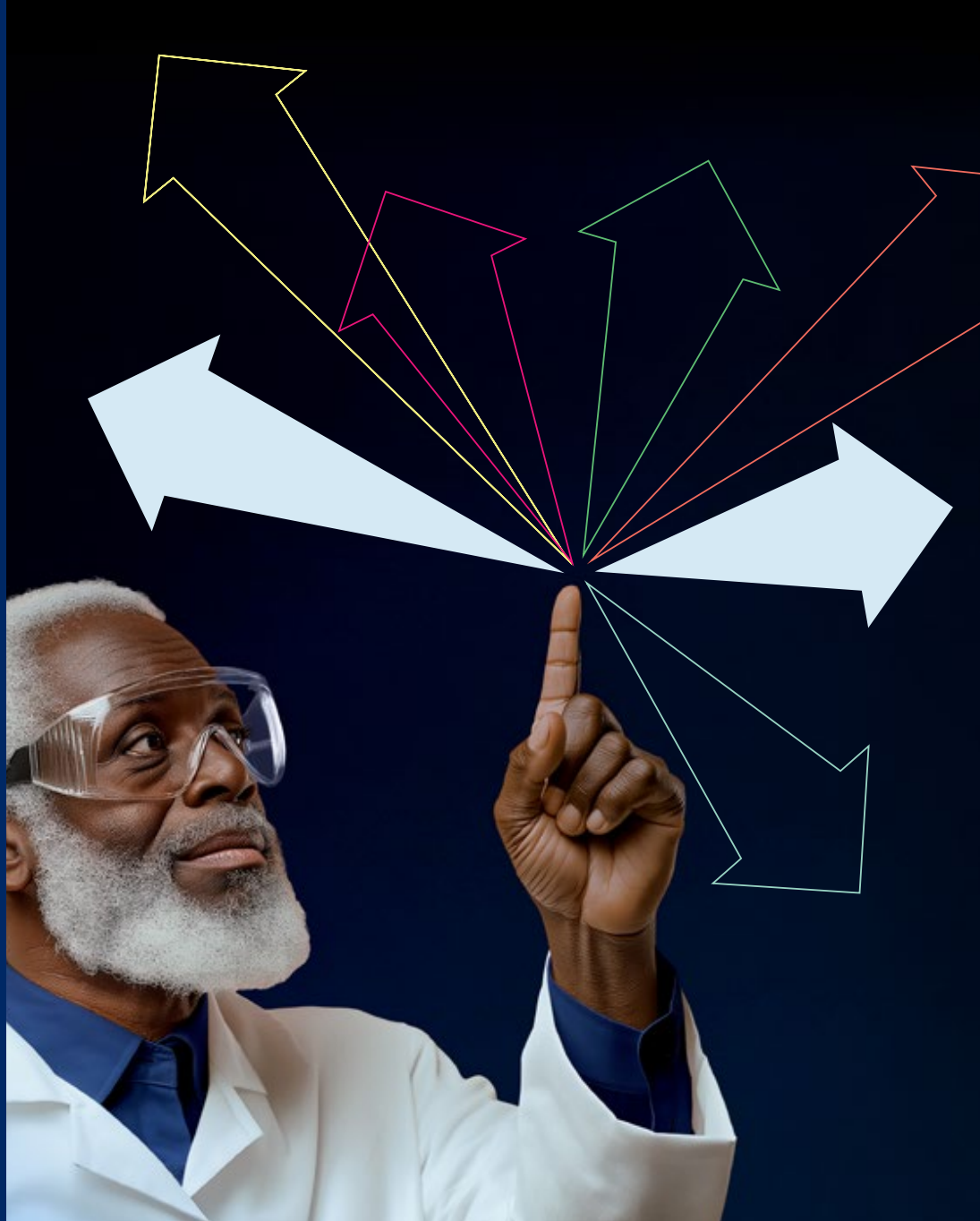


The Balchem Beat

Issue 39
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**From Clinical Evidence
to Consumer Demand:
Balchem Highlights the Power
of Branded Ingredients at
SupplySide Global 2026**

**From Awareness to Demand:
Why Consumer Education
Matters More Than Ever**

Back to Routine: Fueling Fall
with Functional Nutrition

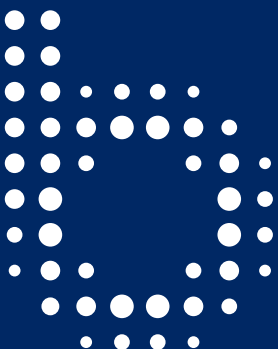
Elevating Everyday
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Editor's Note

Dear Balchem Community,

SupplySide Global is almost here, and we can't wait to welcome you to **booth #5565 in Las Vegas**. See how Balchem addresses some of the industry's fastest-growing opportunities. Our team is excited to share Balchem's latest science, ingredient innovation, and formulation expertise—and most importantly, to connect with you.

Stop by to explore new research, trusted branded ingredients, and better-for-you concepts for daily performance, healthy aging, GLP-1 companion nutrition, and more. In this issue you'll get a preview of what we're bringing to the show—from **advances in Optifolin+®** and **mineral bioavailability** to **consumer education, functional beverages, protein-forward nutrition, and bakery innovation**. Each story reflects our shared goal: using science, clear communication, and thoughtful formulation to create products that truly connect with today's consumers.

We hope these ideas inspire your next innovation. Join us at **SupplySide Global, October 28-30** to meet our team, sample new concepts, and experience Balchem's science-backed solutions firsthand. We look forward to seeing you there!

**Warm regards,
Balchem Beat Editorial Team**





From Clinical Evidence to Consumer Demand:

Balchem Highlights the Power
of Branded Ingredients
at SupplySide Global 2026

We are returning to SupplySide Global 2026 to showcase our branded ingredients and scientific leadership, to help customers address some of the industry's fastest-growing opportunities. These include the growing convergence of daily performance and long-term vitality, as well as the rising demand for GLP-1 companion products.



At booth #5565, newly published research across the offering will sit alongside better-for-you food and beverage concepts that enhance nutritional profiles, functionality and sensory appeal.

Science at the Heart of Balchem's Story

Our SupplySide Global showcase will spotlight the latest research behind its portfolio, including studies that:

- Strengthen evidence behind the role of K2VITAL™, a patented, typically 99.8% all-trans vitamin K2 MK-7, in cardiovascular health¹ and uncover potential post-exercise neuromuscular signaling support in older adults.²
- Demonstrate, for the first time with fMRI, how VitaCholine®, the gold standard choline, influences brain network efficiency in post-menopausal women.³
- Highlight how Optifolin+®, the industry's first choline-enriched folate, delivers a 7x methyl advantage over other folates, with new cutting-edge cell testing showing how the ingredient enhances cellular methylation capacity up to 2.3x and DNA methylation up to 14x, supporting its role in cellular health and epigenetic function.⁴
- Reveal new breakthrough science that demonstrates OptiMSM®'s impact on female athletic performance.



Breakthrough Combinations and Enhanced Solutions

As well as highlighting new science, we will show how familiar nutrients can be made to work harder for brands.

Albion® Minerals' Creatine MagnaPower® unites two of the biggest consumer favorites in sports nutrition, creatine and magnesium, in a single formulation that delivers superior muscular performance benefits.⁴

Visitors can also discover the Albion® Meta Mag® range of magnesium bisglycinate, spanning taste-free solutions and a new high-density form optimized for capsules. Collectively, these ingredients illustrate Balchem's broader "Premier Ingredients for Premier Athletes" platform, which addresses the growing consumer desire to support both everyday performance and long-term vitality.

Simplifying Beverage and Format Innovation

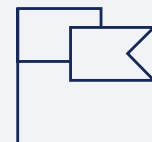
Visitors can experience Balchem's application capabilities firsthand through a range of beverage-focused concepts designed to help brands bring differentiated solutions to market across cognitive health, active nutrition, hydration, and healthy aging platforms.

Featured concepts include a VitaCholine®-fortified Charged Frappé Coffee for cognitive well-being, and VitalBlend™, a customizable lipid-based powder technology for targeted nutrition applications. Attendees can also learn how Balchem's Beverage Systems help streamline formulations and accelerate commercialization, all while delivering consistent sensory performance.

Complementing these beverage innovations, samples of protein-enriched chocolate clusters made with Milk Protein Z-Crisps® will be available at the stand, showcasing the company's broader expertise in nutrition-forward food and beverage solutions.

Request a meeting:

balchem.com/events/supplieside-global-2026



Join Our Presentation

For manufacturers interested in learning more about how to address today's fastest growing functional food and beverage trends, Balchem is set to deliver a presentation entitled **"Unlocking Opportunities for Fortification: Trends, Applications and Innovation in Functional Foods & Beverages"**.

Led by **Jason Wielgoszinski**, Sales Director — Powders at Balchem, the talk will be held on **Thursday, October 29 at 11:30 - 11:50 AM (PDT)**, at the **Product Development Theater A, Booth #7915**.

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From Awareness to Demand:

Why Consumer Education Matters More Than Ever

Consumers have more health and wellness choices than ever before, but a crowded marketplace can make it difficult to identify products that truly deliver quality. According to a recent Euromonitor study, consumers increasingly evaluate products not only on price, but also on ingredient quality, transparency, and trust.



Our consumer awareness efforts are approaching about

1 billion consumer impressions

across the Balchem HNH portfolio.

At Balchem Human Nutrition & Health, we believe education is one of the most powerful ways to help consumers make informed decisions. That is why we continue to invest in consumer awareness programs that highlight the value of science-backed, branded ingredients, helping both consumers and our customers identify products built on quality.

Today, we are proud to share that our consumer awareness efforts are approaching **one billion consumer impressions** across the Balchem HNH portfolio. What began with VitaCholine® has evolved into a cross-portfolio strategy that now includes VitaCholine®, K2VITAL®, OptiMSM®, and Albion® Minerals. Through a combination of influencer partnerships, consumer media outreach, and high-profile sports collaborations, we are reaching consumers with a simple but powerful message: **Ingredient quality matters. Check the label.**

These efforts have generated visibility in leading publications such as *ELLE*, *Men's Journal*, and *Forbes Health*, while our partnerships with the New York Jets and FC Bayern Munich Women bring ingredient education directly to consumers through engaging experiences and activations.

A key example is VitaCholine®'s recently extended partnership with the New York Jets. This season, VitaCholine® will further strengthen health benefit education by engaging New York Jets fans through interactive experiences, educational content, exclusive giveaways, and special activations at select games, helping bring the story of body and mind performance to life. The brand promise "Supercharge Your Body and Mind" highlights the important role choline plays in supporting brain and body health, while helping consumers better understand the essential nutrient choline that remains under-consumed by many Americans.

While our consumer awareness programs drive recognition of our ingredient brands and their health benefits, they also create meaningful value for our customers. From exclusive hospitality experiences with FC Bayern in Hong Kong, Jeju, and Munich to co-branded consumer PR activities, we help our champion brand partners differentiate their products and strengthen their connection with consumers.

Why does this matter? Because consumer awareness drives demand. Research shows that consumers increasingly recognize branded



From exclusive hospitality experiences with FC Bayern and the New York Jets, Balchem strengthened distributor partnerships through K2VITAL® engagement and showcased VitaCholine® education at premier sporting events around the world.



Request a meeting:
balchem.com/events/ift-first-2026



Question

"I always look for branded ingredients, and I am willing to pay a premium."

Co-Branding Drives Premium Pricing (US Market)



Source: adapted from ITC 2025 Consumer Supplement Survey

n = 677, USA

ingredients as signals of quality and are willing to pay a premium for products featuring trusted, science-backed ingredient brands. In a competitive marketplace, co-branding helps consumers navigate crowded shelves while helping brands stand out.

By building awareness and trust in our ingredient brands, we are creating value for consumers and helping our customers stand out in an increasingly competitive marketplace.

Want to learn more?

Meet us at SSG, booth #5565.



Rookie Cooking Class with the
New York Jets | Presented by VitaCholine®

Request a meeting:

[balchem.com/events/
supplyside-global-2026](https://balchem.com/events/supplyside-global-2026)



Back to Routine: Fueling Fall with Functional Nutrition

As summer winds down and consumers return to their routines of work, school, and busy daily schedules, demand for convenient better-for-you food and beverage solutions continues to grow. Today's consumers are looking for products that fit seamlessly into their lifestyles while helping them achieve their health and wellness goals.

For brands planning future innovation pipelines, this shift presents a valuable opportunity to develop functional nutrition options that align with evolving consumer priorities and support market-place differentiation.

One area where these trends are particularly evident is breakfast and morning snacking, where consumers are seeking convenient, protein-rich options that fit easily into their day. Z-Crisps® protein crisps, available in whey, milk, pea, and soy protein varieties, can help brands enhance protein content while delivering the texture and crunch consumers expect from formats such as granola, cereal clusters, and nutrition bars. By incorporating protein into familiar products, brands can help consumers increase protein intake throughout the day.

While breakfast remains a key occasion for added nutrition, consumers are increasingly turning to protein-forward snacks and beverages throughout the day, making protein bars and functional nutritional beverages trusted choices for on-the-go snacking, lunchboxes, and afternoon fuel. To support these applications, Balchem offers a versatile portfolio of functional spray-dried lipid powders that can be fortified with protein,

prebiotic fiber, vitamins, and minerals while improving mouthfeel and solubility, including plant-based options.

Balchem's spray-dried powder portfolio includes:

- **Jerzee CWS 50-Sunflower NP IP**
 - **Jerzee 50 Coconut IP**
 - **Quic Creamer 5170 IP**
 - **Richmix 5025 IP**
 - **Vital Blend MCT 7506**
-

As consumers refocus on their routines this fall, brands have an opportunity to meet the growing demand for convenient solutions that support protein intake, digestive wellness, and GLP-1-related nutrition goals. Ingredient platforms that combine functionality, nutrition, and formulation flexibility can help accelerate innovation, strengthen product positioning, and bring relevant, consumer-focused products to market that stand out on shelves.

Contact us to learn how our powders and protein crisps can help deliver solutions tailored to your innovation goals.



Elevating Everyday **Bakery Experiences**

Bakery has always held a unique place in consumers' lives. From the comfort of warm bread at the dinner table to the convenience of a tortilla wrap on the go to the indulgence of a favorite cookie or celebration cake, these products create moments of connection, satisfaction, and joy.

Today's consumers, however, are redefining what they expect from bakery. They want foods that feel rewarding and crave-worthy while fitting into evolving lifestyle goals, including higher-protein eating patterns, mindful indulgence, and wellness journeys influenced by GLP-1 medications. The opportunity for brands is to deliver bakery experiences that offer both enjoyment and purpose without sacrificing taste, texture, or quality.

Bold Flavor. Memorable Experiences.

Consumers continue to seek bakery products that deliver moments of indulgence and discovery. Whether it's a premium cookie, a fruit-filled breakfast bread, or a limited-time tortilla offering with global flavor inspiration, taste remains the ultimate driver of purchase and repeat engagement.

Our INhance™ Inclusions bring products to life with layers of flavor, visual appeal, and texture that turn everyday bakery items into memorable experiences. From warm cinnamon notes and decadent dessert-inspired concepts to vibrant fruit-forward and savory spice profiles, these solutions help brands create products consumers are excited to enjoy again and again.

At Balchem, we're helping bakery manufacturers reimagine what's possible.





Freshness That Builds Consumer Confidence

Great bakery products aren't judged solely on the first bite. Consumers expect freshness, softness, and consistency throughout a product's shelf-life.

As manufacturers innovate with reduced-sugar, dairy-free, fiber-enriched, and protein-fortified formulations, preserving quality becomes increasingly important. Balchem's microencapsulation technologies help protect ingredient functionality and maintain product integrity, supporting freshness, stability, and the sensory attributes consumers associate with premium bakery products.

Performance Behind Every Bite

The perfect crumb. A soft sandwich bread. A tortilla with an extended shelf-life. A cake with exceptional volume and texture.

Delivering these experiences requires ingredients that perform reliably and consistently across a wide range of formulations.

BakeShure® Microencapsulation Technology provides controlled release technology designed to support optimal rise, volume, and crumb structure while helping manufacturers navigate increasingly complex formulations. The result is dependable performance that supports both operational efficiency and consumer satisfaction.

Innovation Across the Bakery Aisle

Breads are being reinvented with added protein, fiber, and other functional nutrition. Tortillas continue to expand beyond traditional applications, serving as versatile platforms for wraps, snacks, and globally inspired meal solutions. Cakes and cookies are embracing premium flavors, elevated textures, and indulgent inclusions that transform familiar favorites into exciting experiences.

Across every bakery segment, the winning products are those that successfully unite indulgence, functionality, and consumer relevance.

Baking What's Next

The future of bakery belongs to brands that can satisfy changing consumer expectations while delivering the sensory experiences people love. By combining ingredient innovation with formulation expertise, Balchem helps manufacturers create breads, tortillas, cakes, cookies, and other baked goods that are as enjoyable as they are purposeful.

Because when quality, performance, and indulgence come together, every bite becomes an opportunity to delight.

Contact us at hnh-info@balchem.com or your **Account Manager**.



New Research Reinforces **Optifolin+®'s Leadership in Cellular Health Innovation**

Balchem Human Nutrition & Health continues to advance the science of healthy aging with the publication of new peer-reviewed research showcasing the unique benefits of Optifolin+®, our first-of-its-kind choline-enriched folate. The study provides compelling evidence that Optifolin+ helps fuel the cellular processes that support DNA stability, cellular health, and healthy aging.



The latest research demonstrates how Optifolin+'s unique choline-enriched structure translates into meaningful cellular activity.



As consumer interest in cellular health continues to grow, brands are looking for science-backed solutions that deliver meaningful differentiation. Optifolin+ was specifically designed to meet that need by combining bioactive folate with VitaCholine® to create a unique nutritional solution with a 7x methyl advantage and 98% methylation capacity.

In collaboration with researchers at the University of Arkansas for Medical Sciences, Balchem evaluated Optifolin+ in a human cell model and demonstrated **significant improvements in key markers of methylation, including:**

- **Up to 71% greater methyl donor availability (SAM)**
- **Up to 2.3x higher methylation capacity**
- **Up to 14x greater cellular DNA methylation**

These findings help explain how Optifolin+ supports the body's natural methylation pathways, providing a stronger scientific foundation for next-generation healthy aging, cellular health, and epigenetic health products.

"This latest research demonstrates how Optifolin+'s unique choline-enriched structure translates into meaningful cellular activity," said Lauren Eisen, Senior Marketing & Business Development Manager, Minerals and Nutrients.

The publication adds to the growing body of science behind Optifolin+ and further reinforces Balchem's commitment to developing innovative, evidence-based solutions that help customers meet evolving consumer health needs.

By demonstrating measurable effects on cellular methylation, Optifolin+ continues to set a new standard for innovation in the folate category.

Learn more:

balchem.com/hnh/resources/optifolin-in-vitro-cellular-health-study/





New Research: **Only 30% of Calcium in Global Food Supply Is Bioavailable**

New research from the US and Canada entity of the International Life Sciences Institute (ILSI), partially funded by Balchem, estimates that only 30% of the calcium in the global food supply is bioavailable.¹

Published in The Journal of Nutrition, the study applied a recently developed algorithm to Food and Agriculture Organization (FAO) Food Balance Sheet (FBS) data to assess the impact of anti-nutrients such as phytates and oxalates on calcium bioavailability. The findings highlight opportunities for food and supplement brands to improve formulations with bioavailable ingredients that help overcome anti-nutrient interference.

New Algorithm Reveals Global Gaps in Calcium Absorption

An ILSI US and Canada scientific committee developed a predictive equation for calcium bioavailability in collaboration with Balchem. The algorithm accounts for calcium content as well as the anti-nutrients oxalate and phytate.^{1,2} Common in plant-based foods such as beans and pulses, these compounds bind with free mineral ions from foods and inorganic mineral salt supplements, forming complexes that are poorly absorbed by the body.³

The result is reduced absorption of essential minerals, including calcium. This study marks the first global application of the algorithm, providing a framework to estimate bioavailable calcium across countries and food systems.

Regional Disparities in Calcium Bioavailability: Influence of Dietary Composition

Although the global average of bioavailable calcium was 30%, substantial regional differences were identified.* In Asia and Africa only 23% and 19% of calcium in the food supply was bioavailable, respectively.

By comparison, EU member countries averaged 49% bioavailable calcium and the US 47%. Southeast Asia, parts of South America, and the Middle East also showed relatively low levels compared to Europe and the US. These differences are largely driven by dietary composition. Greater reliance on plant-based foods,

especially when combined with lower dairy consumption, appears to be a key factor contributing to lower calcium bioavailability.

Mineral Chelation as Anti-nutrient Protection

One strategy to reduce anti-nutrient interference is the use of chelated mineral ingredients, which can support superior absorption. Chelation binds minerals to organic molecules such as amino acids, creating a stable complex that helps protect the mineral from interactions with anti-nutrients.

For example, chelated iron (ferrous bisglycinate) has been recognized by the World Health Organization for its greater absorption than conventional iron salts such as ferrous sulfate in the presence of phytates.⁴ Chelated minerals may also offer improved gastrointestinal tolerability compared to inorganic forms,⁵ along with formulation benefits such as enhanced solubility.⁶

Learn more:

balchem.com/news/hnh-only-30-of-calcium-in-global-food-supply-is-bioavailable/



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- [5] Fischer, J. A., et al. (2023). The effects of oral ferrous bisglycinate supplementation on hemoglobin and ferritin concentrations in adults and children: a systematic review and meta-analysis of randomized controlled trials. Nutrition reviews, 81(8), 904-920.
- [6] Heaney, R. P., et al. (1990). Absorbability of calcium sources: the limited role of solubility. Calcified Tissue International, 46(5), 300-304.

***Note:** The proportion of bioavailable calcium was calculated by dividing bioavailable Ca (mg/person/day)





Market Update: **Proof, Quality and Format Innovation** Are Shaping Consumer Choice

Consumers are becoming more deliberate about the products and ingredients they choose. In the vitamins, minerals, and supplements category, 34% of consumers report looking up different ingredients before using a product, while 31% want greater transparency about what products contain. Ingredient quality is also influencing purchase behavior, with 40% of consumers identifying it as a factor in their VMS decisions.¹

Effectiveness and quality remain the strongest considerations. Fifty-one percent of consumers prioritize whether a product works for them; 50% look for high quality and 35% consider whether it addresses a specific need.

Science can provide additional differentiation, with 27% citing science-backed products and 23% looking for certification by a scientific organization.²

Attitudes & Behaviors Around VMS, 2025¹

Consumers are actively investigating ingredients

40%

say ingredient quality influences VMS purchase decisions.

34%

look up different ingredients before using a product.

31%

want more transparency about what is included in products.

Behavioral takeaway: Consumers are doing their own homework, making accessible ingredient evidence part of the purchase journey.

Effectiveness and Quality Lead, with Science Adding Credible Differentiation

Factors influencing consumer choice²

27% specifically cite "science-backed," while 23% cite certification by a scientific organization.



For brands, the opportunity is not simply to provide more information, but to make credible evidence easier to find and understand.

Clear communication that connects ingredient quality and supporting science with a relevant consumer need can help build confidence throughout the purchase journey.

This focus on differentiated values is also visible in food categories. Nielsen data for the latest 52 weeks ending June 13, 2026 show that frozen novelty dollar sales increased 6.4 %, compared with 1.3 % growth for traditional packaged ice cream. Growth was particularly strong in fruit-based novelties at 12.7 %, followed by non-dairy novelties at 10.2 % and frozen yogurt novelties at 7.7 %.³

Together, these trends point to opportunities for innovation that unite distinctive formats with clearly communicated value. In frozen novelties that may include natural fruit flavors, indulgent flavor systems, premium ingredients, and health-forward concepts. Across both supplements and food, the broader takeaway is consistent: consumers are looking for products that deliver quality, relevance and differentiation, supported by information they can understand and trust.

Sources

- [1] Mintel. Vitamins, Minerals and Supplements, US, 2025.
- [2] McKinsey & Company. Future of Wellness, August 2023.
- [3] Nielsen. Frozen novelty and packaged ice cream dollar sales, latest 52 weeks ending June 13, 2026.

Frozen Novelty Outpaces Traditional Packaged Ice Cream

Growth is broad-based across fruit, non-dairy, and frozen yogurt formats³



Why It Matters

Frozen novelty is an attractive platform for flavor innovation and differentiated product development.

Opportunity areas: natural fruit flavors, indulgent flavor systems, premium ingredients and health-forward concepts.





Events
Ahead

Events — See You There

13

OCT 2026



Science Done Right: New Clinical Evidence Advancing Cardiovascular Nutrition

Online Webinar — [Registration](#)

14

OCT 2026



Rethinking Protein: Quality, Functionality and Future Opportunities

Online Webinar — [Registration](#)

15—16

OCT 2026

1st International GVF Symposium 2026

Bergen, Norway

22—23

OCT 2026

Remedy NutraFood CDMO Conference

Gdansk, Poland

28—30

OCT 2026

Supply Side Global

Las Vegas, NV, Booth #5565

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OCT 2026

NPA 90th Anniversary Breakfast at SupplySide Global

Las Vegas, NV

4

NOV 2026

Regional IFT: Chicago

Chicago, IL

5—6

NOV 2026

TIA Europe

Barcelona, Spain

9

NOV 2026

The Sports & Active Nutrition Summit Europe

London, UK

15—17

NOV 2026

U.S. Private Label Show — Chicago (PLMA)

Chicago, IL, Booth #F808

17—19

NOV 2026

Fi Europe

Frankfurt, Germany, Booth #3.0D68



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