



The Balchem Beat

Strong Partnership
Balchem and
Stauber Performance
Ingredients

Most Important
Nutrients
for Mental Health

The Power of
Plant-Based
Powdered Blends

2024 – Bakery
Consumer Trends

Potential of
Vitamin K2 MK-7 for
Heart Health

Market Trends

Upcoming Events



Issue 20 March 2024



balchem[®]
HUMAN NUTRITION & HEALTH



Editor's Note:

Exciting news! This edition marks the beginning of a strategic partnership that strengthens our commitment to delivering exceptional nutrition solutions. Balchem has appointed Stauber Performance Ingredients as the preferred distributor for some of our key brands in the USA and Canada, further expanding our reach and capabilities.

We also delve into the often-overlooked nutrients crucial for mental health, especially in today's stress-filled world. Discover the roles of Choline, Magnesium, and Iron in cognitive function and explore solutions from Balchem to empower your mental and cognitive well-being journey.

For those seeking plant-based solutions, VitalBlend™, our line of innovative powdered blends, offers customizable and convenient ways to enhance your health with essential plant-based proteins.

Our Science Update features groundbreaking research highlighting the potential of vitamin K2 MK-7 for heart health. Learn about the promising findings of the AVADEC study on coronary artery calcification, emphasizing the importance of vitamin K2 and D supplementation.

Finally, we explore bakery trends emphasizing unique and memorable flavors with our INhance™ Inclusions and delve into the merging of beauty and health in the Market Trend section. This section looks at the evolving landscape of supplements and lifestyle risks in the digital age.

We hope this newsletter provides valuable insights into trends and innovations shaping the future of nutrition and health. As we navigate these advancements, Balchem remains dedicated to developing solutions that empower your business to thrive in this ever-evolving landscape.

Wishing you health and vitality,
The Balchem Beat Editorial Team





Balchem Appoints Stauber Performance Ingredients as the Preferred Distributor in USA and Canada

Strong Partnership

"Following a recent series of acquisitions, including Bergstrom with OptiMSM®, we have consolidated our network and decided to appoint Stauber as our preferred supplier in the USA and Canada. Stauber's outstanding knowledge of our product offering, and our customers' satisfaction led us to upgrade the partnership, helping us in our commitment to deliver business continuity and customer success. This renewed alliance will also enable us to meet the increasing market demand for Balchem' solutions."

Frédéric Boned, Senior VP & General Manager,
Balchem Human Nutrition & Health

**For more information about
Balchem and its brands:**



**For more information
about Stauber:**



Balchem Human Nutrition and Health (HNH), and leading US supplement distributor Stauber Performance Ingredients, jointly announce a new distribution partnership in the US and Canada. Building on their longstanding relationship, Balchem recently appointed the distributor as the Preferred Supplier for its Albion® Minerals, OptiMSM®, VitaCholine® and VitaShure® brands.

The synergistic collaboration is poised to provide added value through a deep understanding of market needs and an extensive knowledge of blends, while also enabling both companies to meet the demand for

additional support and customized solutions. Broadened to include Albion® Minerals and OptiMSM®, Stauber's portfolio will assist specific customer segments in consolidating their buying processes and addressing any potential R&D and production challenges. Leveraging a significant network of strategically located warehouses, Stauber's infrastructure and technological capabilities will synergize with Balchem's extensive global presence, including 22 manufacturing facilities, 7 technology centers, and 7 regional offices. This will be pivotal in further improving reach and operational efficiency, across the US and Canada.

"As our relationship with Balchem continues to grow, we are honored to be chosen as the Preferred Supplier for the USA and Canada for Albion® Minerals, OptiMSM®, VitaCholine®, and VitaShure®. Our partnership with the company has deepened over the years, guided by our shared commitment to quality products and excellent service. We're looking forward to continuing to strengthen our close alliance with Balchem to successfully support our joint customers and the nutrition industry."

Patrick Hawkins, CEO, Hawkins - Stauber Performance Ingredients

Most Important Nutrients for Mental Health

In a world where stress levels are on the rise – according to the American Psychological Association, 65% of adults reported moderate to high stress in the past month – taking care of our mental health has never been more crucial ⁽¹⁾.

Stress manifests in various ways – muscle tension, pain, stomach upset, and sleep disruptions, just to name a few. Amidst the chaos, it's time to explore the often-overlooked nutrients – choline, magnesium, and iron – that support a peaceful and resilient mind.



Choline

Brain-Boosting Nutrient

Choline is a crucial nutrient that often doesn't receive the attention it deserves. Your brain and nervous system need it to regulate memory, mood, muscle control, and other functions. You also need choline to form the membranes that surround your body's cells. You can make a small amount of choline in your liver, but most of the choline in your body comes from the food you eat ⁽²⁾. Ensuring an ample supply of choline in your diet can support your cognitive performance.

Sources of Choline ⁽³⁾

- Eggs
- Meat, especially chicken and beef
- Fish, such as salmon and cod
- Dairy products
- Dietary supplements and fortified foods

[VitaCholine® | Human Nutrition and Health \(balchem.com\)](https://www.balchem.com/human-nutrition-health)

Magnesium

The Relaxation Mineral

Magnesium is a nutrient that the body needs to stay healthy, and it plays an important role in the relaxation of cells in the body ⁽⁴⁾. Magnesium is important for many processes in the body, including regulating muscle and nerve function, blood sugar levels, and blood pressure and making protein, bone, and DNA ⁽⁵⁾. Magnesium also helps regulate the stress hormone cortisol, which can support the sense of calmness, and promote improved sleep ^(6,7).

Sources of Magnesium ⁽³⁾

- Leafy green vegetables, like spinach and kale
- Nuts and seeds, such as almonds and sunflower seeds
- Whole grains, including brown rice and quinoa
- Fish, particularly mackerel and tuna

[Magnesium | Human Nutrition and Health \(balchem.com\)](https://www.balchem.com/human-nutrition-health)

Iron

Oxygenating the Brain

Iron is an essential mineral for transporting oxygen throughout the body, including the brain. A well-oxygenated brain is essential for optimal cognitive function and mental alertness. Iron deficiency can lead to fatigue, difficulty concentrating, and impaired cognitive function ⁽⁸⁾.

Sources of Iron ⁽³⁾

- Lean meats, like beef and poultry
- Legumes, including lentils and chickpeas
- Dark leafy greens, such as spinach and kale
- Fortified cereals and grains

[Iron | Human Nutrition and Health \(balchem.com\)](https://www.balchem.com/human-nutrition-health)

Balchem Solutions:

Investing in your mental health is an investment in your overall quality of life. By nourishing your body and mind with the right nutrients, you can empower yourself to face life's challenges with resilience and clarity.

While we understand that life can get busy, and maintaining a perfectly balanced diet might not always be feasible, Balchem Corporation, a leader in nutritional solutions, offers a range of dietary ingredients designed to support your mental and cognitive health journey. These ingredients provide a convenient way to ensure your body receives the essential nutrients it needs, even on the most hectic days.

For more information on our choline, magnesium, and iron products, click the links above. Remember to consult with a healthcare professional or a nutritionist to personalize your dietary needs based on your individual health requirements.

References

- 1) [APA 2023 Stress in America Topline Data](#)
- 2) [Choline - Health Professional Fact Sheet \(nih.gov\)](#)
- 3) <https://fdc.nal.usda.gov/>
- 4) <https://www.ncbi.nlm.nih.gov/books/NBK109816/>
- 5) [Magnesium - Health Professional Fact Sheet \(nih.gov\)](#)
- 6) [Magnesium and stress - Magnesium in the Central Nervous System - NCBI Bookshelf \(nih.gov\)](#)
- 7) [Oral magnesium supplementation for insomnia in older adults: a Systematic Review & Meta-Analysis | BMC Complementary Medicine and Therapies | Full Text \(biomedcentral.com\)](#)
- 8) [Iron - Health Professional Fact Sheet \(nih.gov\)](#)

*These statements have not been evaluated by the Federal Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

[balchem.com/human-nutrition-health](https://www.balchem.com/human-nutrition-health)
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The
Balchem
Beat

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VitalBlend™
Plant-based

VitalBlend™

The Power of Plant-Based Powdered Blends

In our quest for optimal health and vitality, incorporating nutrient-rich foods into our daily routine is essential. One innovative and convenient way to achieve this is through plant-based powdered blends. These versatile blends offer a wide array of benefits that have the potential to revolutionize our wellness journey.

What's VitalBlend™?

VitalBlend™ is Balchem's line of lipid-based powders available with both plant-based and dairy-based proteins. There are a variety of plant-based proteins like peas, chickpeas, and soy. Each of these has different characteristics that can alter the nutritional value, mouthfeel, color, and flavor of the products they are used in.

Why VitalBlend™?

These powdered blends contain a wide range of fat, protein, and carbohydrate sources at varying concentrations and can be fully customized to support your consumers' health and vitality.





VitalBlend™ offers multiple benefits:

- **Sourced from coconut, palm, or palm kernel oil for a wide range of fats:** Fats are essential to give your body energy, support cell function, and aid in the absorption of vitamins in the diet. ⁽¹⁾
- **Includes fiber and protein:** VitalBlend™ contains fiber and protein, two essential nutrients that play vital roles in supporting overall health. Fiber aids in digestion, promotes satiety, and supports heart health. Protein is crucial for building, and repairing tissues and supports various metabolic functions⁽¹⁾
- **Simplified ingredients with no added sugars options:** By avoiding added sugars, VitalBlend™ provides a healthier option for consumers who want to minimize their sugar intake. Leverage Balchem's expertise in spray drying and agglomeration technologies. Create functional nutritional powders for today's active consumer lifestyle with a variety of choices including organic peas, coconut, avocado, sunflower, and more. VitalBlend™ can be easily added to a variety of beverages and bar mixes.

Incorporating plant-based powdered blends into your daily routine can be a powerful strategy for maintaining health and vitality. Whether added to smoothies, mixed into yogurt, or incorporated into recipes, plant-based powdered blends can provide a simplified, clean-label plant-based ingredients alternatives to support your well-being.

Contact us today!



To learn more about VitalBlend™ plant-based lipid powders with protein, and the rest of our product line, [click the link to read our Solutions Guide](#) and contact us today!

References

1) Institute of Medicine. 2005. Dietary Reference Intakes for Energy, Carbohydrate, Fiber, Fat, Fatty Acids, Cholesterol, Protein, and Amino Acids. Washington, DC: The National Academies Press. <https://doi.org/10.17226/10490>.



2024 Bakery Consumer Trends

Consumers are looking for brands to liven up bakery with unique and memorable flavors and create product versatility.

Our INhance™ Inclusions can present unique flavors to bakery concepts. This easy drop-in technology can provide quick color and flavor changes to cookies and breads.

Want some flavor inspirations?

Our 2024 TrenDish™ trends and tasting concepts are coming soon. Don't delay, schedule a meeting today and get inspired by our 4 memorable flavors.



Promising Potential of Vitamin K2 MK-7 for Heart Health

The Aortic Valve Decalcification Trial – also known as the AVADEC study – is a clinical trial investigating the impact of daily vitamin K2 and D supplementation on CAC progression – which is strongly associated with a higher risk of heart disease and negative cardiovascular events. No significant effect was observed on the CAC score in the total group. However, the peer-reviewed research in JACC did find that two years of all-*trans* vitamin K2 MK-7 (720 µg/d K2VITAL® DELTA vitamin K2 MK-7) and vitamin D (25 µg/d) intervention in a subgroup analysis of participants at high-risk of CAC (CAC score \geq 400 AU)

K2VITAL® DELTA

Groundbreaking research in the dynamic cardiovascular health space continues to underscore the potential of vitamin K2 MK-7 as a heart health supplement. The latest findings from a peer-reviewed paper – published in the Journal of the American College of Cardiology (JACC) – reveal the potentially positive effects of vitamin K2 MK-7 and vitamin D intake on coronary artery calcification (CAC) progression specifically. ⁽¹⁾

The principal investigator of the study, Professor Axel Diederichsen, Odense University Hospital in Denmark, comments on the findings:

“Scientific observations reveal that vitamin K2 and D supplementation play an important role in heart health – but there is limited research that delves deeper into the mechanism of action behind this benefit. Our research set out to fill this gap in knowledge, with discoveries from the subgroup analyses offering promising insights into the role of both vitamins in calcification in specific populations.”

with no prior ischemic heart disease (heart weakening) significantly slowed down the progression of the CAC score. Statin users also displayed a significant slowdown in the progression of the CAC score following vitamin K2 and D intervention. A further noteworthy observation was that the number of adverse “events” in patients – that is, acute myocardial infarctions, coronary revascularizations, and all-cause deaths – was lower in the group receiving vitamin K2 MK-7 and D supplementation compared to placebo.

Promise of K2 MK-7 in Arterial Health

In addition to its possible role in CAC progression, the potential of vitamin K2 MK-7 is being investigated in arterial health as well. One recent study demonstrated that 24 weeks 375 µg/d K2 MK-7 intake provided a beneficial impact on lowering the rate of arterial stiffness progression in chronic hemodialysis patients with diabetes.⁽²⁾ Another trial highlighted the effect of 360 µg/d K2 MK-7 on arterial elasticity in vitamin K-deficient kidney transplant recipients after 12

weeks; it concluded that K2 intervention supports healthy progression of arterial stiffness.⁽³⁾

Navigating K2 options

Balchem’s K2VITAL® DELTA ingredient provides typically 99.7% all-*trans* vitamin K2 MK-7, identical to the K2 molecule found in nature and fully bioactive. With excellence, purity, unmatched stability, and patented processes, Balchem aims to bring the best possible health benefits to consumers around the world, including support for bone, heart, and immune health.

To learn more about Balchem’s solutions for vitamin K2 MK-7 innovation, visit our website. 

Trygve Bergeland, Director Nutrition Science, Kappa Bioscience® comments:

“As an industry-leader in vitamin K2 MK-7 scientific excellence, we remain at the forefront of cutting-edge research in the field – and we are excited to have uncovered findings that are important for the future of our understanding of the heart health space. These latest discoveries in CAC progression and arterial stiffness are a step forward for heart health solutions and will most certainly open up new development opportunities. It’s particularly exciting that our K2VITAL® DELTA vitamin K2 MK-7 is projected to be at the heart of innovation.”

References

- 1) Hasifc et al. Effects of vitamin K2 and D supplementation on coronary artery disease in Men: A RCT. JACC, 2023;2(9):100643.
- 2) Naiyarakserree et al. Effect of menaquinone-7 supplementation on arterial stiffness in chronic hemodialysis patients: A multicenter randomized controlled trial. Nutrients, 2023;15(11):2422.
- 3) Eelderink et al. Effect of vitamin K supplementation on serum calcification propensity and arterial stiffness in vitamin K-deficient kidney transplant recipients: A double-blind, randomized, placebo-controlled clinical trial. Am J Transplant, 2023;23(4):520-530.

*These statements have not been evaluated by the Federal Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.



Supporting the Healthspan: Beauty from Within

Beauty regimes are incorporating more elements that focus on how food, beverage, and supplements can support an attractive appearance and youthfulness.

- **Collagen & Colostrum** With purported holistic health, immunity and beauty benefits, colostrum might be at the center of the next collagen craze iteration.
- **Honing Hydration** Finding methods to improve water consumption and potency, refined with lower sugar options primed for added functionality
- **Finding Nature's Ozempic** Shoppers are seeking supplements with metabolism enhancing properties

Source: SPINS.com



Events

SEE YOU
THERE

★ **Regional IFT Southern California, 3/12/24**
Garden Grove, CA

★ **IDFA Ice Cream Tech (4/9 – 4/10)**
Clearwater, FL

★ **SupplySide East (4/16 – 4/17)**
Secaucus, NJ

★ Schedule a meeting with us, here: 



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