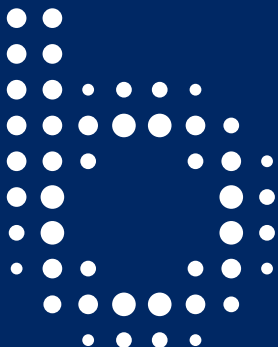
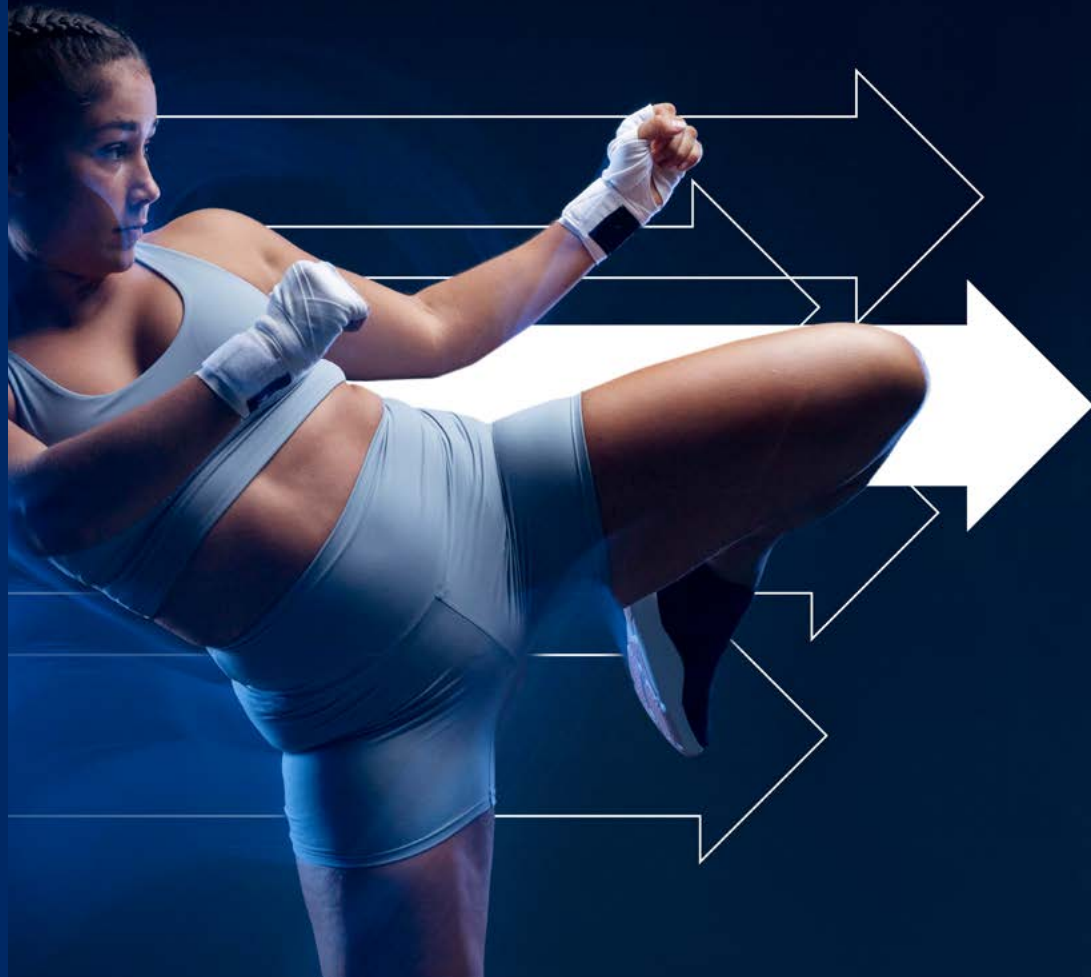


The Balchem Beat

Issue 33
September/October 2025



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Powering the Future of
Wellness: Active Nutrition,
Epigenetic Health and GLP-1**

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Editor's Note

Dear Balchem Community,

Welcome to the September-October 2025 edition of the Balchem Beat! As we transition into the vibrant colors of fall, we have an exciting lineup of articles that we hope will inspire and inform you.

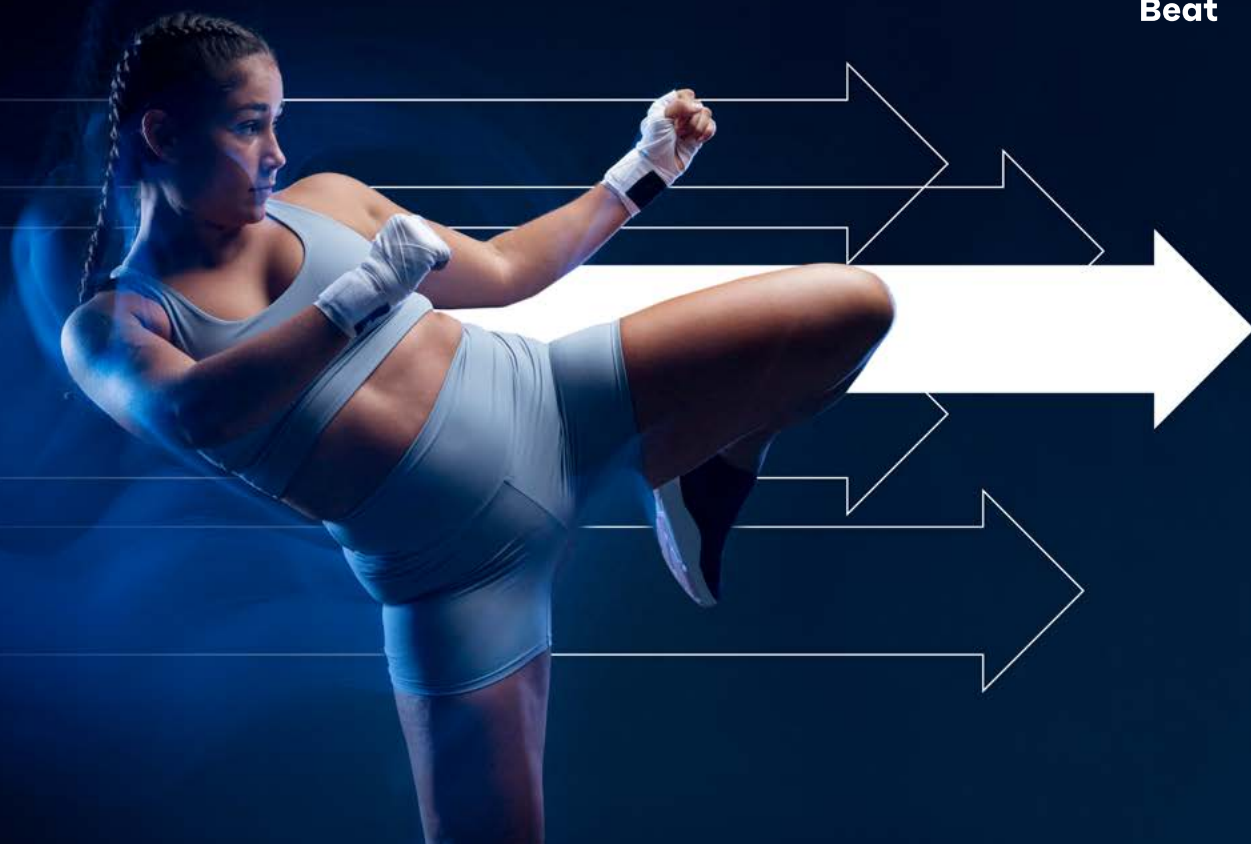
In this issue, we delve into the latest trends in the industry, share success stories from our dedicated team, and provide insights into the innovative projects that are shaping our future. Each article is crafted with care to keep you updated and engaged with the dynamic world of Balchem.

We are also thrilled to announce our participation in the upcoming SupplySide Global (SSG) tradeshow. This is a fantastic opportunity for you to meet our team, learn more about our latest products and services, and see firsthand the innovations we are bringing to the market. We invite you to visit our booth and join us in celebrating our achievements and exploring new possibilities together.

Thank you for being a part of our community. Your support and engagement are what drive us to continually strive for excellence. Enjoy the read, and we look forward to seeing you at the SSG tradeshow!

**Warm regards,
Balchem Beat Editorial Team**





Supply Side Global 2025 -

Powering the Future of Wellness: Active Nutrition, Epigenetic Health and GLP-1

This year's booth visitors will be the first to discover how we're bridging two of today's most in-demand consumer priorities: performance and weight management. As the **official Gold Sponsor for "Active Nutrition"** at SupplySide Global, we'll spotlight our broad sports nutrition offering under the theme "Premier Ingredients for Premier Athletes." We'll also reframe GLP-1 support through the lens of performance, showcasing how minerals, nutrients, and functional food ingredients can be powerful allies on the path to better health.

We're excited to continue shining a light on the newest addition to our portfolio, Optifolin+® — a unique choline-enriched folate with sci-

ence-backed benefits spanning women's and prenatal health, brain health, heart health, and epigenetics.

Introducing StabiliPro™: the smart solution for formulating stable, effective probiotics that consumers can trust.

Visit us at Booth #5264 to experience the future of active nutrition — and be among the first to explore our latest innovations.

For more information about the highlights we're presenting at the show, or to request a meeting with the team, contact us here:



GLP-1 Drugs Are Reshaping Consumer Behavior – **Here's How Balchem Is Leading the Response**

13 M

US adults use GLP-1 medications

The rise of GLP-1 receptor agonists like Ozempic, Wegovy, and Mounjaro is transforming how millions of consumers eat, shop, and think about health. With over 13 million US adults currently using GLP-1 medications – a nearly 600% increase over six years – the ripple effects are being felt across the food, beverage, and supplement industries.

600%

increase over six years

GLP-1 drugs suppress appetite, reduce calorie intake, and shift consumer priorities toward **nutrient-dense, functional products**. According to EY and Morgan Stanley research¹, GLP-1 users are cutting back on calorie-dense snacks, sugary beverages, and processed foods, while increasing their intake of **protein, fiber, and functional nutrients**.



Key Focus Areas



Dietary Supplements

GLP-1 users often face nutrient deficiencies due to reduced food intake. Balchem's portfolio includes ingredients like VitaCholine®, which supports liver function, cognitive health, and muscle preservation – critical areas for GLP-1 users.



Functional Beverages

From pre-meal hunger support drinks to protein formulas, our ingredients power beverages that contribute satiety, while delivery-digestive support, and metabolic benefits.



Healthy Snacking: Consumers are seeking convenient, low-sugar protein snacks. Balchem enables innovation in this space with clean-label, plant-based, fiber formats.



Balchem's Answer to the GLP-1 Era

As a trusted expert in Human Nutrition and Health, **Balchem is uniquely positioned to support this consumer shift.** Our science-backed ingredients and formulation expertise enable customers to develop GLP-1 companion products that address emerging health gaps and meet evolving consumer expectations.

Why It Matters

GLP-1 drugs are not just a trend – they represent a **structural shift in consumer behavior.** With 30 to 50 million Americans estimated to be eligible for anti-obesity medications, the demand for better-for-you products is accelerating. Balchem's HNH portfolio is already aligned with this movement, offering solutions that are **nutritionally relevant, scientifically validated, and market-ready.**

What's Next

To showcase our approach, Balchem will launch a dedicated GLP-1 microsite in **Q4 2025**, highlighting ingredient solutions, scientific insights, and product concepts. We'll also be at **SupplySide Global in Las Vegas**, where visitors can explore our GLP-1 support innovations firsthand.

If you're attending **SupplySide Global in Las Vegas, October 28 - 31**, don't miss the chance to connect with our team. Let's shape the future of health together – see you there!

Reference:

[1] EY-Parthenon GLP Consumer Survey (Spring 2024, Spring 2025)



Our Promises:

Flavor, Preservation, Leavening

Cakes and cookies have long been go-to treats for celebrations, comfort, and pure indulgence.

Whether you're hosting a party or simply craving a sweet delight, cakes and cookies offer the perfect solution. Dive into the world of flavors and textures that make these baked goods irresistible with BakeShüre® Encapsulated Leavening Systems and INhance™ Inclusions.

More than just desserts, cookies and cakes are a celebration of flavors and textures that cater to diverse dietary needs and preferences.

With options like dairy-free, egg-free, and sugar-free, ensuring good texture is a must.

At Balchem, we are your partners to ensure that everyone can enjoy a slice of happiness with our delightful ingredient solution offerings.

Discover the delightful world, where indulgence meets quality.

Get inspired by TrenDish™.

Contact your account manager to ideate about the future of

- Bakery
- Beverage
- Frozen Desserts
- Meat Snacks

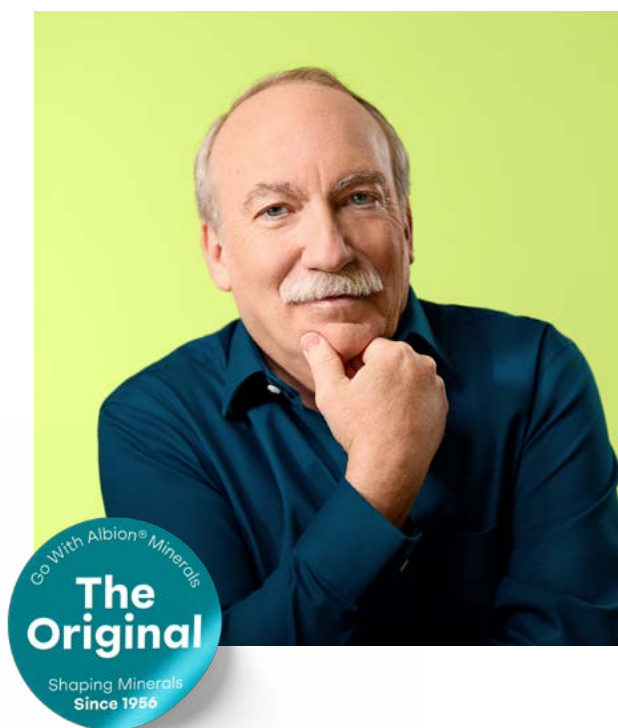


BakeShüre

INhance
inclusions



Celebrating Albion® Minerals: **A Legacy of Innovation**



» Albion® pioneered amino acid chelates – long before they became the industry standard. My grandfather Harvey Ashmead transformed nature’s concept into validated science, with proven absorption and real bioavailability. We are the original, and still the leader.

Stephen Ashmead, Sr Fellow for Chelates R&D at Balchem Corp.

At Albion® Minerals, we honor our roots and the pioneering spirit that has driven us for decades.

Our legacy began with Harvey H. Ashmead, the pioneer of amino acid chelate technology, and continues today through his grandson, Stephen Ashmead, Sr Fellow for Chelates R&D at Balchem Corp.

As we honor our history, we’re also shaping the future! Join us as we celebrate our rich history and our incredible newest innovations.

Discover the legacy of innovation and excellence that defines Albion® Minerals.

Click the link to learn more about the people behind Albion® Minerals, and how we continue to lead the industry with groundbreaking solutions.





New Study Shows Association of Serum Folate Levels to **"Epigenetic Age Deviation"**

A newly published study in The American Journal of Clinical Nutrition reports that older adults with higher serum folate are more likely to have a lower "epigenetic age deviation".¹

The study shines a light on the importance of folate in cellular and epigenetic health, unlocking new opportunities for supplement formulators to innovate in the healthy aging space.

Folate and Epigenetic Age

"This latest study analyzed the cross-sectional National Health and Nutrition Examination Survey (NHANES) – a large, gold-standard data set – using powerful, cutting-edge machine learning tools known as epigenetic clocks," comments Eric Ciappio, PhD, RD, Senior Manager, Nutrition Science, Balchem HNH. "Epigenetic clocks examine the levels of DNA methylation at specific points on the genome that change with age, to help quantify variations in biological versus chronological aging. This difference is known as epigenetic age deviation (EAD).² This recent study was particularly interesting as it tested for associations between EAD and nutritional biomarkers associated



» These findings underscore the importance of folate in epigenetic health.

Eric Ciappio, PhD, RD, Senior Manager, Nutrition Science, Balchem HNH

with one carbon metabolism. This essential biochemical pathway supports many physiological processes, including balanced methylation."

Analyzing data from over 2,000 adults aged 50-85, researchers found that increased serum folate (a promoter of one carbon metabolism) was associated with lower EAD in several of the epigenetic clock tools examined. Conversely, increased levels of blood homocysteine (an indicator of one carbon metabolism deficiencies) were associated with higher EAD in several epigenetic clock tests as well.

"These findings underscore the importance of folate in epigenetic health," comments Ciappio. "Folate plays an essential role, supplying methyl groups to be used in DNA methylation, a fundamental process which regulates gene expression and supports genomic stability.^{3,4} As we age, our global DNA methylation levels decrease.⁵ This is where folate's methyl-donor function comes into play – helping to maintain cellular health and optimize the integrity of our genetic material."

The New Frontier of Healthy Aging

"In recent years, terms like 'cellular health' and 'epigenetic health' have started to move from scientific literature into the healthy aging mainstream," adds Lauren Eisen, Sr. Marketing & Business Development Manager, Minerals and Nutrients at Balchem. "This study signals the potential for folate to drive innovation in this space through its methyl-donor function. The key point here is that every methyl counts. That's why we developed our first-of-its-kind, choline-enriched folate salt, Optifolin+®, which delivers seven times the methyl groups found in other folate products – uniquely positioning the ingredient to promote balanced and effective methylation throughout life."

For more information about Balchem and its choline-enriched folate brand Optifolin+®, click here:



Optifolin+®



References:

- [1] Bozack, A., et al. (2025). One-carbon metabolism-related compounds are associated with epigenetic aging biomarkers: Results from the cross-sectional National Health and Nutrition Examination Survey (NHANES) 1999-2002. *The American Journal of Clinical Nutrition*.
- [2] Horvath, S., & Raj, K. (2018). DNA methylation-based biomarkers and the epigenetic clock theory of ageing. *Nature reviews genetics*, 19(6), 371-384.
- [3] Menezo, Y., et al. (2020). Methylation: an ineluctable biochemical and physiological process essential to the transmission of life. *International journal of molecular sciences*, 21(23), 9311.
- [4] Greenberg, M. V., & Bourc'his, D. (2019). The diverse roles of DNA methylation in mammalian development and disease. *Nature reviews Molecular cell biology*, 20(10), 590-607.
- [5] Heyn, H., et al. (2012). Distinct DNA methylomes of newborns and centenarians. *Proceedings of the National Academy of Sciences*, 109(26), 10522-10527.



Balchem at IFT FIRST Chicago 2025: **Driving Innovation in Food Science**

IFT FIRST Chicago, the Institute of Food Technologists' Food Improved by Research, Science, and Technology event, is the world's largest expo dedicated to food science and innovation. This year's show highlighted the latest in food and beverage advancements, with a strong focus on emerging consumer trends and cutting-edge formulation strategies.

Our Flavor and Encapsulate team showcased a range of innovative solutions, including the MeatShure® line for snack sticks and beverage flavor systems. These technologies were brought to life through exciting concept applications such as Meat Snack Sticks, Ready-

to-Drink Energy Drinks, and Ready-to-Drink Hydration Water.

Our Powders and Cereals team introduced a GLP-1 support beverage featuring StabiliPro™ Inulin and 19096-NPH. Another featured concept was a plant-based chocolate oat creamer soft serve made with Balchem's oat creamer, added soy protein, and StabiliPro™ Inulin. Both applications demonstrated how our systems align with growing consumer interest in gut health, protein-rich products, and functional ingredients.



VitalBlend 



Taste of Science Presentations Spotlight Sugar-Free Meat Snack Innovation and GLP-1 Support

A key highlight of the event was the "Taste of Science" presentations delivered by Ryan Goeser, Account and Business Development Manager for Meat; Lois Baker, Senior Scientist - R&D Product Development; and Jessica DiFabbio, Account Manager for Powders and Cereals.

Ryan's session, titled **"Encapsulation Technology for Zero-Sugar Meat Snacks and Scaled-Up Production"** focused on how MeatShure® Acidulants can help manufacturers replace traditional starter cultures and sugar sources in meat snack sticks. This approach enables sugar-free formulation while improving production efficiency, reducing manufacturing time, and enhancing product consistency.

Lois and Jessica presented "Formulating for Today's Consumer - High Protein, Healthy Fats, and High Fiber," emphasizing how this nutritional profile is essential in supporting individuals following healthy weight management lifestyles. Additionally, GLP-1 companion and support products are rapidly shaping the future of food, with strong interest in ingredients that align with this growing category.

Balchem's participation at IFT FIRST 2025 underscored our commitment to delivering science-backed, consumer-focused solutions that meet the evolving needs of the food and beverage industry. Contact us today.



The
**Balchem
Beat**



MeatShure®



Discover the Beauty Power of OptiMSM®: Science-Backed Benefits for Radiant Skin

OptiMSM®

What makes OptiMSM® a standout ingredient in the beauty-from-within space? Find out in this exclusive SupplySide Supplement Journal Editorial Webinar featuring Dr. Eric Ciappio, PhD, RD, Senior Manager of Nutrition Science at Balchem.

Discover the science behind the beauty mineral, as you're guided through the latest research on how MSM:

- Supports collagen formation and key skin components like dermatan sulfate and hyaluronic acid
- Supports the body's network of defenses by supporting the production of glutathione, a crucial antioxidant that helps support the immune system

- Delivers measurable improvements in 7 markers of skin health
- Works as a standalone ingredient or as a support for collagen formulation

If you're in R&D, formulation, marketing, or purchasing, this is a must-attend session to stay ahead of the curve in beauty-from-within innovation.

Click here to watch this event on-demand: Nutricosmetics: The Long View on Beauty





CRN's 2025 Innovation Exchange: **Spotlight on Brain Health**

The Council for Responsible Nutrition (CRN), the leading trade association for the dietary supplement and functional food industry, is set to host its signature **Innovation Exchange** event at **the Ritz-Carlton, St. Louis**, from **October 8-10**.

This premier gathering brings together industry leaders, scientists, and innovators to explore the future of nutrition. A steering committee of experts selected the final lineup, and we're proud to announce that **Tom Druke**, Sr. Marketing & Business Development Manager, and **Eric Ciappio, Ph.D., R.D.**, Sr. Manager, Nutrition Science, will take the stage to present:

**"Empowering Brain Health:
The Nexus of Science, Form,
and Dosage"**

Attendees will get an exclusive first look at our latest innovations, including:

- New research on **VitaCholine®** and its impact on brain function in post-menopausal women
- Patented technologies for **improved tableting applications**
- Turnkey solutions for **high-dose capsule applications**
- And much more!



Save the date: October 8th
Location: Ritz-Carlton, St. Louis

We look forward to seeing you there!





Supplement Industry & Functional Food Trends

E-Commerce Drives

Supplement Channel Growth

The supplement industry continues to see robust expansion, with e-commerce leading the way. According to the Nutrition Business Journal 2025 Business Report, the e-commerce channel is experiencing double-digit growth (10%+ annually), outpacing all other sales channels. Online platforms like Amazon and iHerb are key contributors to this surge. Notably, e-commerce is projected to surpass mass-market sales by 2028, signaling a major shift in consumer purchasing behavior and channel strategy for supplement brands and suppliers.

Key Figures



- E-commerce supplement sales are forecasted to reach \$17.75 billion in 2025, with continued strong growth through 2028.
- Mass market and practitioner channels are also growing, but at a slower pace.
- Traditional channels such as mail order and MLM/network marketing are either flat or declining.

Source: Nutrition Business Journal 2025 Business Report



↑17.75 B

E-commerce supplement sales
forecast for 2025





Functional Food Innovation:

Health Claims Fuel Growth

In the fruit-based snacks, juice drinks, and fruit juices/nectar category, overall product launches have declined slightly (-0.9%). However, there is a bright spot: Launches featuring active health claims are on the rise. Products fortified with vitamins/minerals and those promoting immune health benefits now account for the largest share of new launches with health claims.

Takeaway

The supplement and functional food markets are evolving rapidly, with digital channels and health-driven innovation at the forefront. Companies that prioritize e-commerce strategies and invest in products with clear, science-backed health claims are best positioned for growth in the coming years.

Key Insights



- Despite a slight overall category decline, health-focused innovation is driving new product activity.
- The compound annual growth rate (CAGR) for launches with active health claims from 2020 to 2024 is 2.53%.
- Brands emphasizing functional benefits – especially immune support and fortification – are capturing consumer interest and shelf space.

Source: : Innova Market Insights

Events — See You There

09—10
SEPT 2025

Diet and Optimum Health Conference

OSU Linus Pauling Institute, Corvallis, Oregon

13—17
SEPT 2025

IBIE

Booth 6762, Las Vegas, NV

17—19
SEPT 2025

VitaFoods - Asia

Bangkok, Thailand

08—09
OCT 2025

Food Tech Summit & Expo

Mexico City, Mexico

08—10
OCT 2025

CRN Annual Meeting

St. Louis, MO

29—30
OCT 2025

Supply Side Global

Las Vegas, NV

05
NOV 2025

Regional IFTs: Chicago

Rosemont, IL

Schedule a meeting with us, here:



Webinar

23
SEPT 2025

Optifolin® - SupplySide Supplement Journal Custom Webinar

Register here:



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