

WHAT'S INSIDE?

VITAFOODS EUROPE 2019

FEATURES



MOVING WITH THE TIMES™

Discover the launch of Lonza's new portfolio and how it is helping customers to capitalize on unmet demands for innovative joint health products

PG2



TIME FOR COLOR

We sat down with Morgan Laloux, Business Development Manager at Lonza, to discuss where the clean-label trend is heading and Lonza's latest innovations

PG3



VCAPS® PLUS WHITE OPAL™

The new Vcaps® Plus White Opal™ capsule addresses demand for opaque capsules that do not include titanium dioxide

PG3

INTERVIEW

CREATING FUTURE-PROOF SUPPLEMENT PRODUCTS



Technology is driving change across the food supplements industry. We speak to **Beth Tormey, Senior Vice President, Head of Global Business Unit, Lonza Consumer Health & Nutrition** to find out how supplement brands can innovate and boost product appeal in the eyes of the connected and informed consumer.

Consumer-led innovation

The ways in which consumers are engaging with their wellbeing are evolving. Shoppers today have a better understanding of their own health needs, and are seeking more customized solutions that address targeted areas of concern. The internet, in particular, continues to shape the trend for personalization and is shifting the ways that consumers are buying supplement products, with online channels seeing a 91% growth in sales from 2009 to 2017.¹

While this is particularly true for Millennials, similarities remain across the generations. Issues normally associated with older consumers, such as promoting joint health, boosting immunity and supporting healthy vision, are also increasingly important to Millennial consumers, as are supplements that provide energy. A survey, commissioned by Lonza and conducted in the US, found that the use of condition-specific supplements is on the rise across all demographic groups.² This creates opportunities for supplement brands to create relevant products in line with the latest trends.

Alongside their personal health needs, consumers are also more attuned to the wider impact of their activities on the world around them. Natural, free-from, non-GMO, vegetarian

and vegan products are moving from the niche to the mainstream, and the clean-label movement continues to evolve as it gathers pace. Innovations in both ingredients and delivery systems continue to support brand owners in developing on-trend, label-friendly supplement products.

Connecting the dots

The food supplements market has always been fast-moving, and advances in technology mean the pace of change shows no signs of slowing down. Ingredients and dosage forms, from leading global health and nutrition providers, such as Lonza hold huge potential for manufacturers and brand owners to capitalize on growing consumer interest in supplement products that deliver proven results.

Learn more at stand G10 to find out how we can support you in meeting evolving consumer demands through our science-backed ingredients, dosage forms and finished product formulations.

¹ NMI SORD US study – 2017
² Ibid.



WELCOME

MAKE MORE POSSIBLE AT VITAFOODS EUROPE 2019

Welcome to Vitafoods Europe 2019! From new science-based formulations to our extended clean-label capabilities, we are excited to bring you our latest innovations. We are committed to providing customers with products and services meeting all specifications and fulfilling consumer needs and expectations. The highest priority and emphasis are placed on the integrity of our products, their safe manufacture and distribution and compliance with environmental and other relevant regulations. Our actions, on a global scale, take into account our impact on the planet and society as a whole and we aim to improve our environmental footprint by reducing energy and material demand per unit by 2030.

At this year's exhibition, we are the Official Capsule Sponsor and our expert team is at stand G10 to explain why our Capsugel® portfolio continues to set new standards in quality, manufacturing and service. In light of the evolving regulatory landscape, Vitafoods Europe also marks the launch of a semi-opaque, titanium dioxide-free solution to our range of high-performance vegetarian capsules.

Of course, dosage forms are only part of the integrated capabilities that Lonza now offers to consumer health and nutrition companies across the EMEA region. Visitors to our stand at Vitafoods Europe can find science-based innovations centered around our UC-II® joint health ingredient. In addition, visitors will be able to learn more about our ready-to-go products for popular market segments such as healthy aging and active nutrition.

At Lonza, the entire team enjoys Vitafoods Europe as a great occasion to meet with customers – new and old. We invite you to sample a coffee from our barista, Brian, as you discover how we can help make more possible for your business.

Joachim Meier,
Director, Head of Sales EMEA,
Lonza Consumer Health
& Nutrition



INTERVIEW

MOVING WITH THE TIMES™: NEXT GENERATION JOINT HEALTH INNOVATION



For today's aging population, maintaining the ability to move around like we always have is a top priority. However, mobility is no longer just a concern that affects seniors. Consumers across the generations are now looking for solutions to promote aging well and achieve peak physical performance in the short term.

Joint health plays a pivotal role in protecting mobility. 76% of Boomers and 69% of Gen X supplement users in Germany, France and Italy state that they would consider taking joint health supplements to support mobility at all stages of life. However, recent years have seen a lack of real differentiation in new products entering the market.

Here, Dominik Mattern, Associate Director Business Development, Lonza Consumer Health & Nutrition explains how the launch of Lonza's new Moving with the Times™ portfolio is helping customers to capitalize on unmet demands for innovative joint health products.

What is the Moving with the Times™ platform?

The Moving with the Times™ platform is a range of joint health solutions, designed to support consumers of all ages in maintaining active lifestyles for longer through convenient, safe and effective food supplements. Drawing on selected, high performance ingredients, the portfolio centers around Lonza's UC-II® undenatured type II collagen. The UC-II® ingredient has a unique mode of action and is clinically proven to trigger the natural rebuilding of cartilage, so improving joint comfort, mobility and flexibility.

The performance and consumer appeal of UC-II® undenatured type II collagen can also be further optimized through the choice of dosage format. Lonza's industry-leading Capsugel® capsule technologies enable the safe and secure containment of both liquid and powder ingredients, without compression or aggressive handling of the undenatured type II collagen. Capsules are also a preferred dosage form for consumers, as the premium Vcaps® Plus capsules enable the formulation of the small 40 mg required dose of the UC-II® ingredient in a convenient, once-per-day solution.

Why did you decide to launch the platform?

At Lonza, we are committed to enabling our customers to meet the latest consumer demands via differentiated health products. With Moving with the Times™, we saw an opportunity to bring exciting new innovations to the market. The solutions that we have developed support mobility across all ages, including in the growing number of active, older individuals, and have been created with the needs of today's consumers in mind.

Where can people find out more about the solutions available?

The latest ready-to-go products are being presented at stand G10 at this year's Vitafoods Europe, with for example vitamins C and D3 delivered in combination with the UC-II® ingredient to support EFSA health claims. This includes a series of unique combination products where the UC-II® brand is formulated with other complementary ingredients, such as omega-3s, vitamin C and vitamin D3 or a powerful combination of highly bioavailable curcumin, vitamin C, manganese and copper for anti-inflammatory benefits. UC-II® undenatured type II collagen can also be delivered alongside vitamin K2 in a Licaps® liquid-filled hard capsule, providing an all-in-one bone and joint health solution.

DON'T MISS OUR SPEAKER SESSION

Discover more about Lonza's Moving with the Times™ platform and a new generation of ready-to-market innovative formulations, including those featuring the unique UC-II® undenatured type II collagen. In 'Moving with the Times™: A New Generation of Joint Health Solution for Today's Consumer', Dominik Mattern will share the latest insights on the changing consumer landscape and the expectations of the aging, but active, consumer.

Join us in the Life Stages Theater (G220) from 14:20 CEST on Tuesday, 7 May 2019

INTRODUCING OUR READY-TO-GO PRODUCTS



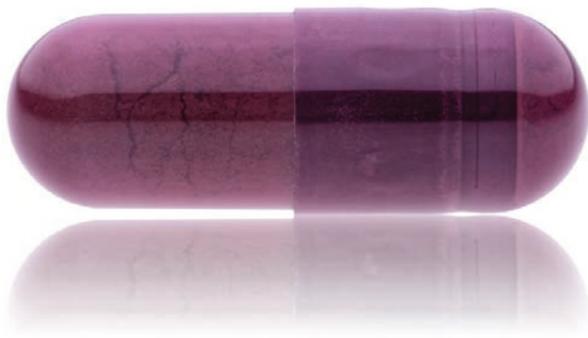
In the fast-moving consumer health and nutrition market, innovation is the name of the game. Whether it be through tapping into an up-and-coming ingredient trend, or creating solutions with unique branding potential, supplement brand owners are continually searching for the 'next big thing'.

Lonza's ready-to-go products have been designed to inspire innovation through an extended series of formulations, with a focus on the role of the dosage form in achieving true differentiation. The solutions on show at this year's Vitafoods Europe offer convenience, performance and varying release profiles to consumers across a range of popular market segments, including healthy aging and

active nutrition, as well as for specific life stages such as pre and post-natal.

In one ready-to-market product, a Licaps® liquid-filled capsule is used to deliver a high bioavailability HMB-free acid for sports nutrition, while another sees Carnipure® L-Carnitine feature in a scientifically-backed weight management solution. The Probiotics DUOCAP™ Combo concept, meanwhile, opens opportunities to enter new health categories, with applications beyond digestive health including immunity, skin and cardiovascular health, as well as sports nutrition.

Turn to page 4 to read more about the ready-to-go innovations on show at stand G10, Vitafoods Europe.



INTERVIEW

TIME FOR COLOR: STANDING OUT IN THE CLEAN-LABEL SPACE

The once niche clean-label trend has rapidly evolved into a global, mainstream movement that is changing the shape of the food supplements industry. We sat down with Morgan Laloux, Business Development Manager, Lonza Consumer Health & Nutrition, to discuss where the trend is heading and share details on Lonza's latest clean-label innovations.

What does the clean-label trend mean for consumers? How is it evolving?

While most trends vary across ages and demographics, the clean-label movement is an important purchasing driver across all consumer groups. Initially, clean-label was about eliminating unfamiliar ingredients and additives from labels; this is still important, but the focus is increasingly shifting to achieving vegan and natural positionings. Research commissioned by Lonza found that knowing the source of ingredients was a very important factor in the purchasing decision for 43% of US consumers.¹ The number of individuals seeking naturally-derived and plant-based supplement products has also increased by 59% and 60%, respectively, from 2013 to 2018.²

What is important when developing a clean-label food supplement?



With free-from, natural and organic all increasingly important purchasing drivers for many consumers, it is essential for brand owners to know how ingredients are sourced to deliver a network of excellence in the supply chain. However, the dosage form selection also plays a crucial role in supporting on-pack claims. As a pioneer in cutting-edge dosage form technologies, Lonza's Capsugel® Vcaps® Plus range is vegetarian and plant-based, consisting of only hypromellose (HPMC) and water and free from gelling agents. This allows manufacturers to create food supplements that align with consumer expectations.

How can Lonza help supplement brands stand out?

The demand for aesthetically-pleasing products is growing rapidly in today's online world; many supplement brands are looking to add vibrant colors to capsules to achieve a unique look. Following the launch of the Vcaps® Plus Blue Spirulina capsule last year and the recent Vcaps® Plus Purple Carrot capsule, Lonza is introducing new additions to its vegetarian food colored capsule portfolio at Vitafoods Europe. Lonza's Vcaps® Plus capsule range – made using HPMC and water only – will soon be able to be tinted using coloring foods, to achieve a naturally bright Red Radish or Spicy Yellow color. These next generation clean-label capsule solutions help manufacturers establish unique brand identities, and appeal to consumers seeking supply chain transparency and a natural positioning. Lonza has developed a logo, which is available to support customers in communicating these benefits to shoppers on the product packaging.

Can you tell us more about the Clean Label Alliance?

Vitafoods Europe 2019 marks the official launch of the Clean Label Alliance in Europe. As a founding member of the group in the United States, Lonza will be working to support manufacturers in meeting evolving consumer preferences for clean-label products. Any requests for support can be submitted via www.cleanlabelalliance.com.

¹ NMI SORD US study - 2018
² Ibid

VCAPS® PLUS WHITE OPAL™ CAPSULE: AN INNOVATIVE TITANIUM DIOXIDE-FREE SOLUTION



The new Vcaps® Plus White Opal™ capsule, which is designed to address growing demand for opaque capsules that do not include titanium dioxide, is soon to be introduced to the market. By using an alternative opacifier, the Vcaps® Plus White Opal™ capsule helps to mask unattractive food supplement ingredients, while offering a natural, semi-opaque look.

“Food-grade titanium dioxide, also known as E 171, is a common white pigment that has a long history of use in food supplement applications due to its brightness and opacifying properties,” explains Bram Baert, Regulatory Affairs Specialist, Lonza Consumer Health & Nutrition. “Recent scientific studies have, however, indicated potential risks associated with the presence of nanoparticles. Although further research is needed, these findings have prompted a debate on the use of titanium dioxide as a food additive.”

According to a survey commissioned by Lonza and conducted by the NMI in the UK, four out of five supplement users cite ‘unquestionable safety’ as a key decision-making factor when purchasing supplements.³ The new Vcaps® Plus White Opal™ capsule therefore puts Lonza at the forefront of innovation, enabling supplement brand owners and manufacturers to maintain safe, free-from and vegan positionings that address the latest trends.

³ NMI, SORD study UK, 2018

OFFICIAL CAPSULE SPONSOR

Lonza is proud to be the Official Capsule Sponsor of Vitafoods Europe 2019.

As a leader in capsule technology, we use Quality by Design (QbD) principles to implement robust manufacturing processes and continue to deliver high-performance Capsugel® capsules to our customers. At stand G10, visitors will be able to witness the excellent machinability of our popular Vcaps® Plus Purple Carrot vegetarian capsules in an on-stand demo. The capsules will be filled using our Ultra III™ cGMP-compliant machine for superior consistency in commercial capsule filling.

Visitors can also see the results of a collaboration between Lonza and RIBUS – another founding member of the Clean Label Alliance – via a live demonstration of how Nu-RICE® technology can improve the processability of clean label capsules.



Capsugel®

NEWS

WHAT'S ON SHOW AT VITAFOODS EUROPE 2019

Discover the latest innovative finished products from Lonza Consumer Health & Nutrition.



UC-II® Vitamin K2 in Licaps® capsule

A convenient, all-in-one joint and bone health solution, combining Lonza's UC-II® ingredient with vitamin K2 in a Licaps® liquid-filled capsule. The novel, highly efficacious product addresses the concerns of active consumers looking to maintain mobility as they get older.



UC-II® Omega-3 in SGC® Soft Gelatin capsule

A ready-to-market formulation combining UC-II® undenatured type II collagen and high EPA/DHA omega-3 fish oil in a SGC® Soft Gelatin capsule. The solution is ideal for consumers who are concerned about maintaining their mobility and healthy joints to keep an active lifestyle.



UC-II® Curcumin active in DUOCAP™ capsule

A DUOCAP™ capsule-in-capsule solution, which combines high-performance NovaSOL® Curcumin with the science-backed efficacy of UC-II® undenatured type II collagen, for improved joint comfort and flexibility.



Liquid Curcumin Boswellia in Licaps® capsule

Liquid-filled vegetarian Licaps® with a highly bioavailable plant-based formulation of NOVASOL™ Curcumin/Boswellia for men and women who want to maintain an active lifestyle, but also athletes who engage in intense exercise.



Boswellia Pure in Licaps® capsule

Highly bioavailable boswellic acid, formulated in a liquid-filled vegan and vegetarian Licaps® capsule. Sourced from the *Boswellia serrata* tree, Boswellia is known for its anti-inflammatory properties.



Vitaminize with vitamins in Licaps® capsule

Add branding power to your vitamin products with multivitamin beadlets and oils, in a perfectly sealed Licaps® Beadlets capsule.



Licaps® Digital Defense capsule

This liquid formulation hermetically sealed in a food colored Licaps® Purple Carrot capsule is a unique blend of antioxidants and carotenoids to improve eye health by reducing the risk of macular degeneration and the damaging effects of blue light.

NEWS

DUOEFFECTEV™: EYE AND SKIN NATURAL DIGITAL DEFENSE SYSTEM

At this year's Vitafoods Europe, Lonza Consumer Health & Nutrition will be presenting DuoEffectEV™, a two-part system to target eye and skin health from both inside and out against the effects of LED light from digital devices.

As many as 60% of consumers spend more than six hours a day in front of digital devices, which heavily rely on blue light to enhance screen brightness and clarity. This prolonged exposure can affect the overall appearance of the skin.



DuoEffectEV™ is an integrated regimen that meets consumer demand for whole body wellness and includes a food colored Licaps® Digital Defense Purple Carrot capsule containing a targeted blend of antioxidants and carotenoids to maintain eye health. The system also features a topical skin cream, DuoEffectEV™ ScreenLight™ Block 3D Urban Defense Gelée, with unique ingredients that help protect against the visible effects of blue light exposure.

Talk to one of our experts at stand G10 to find out more.

ENJOY A COMPLIMENTARY COFFEE BREAK WITH LONZA

For centuries, coffee has prevailed as one of the most popular beverages across the world. At this year's Vitafoods Europe, we'll be joined at stand G10 by a familiar face – our very own barista, Brian, who will be serving visitors delicious cups of coffee. But did you know that this brewed drink has been around since 900 BC? Numerous legends have reported that the coffee plant originated from Ethiopia, where a monastery experimented with coffee berries and created the tasty drink we know today.

The word "coffee" is believed to be derived from the ancient Arabic word, "qahwa", referring to a dark brew. Its popularity spread across the globe and, in the 17th century, coffee was introduced to Europe at the first Italian coffee house on the famous Piazza San Marco in Venice, which still exists to this day.

Today, 70% of the world's coffee is produced using the

botanical species of *Coffea arabica*, which can be found in regions such as East and Central Africa, as well as South America. This bean is low in caffeine and delivers an aromatic and sophisticated taste, as opposed to *Coffea robusta*, which is characterized by its robust and full flavor.

Grab a freshly brewed coffee from our barista, Brian, and meet the Lonza team at stand G10.