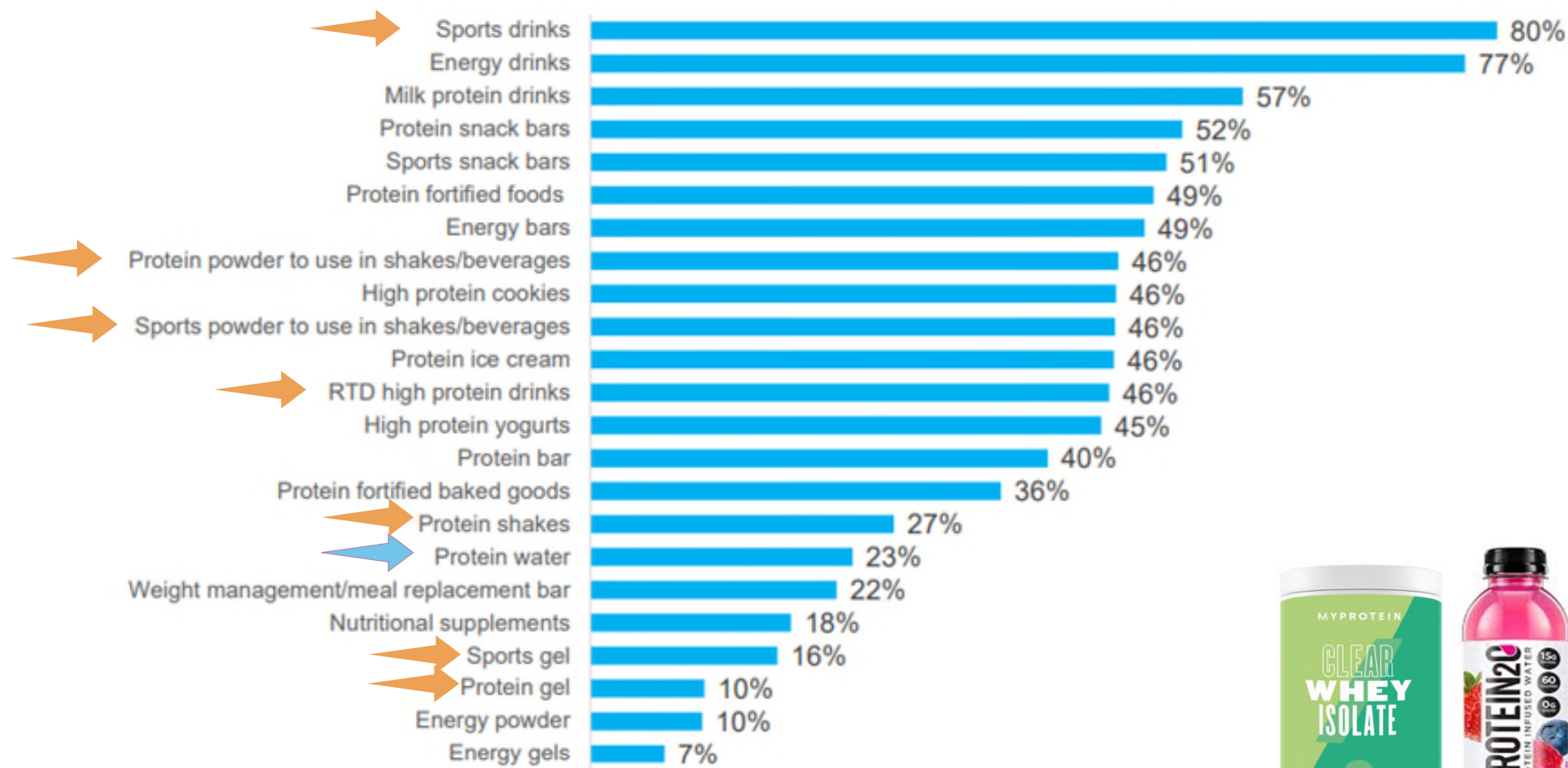


Clear Protein



PROTEIN BEVERAGES HAVE STRONG REACH

Proportion of consumers who have tried the following products in the US over the last six months, 2019



SUPPORT IN-MARKET TRENDS

RTD's continue to lead sports nutrition and beverage category growth

Consumer base is expanding from sports nutrition to functional health

Clear Protein waters especially appeal to hydration seekers

Natural, "Clean," vegan, low fat, non-dairy and lactose free among fast growing label claims

Global Trend. North America is the leading market, Europe follows

Fruity Flavors and clean mouthfeel especially appeals to women



AND ADAPTABILITY TO EMERGING TRENDS

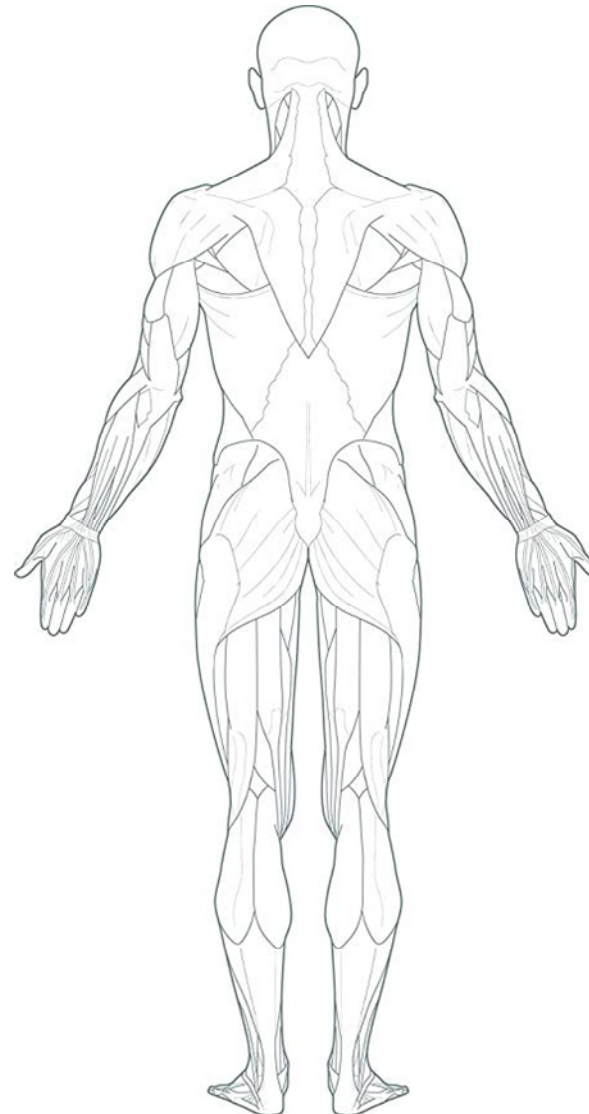
STRESS & RELAXATION SUPPORT

FATIGUE RELIEF

BONE, MUSCLE, JOINT HEALTH

CARDIOVASCULAR HEALTH

HEALTHY AGING



BRAIN & NOOTROPICS
(memory and brain function)

IMMUNITY

INNER BEAUTY

ANTI-INFLAMMATORY

LIVER DETOX



Suvash Kafley
VP, Research & Development
Milk Specialties Global

 MILK SPECIALTIES
GLOBAL