

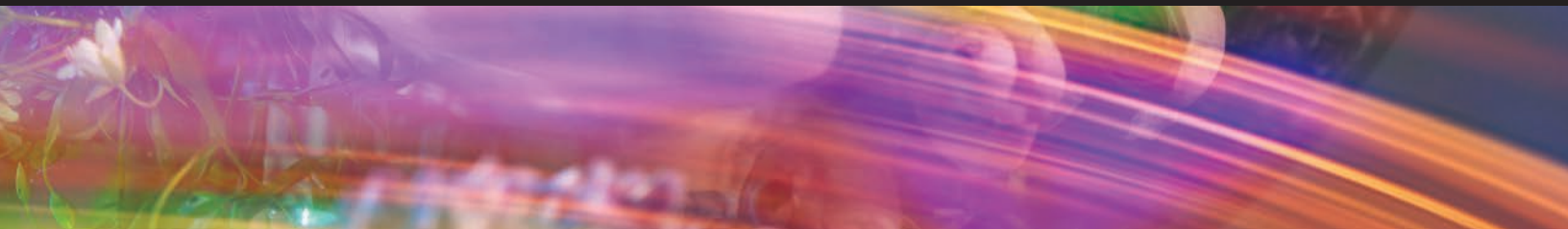


**GLOBAL  
COSMETIC  
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The Beauty Innovator's Resource

# The Next Wave of Beauty Ingredient Breakthroughs:

Highlights from the in-cosmetics Global  
Innovation Zone

April 2025



# The Next Wave of Beauty Ingredient Breakthroughs: Highlights from the in-cosmetics Global Innovation Zone

This year, in-cosmetics Global is unveiling a record-breaking **211 new ingredients in its Innovation Zone**, with *Global Cosmetic Industry* and *Cosmetics & Toiletries* magazines proudly serving as official media sponsors. These submissions showcase cutting-edge technologies from around the globe, offering a glimpse into the future of beauty innovation and claims. However, let's face it—211 ingredients can be overwhelming to sift through. That's why we've partnered to provide a concise overview of the key trends in ingredients and claims emerging from this year's Innovation Zone. In many cases, ingredient technologies overlap multiple trends simultaneously, for instance combining longevity and enhanced well-being claims. In addition to these trend outlines, this report also highlights actionable insights that marketers and product development teams can use to fuel their innovation strategies.

**Let's get started!**

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## AmelioSense™

### Calm the flame of pyroptosis – soothe irritated skin

AmelioSense™ offers a comprehensive approach to addressing skin irritation and redness. It specifically targets pyroptosis, a programmed inflammatory cell death recently linked to rosacea, while simultaneously reducing general skin inflammation. By combining the natural extract of shepherd's purse with a liposomal preparation of three powerful antioxidants, the combination is designed to tackle facial redness and irritation effectively.

#### AmelioSense™

- Reduces the appearance of visible blood vessels on the cheeks
- Decreases facial redness and blood flow
- Alleviates irritation
- Promotes a calm and balanced skin tone

AmelioSense™ – a promising new approach to target inflamed, irritated, and red skin.

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# The Mind-Beauty Intersection

Mintel's 2024 Beauty Trend Report reveals a transformative shift in the industry: "The next chapter of wellness will be mind-body beauty, where mental well-being and physical appearance are interconnected." This emerging trend invites brands to delve into psychodermatology and adopt innovative solutions such as ingestible and neurocosmetic products. By embracing these formats, brands can deliver holistic, multidimensional products that address both the emotional and aesthetic desires of consumers.

Supporting this movement, the global mental wellness market is expected to grow significantly, with sales projected to reach \$175.91 billion by 2025 and an impressive \$283.56 billion by 2033, according to Straits Research.

This year's Innovation Zone entries further reflect this evolution, showcasing technologies that seamlessly blend aesthetic enhancements with well-being benefits.

## Enhancing Sleep and Relaxation Through Advanced Botanical Technology

Taiwan-based ImDerma Laboratories' ArMorpheus (Ferula Galbaniflua (Galbanum) Resin Oil, Copaifera Officinalis (Balsam Copaiba) Resin, Hedychium Coronarium Root Extract, Citrus Aurantifolia (Lime) Peel Extract, Humulus Lupulus (Hops) Flower Extract) essential oil is a natural ingredient blend designed to enhance sleep quality and relaxation. The technology is produced via molecular grade purification technology that reportedly removes impurities while preserving key botanical benefits.

The technology reportedly enhances restful sleep by stimulating alpha brain waves—electrical activity associated with relaxation and the transition into sleep. This effect is achieved through interaction

with the brain's CB2 receptor, a vital part of the endocannabinoid system responsible for regulating sleep. The CB2 receptor also offers anti-inflammatory benefits, allowing for multifunctional effects in formulations.

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### Key benefits:

- Improved sleep efficiency
- Reduced stress
- Anti-inflammatory action

According to ImDerma Laboratories, a brainwave test conducted on test participants, a 0.5% ArMorpheus lotion reduced  $\beta$ -waves (which are associated with stress and nervousness) in the brain by ~50% and increased  $\alpha$ -waves (associated by relaxation) by ~7%.

In addition, a sleep activity test showed improved sleep efficiency by 67%, per the company, while a smell test of 1% ArMorpheus essential oil reportedly enhanced  $\alpha$ -waves more effectively than common relaxing essential oils.

The technology is effective at concentrations of 0.5-1%, according to the company, and can enhance relaxation when combined with essential oils like lavender and chamomile. Applications include any product concepts offering aromatherapeutic and emotionally soothing effects. The essential oil can reportedly easily blend into emulsions, sprays and scented candles.

## Energizing the Skin and Mind Naturally

Phytessence Green Coffee EC by U.K.-based Croda Beauty is a COSMOS-certified active ingredient sourced from organic Robusta green coffee beans through Eco-Sound extraction technology. Created to address global fatigue and stress, it delivers dual benefits for both skin health



and emotional well-being. This innovative extract has reportedly been shown to enhance the release of  $\beta$ -endorphins by 84%, fostering feelings of joy, positivity, and inner balance.

Inspired by the comforting ritual of a morning coffee, Phytessence Green Coffee EC revitalizes the skin by toning, reducing signs of fatigue and improving elasticity. Clinical studies reveal that formulations containing this ingredient increase skin elasticity by 6.5% after 15 days and 7.9% after 28 days, while also decreasing skin fatigue by 9.2% within the same timeframe.

Furthermore, its neurocosmetic benefits have been validated through electroencephalogram testing, demonstrating its ability to evoke positive emotions such as joy, pleasure, and optimism. Phytessence Green Coffee EC offers a holistic approach to beauty, merging physical rejuvenation with emotional upliftment.

### **A Holistic Acne Solution That Enhances Skin Health and Emotional Well-being**

France-based TS-Biotech's YouSIA (Acetylneuraminic Acid) addresses acne while promoting emotional well-being. It targets the root causes of acne, reduces inflammatory markers, repairs the skin barrier, and improves overall skin health, per the company. Beyond physical benefits, YouSIA enhances positive neurotransmitters like oxytocin, serotonin, and beta-endorphins, helping to alleviate the emotional stress, anxiety, and low self-esteem often linked to acne. This holistic approach boosts self-confidence and encourages social interaction. Clinical tests reportedly show that YouSIA significantly reduces acne volume, redness, and sebum production, with visible improvements in just 28 days.

A placebo-controlled, double-blind randomized in-vivo study was conducted with 60 subjects suffering from acne (30 using placebo and 30 using 2% YouSIA cream). Subjects applied the cream twice daily (morning and evening) from Day 1 to Day 28,

with parameters measured on Days 14, 28, and 35. Results showed a significant reduction in acne volume, redness, and sebum production, with continued improvement even 7 days after stopping application. By Day 35, acne volume had decreased by over 80% compared to placebo.

### **Boosting the Skin's Feel-good Messengers**

France-based Croda Beauty Actives' Zenakine (Lactobacillus Ferment Lysate, Glycerin, Pentylene Glycol, Propanediol, and Xanthan Gum) is designed to harness the principles of skin chronobiology. The ingredient technology reportedly stimulates the production of feel-good messengers within the skin, offering a range of benefits:

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- Strengthens the connection between skin and brain
  - Enhances sleep quality and uplifts mood
  - Boosts the skin's resilience to physical and emotional stress
  - Diminishes visible signs of skin fatigue

Zenakine is designed to reduce emotional stress, enhance sleep quality and combat premature aging. Made entirely from natural-origin ingredients, it is fully biodegradable and certified by COSMOS and RSPO.

### **Neuroscience and Adaptogens Meet Anti-Aging Benefits**

Italy-based Active Concepts' AC WonderShroom (Camellia Sinensis Leaf Extract [Gyokuro Tea] and Cordyceps Sinensis Extract and Hericium Erinaceum Extract [Lion's Mane] and Aureobasidium Pullulans Ferment) taps into principles of psychoneuroimmunology and neuroscience with prebiotics, adaptogens and nootropics to counteract stress-induced aging, enhance skin resilience and promote emotional well-being. The technology's key benefits include:

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- Reinforcement of the skin barrier
  - Improved elasticity

AC WonderShroom is a revolutionary skincare solution that combines its advanced bioactive ingredients through a multi-phase manufacturing process for maximum skin benefits. Its dual-action approach enhances skin health, supports emotional balance and addresses stress-related causes at a systemic level.

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**The key benefits are as follows:**

- Anti-aging and skin vitality benefits: Targets key biological pathways for youthful, resilient skin.
- Reduces inflammation: Inhibits COX-II by 31.4%, minimizing signs of aging and photodamage.
- Improves vascular integrity: Enhances endothelial permeability by 35%, reducing dark circles and discoloration.
- Boosts mitochondrial function: Increases mitochondrial membrane potential by 22%, supporting cellular energy production and homeostasis.
- Reduces cellular senescence: Decreases SA- $\beta$ -gal activity by 8%, slowing cellular aging.
- Fights oxidative stress: Scavenges ROS by 30%, protecting skin from premature aging and damage.
- Hydration boost: Increases skin hydration by +57% within 8 hours, with lasting moisture retention for up to 24 hours.
- Strengthens skin barrier: Reduces TEWL (transepidermal water loss) by 25% in 8 hours and 23% at 24 hours.
- Cognitive benefits: Enhances active thinking beta brainwaves by +160%, improving mental clarity and focus.
- Ongoing studies: Research on neck wrinkles, under-eye rejuvenation, elasticity, and cellulite is underway.
- AC WonderShroom combines skincare, neuroscience, and hydration for total wellness.

**Eco-Friendly Hemp Extract for Longevity and Well-Being**

Inabata France's Inawave BiotechHemp is a cannabisin-rich, eco-friendly extract derived from bioreactor-cultivated hemp using microwave-assisted technology. (Cannabisin is a metabolite found in cannabis hairy roots, which reportedly displays protective and regenerative properties.)

This extract targets key biological pathways linked to longevity, including the preservation of proteostasis, activation of autophagy, protection against cellular aging and the promotion of serotonin production—a crucial neurotransmitter that regulates mood.

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**Key benefits are as follows:**

- Stimulates key biological pathways linked to longevity, including proteostasis maintenance, autophagy stimulation, and protection against cell senescence.
- Boosts serotonin production, supporting mood regulation and overall well-being.
- Targets key biomarkers for well-aging and well-being, such as sirtuin-1, lamp2a, Il-1 and Il-6, with enhanced effects compared to resveratrol.
- Demonstrates antioxidant properties with 34% radical scavenging activity.
- Provides antimicrobial benefits, achieving up to 59% inhibition.
- Shows protective effects on UV-A-induced carbonylation in human skin samples.
- Eco-friendly production process using plant biotechnology and microwave-assisted extraction, reducing water usage by 91% and energy consumption by 40% compared to conventional methods.

# 5 Takeaways for Product Developers and Marketers

## 1. Mind-Body Beauty is the Future:

*The integration of mental well-being and physical appearance is driving innovation in the beauty industry. Product developers should explore psychodermatology and neurocosmetics to create holistic solutions addressing both emotional and aesthetic needs.*

## 2. Capitalize on the Growing Wellness Market:

*With the global mental wellness market projected to reach \$283.56 billion by 2033, there is significant potential for products that combine beauty and emotional well-being, such as ingestibles and aromatherapy solutions.*

## 3. Focus on Sleep and Stress Relief:

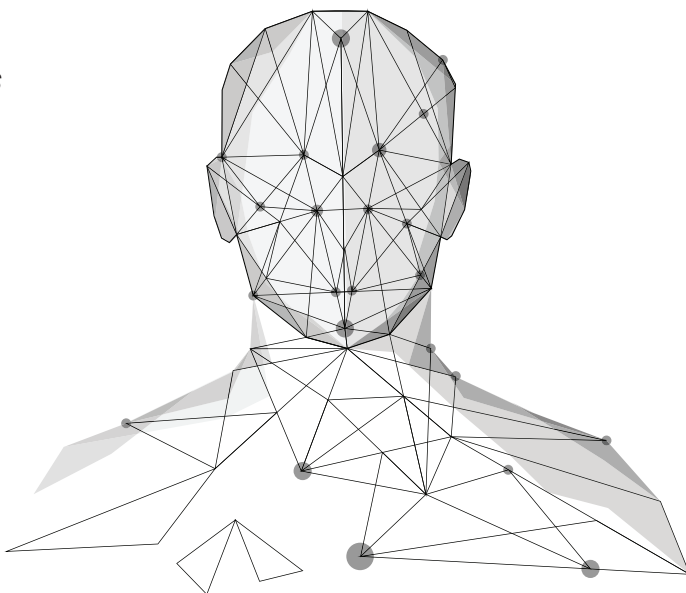
*Ingredients like ImDerma Laboratories' ArMorpheus show that consumers are seeking products that improve sleep quality, reduce stress, and offer anti-inflammatory benefits. Advanced botanical technologies that promote relaxation can be positioned as multifunctional solutions.*

## 4. Boost Emotional Well-being Through Neurocosmetics:

*Ingredients like Phytessence Green Coffee EC demonstrate the power of neurocosmetics in enhancing mood and mental wellness. Products that evoke joy, positivity, and inner balance while addressing skin concerns can resonate strongly with consumers.*

## 5. Combine Efficacy with Versatility:

*Ingredients that deliver measurable skin benefits (e.g., increased elasticity or reduced fatigue) while offering emotional upliftment can be incorporated into various formats—e.g., lotions, sprays, candles—broadening their application and market appeal.*





# Longevity x Slow Aging

A 2024 Mintel report noted, “The steady rise in global life expectancy has spurred a growing demand for functional solutions that promote healthy aging. Consumers are increasingly turning to preventative skin care, opting for products that tackle skin damage before it even manifests.”

The report added, “Brands can tap into this longevity-driven market by combining holistic wellness concepts with technological advancements.”

This includes approaches such as biohacking and cellular rejuvenation, as well as targeting the root causes of aging.

In this year’s Innovation Zone, a wide array of suppliers targeted regenerative, longevity and slow-aging concepts. Here, we present some highlights.

## **Vegan Exosome Technology for Advanced Skin Regeneration and Anti-Aging**

Algaktiv’s Exometics G (Water (and) Propanediol (and) Chlamydomonas Reinhardtii Vesicles (and) Polyglyceryl-4 Caprate) is a patented vegan iomimetic exosome technology derived from microalgae, designed to replicate the structure and function of human exosomes. It supports advanced skin regeneration by enhancing cellular repair, wound healing and overall skin health.

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### **Key claims are as follows:**

- Accelerates wound healing by 30.6% within 8 hours.
- Reverses wrinkles by 2.2 years in just 14 days (measured via AI).

- Improves skin elasticity and firmness, enhancing smoothness and radiance.
- Boosts radiance by 15% in 28 days.
- Reduces hyperpigmentation by 25% in 56 days, promoting a more even skin tone.

### **Benefits:**

- Contains more than 17 million exosomes per drop (at 2% active) for strong bioavailability and high efficacy.
- Clinically proven to deliver measurable improvements in skin regeneration and anti-aging.
- Vegan, cruelty-free, and sustainably produced, aligning with clean beauty standards.

## **The Skin’s New BFF for Balance, Glow and Renewal**

BiCT’s Evobiom (Maltodextrin, Lactobacillus Ferment) is a postbiotic that strengthens the skin barrier and promotes overall skin well-being. It is derived from Nutiani Lacticaseibacillus rhamnosus HN001, co-developed with Fonterra, and provides:

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- Prebiotic activity for microbiome balance
  - Anti-inflammatory action
  - Wound healing support
  - Regeneration for aging skin
  - Hydration
  - Reduction of dark spots due to the ingredient’s antimelanogenic activity

Supported by exometabolomic analysis as well as in vitro and in vivo studies, Evobiom delivers versatile benefits for both cosmetic and medical applications. Produced sustainably and entirely vegan-friendly,

it aligns perfectly with eco-conscious values. This ingredient promotes microbiome balance, accelerates skin renewal, soothes atopic skin and provides powerful anti-aging properties. Ideal for formulations addressing skin barrier disorders, hydration and overall skin wellness, it offers a holistic solution to skincare challenges. Backed by ongoing clinical trials, Evobiom reportedly ensures protection, balance, and long-term skin health at every stage of life.

### Revascularization for Rejuvenated Skin

Exysmol's Alistisilane (Silanetriol (and) Decarboxy Carnosine HCL (and) Propanediol (and) Water) is powered by peptide technology and bioavailable silicium and focuses on skin revascularization to enhance microcirculation, which supports cell activity and skin vitality. It works by protecting against glycation, restructuring the extracellular matrix, and promoting the formation of healthy blood vessels. This dual action reduces collagen damage, improves collagen organization, and ensures long-term anti-aging benefits.

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#### Key Benefits:

- Protects fibers and blood vessels from glycation (-50% AGEs, -30% MMP-1).
- Stimulates collagen production (+28% collagen surface area) and improves collagen organization.
- Enhances endothelial cell proliferation (+17%) and promotes blood vessel formation (+84% blood vessel area in 2 hours).
- Improves skin elasticity, firmness, and radiance.
- Reduces wrinkle depth and jowl ptosis.
- Creates a healthier environment for skin rejuvenation through ECM anchoring (+40-78% fibronectin expression).
- Clinical studies show visible results within 28-56 days, including smoother, brighter skin and reduced signs of aging.

### Rapid Wrinkle Reduction

Sethic's Glycowave (Water, Butylene Glycol, Aphanothece Sacrum Polysaccharides, Gloiopeltis Furcata Extract) reportedly reduces wrinkle size by 10.05% within 14 days in Asian females aged 35-55 (avg. 48).

How the ingredient works: Glycowave leverages glycobiology, gene regulation, and polysaccharides to combat 9 hallmarks of aging. Using a benchmark based on retinol, it enhances anti-aging research by targeting key biological pathways such as telomere protection, autophagy, and inflammation. It regulates longevity-related genes, reduces oxidative stress, boosts collagen production, and improves skin hydration and elasticity, ultimately addressing aging at a cellular level.

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#### Key Benefits:

- Anti-aging performance: Targets 9 hallmarks of aging with evidence-based efficacy.
- Gene regulation: Upregulates longevity genes (SIRT1 +42%) and reduces harmful pathways (mTORC1 -15%, ROS -35.53%).
- Collagen boost: Promotes COL1A1 (+63.7%) and COL1A2 (+101.7%) while suppressing MMP-1 (-27.0%) for improved skin structure after UV damage.
- Quick anti-wrinkle action: Reduces wrinkle area (e.g., crow's feet -5.76%, under-eye wrinkles -10.05% after 14 days).
- Enhanced skin elasticity: Increases overall elasticity by +20.60% and net elasticity by +20.86% after 28 days.
- Hydration & repair: Improves moisture content (+36.46%) and reduces water loss (-12.36%) in damaged skin.
- Versatile formulation: Integrates seamlessly into creams, serums, and gels with a smooth, hydrating skin feel.
- Long-term stability: Maintains performance and quality over extended storage (50°C for 90 days).

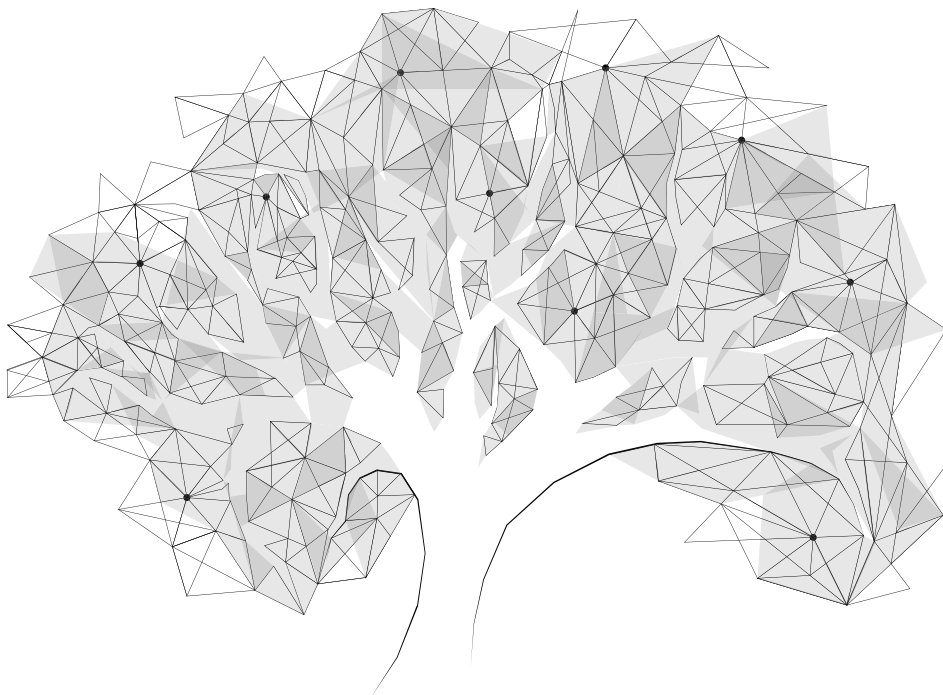
## Boosting the Skin's Ceramide Superpowers

Syensqo's Cerafy Mix Repair is a lipid concentrate combining ceramides (Ceramides 3, 6, and their precursor phytosphingosine) to mimic natural skin lipids. It strengthens the skin barrier, enhances hydration, and protects against dryness and environmental stressors. Its liquid, cold-processable form makes it easy to integrate into cosmetic formulations while ensuring stability and efficacy.

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### Key Benefits:

- Strengthens the skin's barrier for improved resilience.
- Enhances hydration to combat dryness.
- Protects against environmental stressors and prevents premature aging.
- Mimics natural skin lipids for optimal compatibility.
- Easy-to-use, cold-processable, and stable liquid form.





# Insights Into Action: 5 Takeaways for Marketers & Product Developers

## 1. Growing Demand for Healthy Aging Solutions:

*Consumers are increasingly seeking preventative skincare products that address aging before it appears, presenting significant opportunities for brands to align with this longevity-driven trend.*

## 2. Biohacking and Cellular Rejuvenation:

*Innovative approaches like biohacking and targeting the root causes of aging, such as cellular rejuvenation, are gaining traction and can differentiate products in the competitive skincare market.*

## 3. Vegan Exosome Technology:

*Algaktiv's Exometics G demonstrates the potential of cutting-edge, vegan biomimetic exosome technology for advanced skin regeneration, offering measurable benefits like wrinkle reduction, improved skin elasticity, and enhanced radiance.*

## 4. Postbiotic Innovations:

*BiCT's Evobiom highlights the increasing role of postbiotics in strengthening the skin barrier and promoting overall balance and glow, showcasing the importance of microbiome-focused solutions.*

## 5. Clean Beauty & Sustainability:

*Products that are vegan, cruelty-free, and sustainably produced are highly appealing, aligning with consumer demand for clean beauty and environmentally conscious options.*

# Medspa-inspired Beauty

Back in 2022, Mintel's Beauty Rx trend forecast highlighted a growing "medicalization of beauty," driving demand for evidence-based claims, ingredient-focused products, and the rise of synthetic natural ingredients. Simultaneously, the beauty industry began drawing inspiration from medspas, introducing less invasive alternatives to treatments like Botox. Additionally, advancements in understanding wound healing have spurred innovation in skin care actives. In this section of our trend report, we explore the top trends reshaping the beauty landscape.

In this section of our report, we explore some of the most advanced and sustainable skin care ingredients making waves in the industry. Discover how these eco-friendly, clinically proven technologies are transforming the way we approach skin health, offering effective, ethical and gentle alternatives for all skin types.

## **Botanical Botox: Plant-Powered Ingredients Redefining Anti-Aging Skin Care**

ImDerma Laboratories' Imdermalab Flora Tone-COS (Spilanthus Acmella Flower Extract and 1,3-Propanediol) is a botanical extract developed with Molecu-Pure technology for anti-aging, skin-brightening and soothing effects. Rich in spilanthol, it provides a Botox-like effect, reducing crow's feet by 6.1% in 28 days and improving skin elasticity. It soothes irritation by 11.9% within 60 minutes and inhibits melanin production for brighter skin. Eco-friendly, non-toxic, and gentle on sensitive skin, Flora Tone-COS aligns with clean beauty standards and supports sustainable formulations. Its excellent water solubility and formulation flexibility make it a versatile choice for skin care applications.

Meanwhile, Disproquima SAU's FytoDis Vegan Botox is a 100% plant-based, cruelty-free anti-aging

solution offering a natural alternative to Botox. Known for its spilanthol content, it delivers a Botox-like effect by smoothing expression lines, boosting collagen, and enhancing skin firmness and elasticity. Proven in vivo results demonstrate its effectiveness: after 8 hours, skin firmness increased by 12.10% and elasticity by 15.52%; after 56 days, hydration improved by 32.18%, melanin levels decreased by 6.29%, and 61.11% of participants showed fewer forehead wrinkles. This sustainable, water-soluble ingredient integrates seamlessly into cosmetic formulations, aligning with clean beauty trends and ethical values while delivering measurable, long-term skin improvements.

## **Shape Up Your Skin: Boosting Contour and Firmness**

Mibelle Biochemistry's CollPerfect P6 (Collagen Amino Acids (and) Lecithin (and) Maltodextrin (and) Aqua / Water) is an encapsulated bioactivating hexapeptide based on human skin type I collagen.

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### **Key benefits include:**

- Stimulates natural skin revitalization: Replicates damaged collagen fragments to trigger collagen synthesis and dermal remodeling.
- Boosts elasticity and firmness: Enhances skin elasticity, density, and tightening for a firmer, more youthful appearance.
- Advanced peptide technology: Bio-optimized, non-animal hexapeptide based on human type I collagen, encapsulated for deeper skin penetration and stability.
- Anti-aging benefits: Promotes procollagen I and hyaluronic acid production, protecting collagen fibers and improving hydration for long-term skin vitality.

- Reduces inflammation: Regulates ECM production and oxidative response while decreasing genes linked to inflammation, supporting a healthier complexion.
- Clinically proven results: Tightens facial contours, improves dermal density, and visibly reduces sagging for a sculpted, rejuvenated look.
- Ethical innovation: Provides a safe and sustainable alternative to animal-derived collagen, aligning with modern cosmetic trends.

### **Glow Up with Oat-Powered Peptides**

Oat Cosmetics' EcoPep (Avena Sativa (Oat)) is a high-purity, natural oat-derived peptide designed to combat skin aging at cellular, structural and visual levels. It reinforces skin's foundation, strengthens structure, improves elasticity, and visibly reduces signs of aging.

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#### **Key benefits:**

- Biotech Precision: Low and medium molecular weight peptides ensure deep penetration and optimal skin renewal.
- Sustainable Innovation: Enzyme-based production enhances purity and bioactivity, offering an eco-friendly alternative to traditional peptide extraction.
- Slow-Aging Trend Alignment: Supports long-term skin health, aligning with the longevity and slow-aging movements.

#### **Benefits for Manufacturers:**

- Low inclusion rate (0.1%) reduces material costs while maintaining efficacy.
- Powder form ensures easy storage, transport, and formulation without refrigeration.
- Eco-conscious, waterless ingredient meets demand for sustainable solutions.

### **In-Vitro Results:**

- Structural Support: Increases COL1A1 gene (+52%), reduces ECM degradation (MMP1 -49%).
- Anti-Inflammatory Action: Decreases inflammatory markers IL-1B (-71%), IL23A (-72%), CXCL8/IL8 (-63%).
- Enhanced Resilience: Upregulates TIMP2 (+10%) to preserve extracellular matrix and boost skin strength.

### **Udderly Amazing: How Milk Exosomes Are Transforming Skin Care**

The Tiny Cargo Company's Bovine Milk Extracellular Vesicles (Milk Exosomes) tap cow's milk exosomes for use in skin repair formulations. These bovine milk exosomes are claimed to "revolutionize" skin care with GMP-grade products available at an industrial scale (milligram to kilogram quantities). The company's exosomes are reportedly proven to repair aged and UV-damaged skin by reducing oxidative stress, preventing melanin overproduction and promoting skin cell renewal. As natural therapeutic agents, these exosomes combat signs of aging, like wrinkles and skin damage. Tiny Cargo's technology purportedly ensures cost-effective, scalable production, making exosomes accessible for cosmeceutical manufacturers and redefining the future of anti-aging skin care.

Tiny Cargo milk exosomes are available in two variants: cosmeceutical grade (1 x 10E9 exosomes per milligram) and pharmaceutical grade (1 x 10E12 exosomes per milligram).

Bovine exosomes show promise in repairing UV-induced skin aging and damage, per Tiny Cargo. They reduce reactive oxygen species in keratinocytes, lower melanin production in melanocytes and have potential as natural therapeutic agents for skin repair. Additional in vivo research supports their role in wound healing and skin regeneration.



## Snow Lotus Power: a Plant-Based Skin Transformer

Uniproma GmbH's BotaniCellar Tianshan Snow Lotus (P) (Saussurea Involucrata Callus Extract, Pentylene glycol, Butylene Glycol) is a plant-based firming serum that combines 30% Saussurea involucrata callus extract—sourced sustainably via lab cultivation of China's protected Tianshan snow lotus—with glycols for clarity and stability.

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### Benefits and functions:

- **Immediate Bioavailability:** Pre-extracted actives from disrupted cells ensure fast absorption and bypass traditional extraction processes.
- **Eco-Conscious and Sustainable:** Controlled plant cell culture replaces wild harvesting, preserving biodiversity and reducing environmental strain.
- **Enhanced Potency:** Highly concentrated antioxidants (flavonoids, polysaccharides) offer higher purity compared to traditional methods.
- **Wound Healing & Repair:** Accelerates fibroblast wound healing by over 25% at minimal concentrations.
- **Soothing & Anti-Inflammatory:** Reduces inflammatory markers (PGE2, IL-1 $\beta$ , IL-8, IL-6) and promotes skin repair.
- **Hydration & Barrier Support:** Boosts Aquaporin 3 by 146%, enhancing moisture retention and skin barrier function.
- **Anti-Aging & Firming:** Reduces wrinkle-causing enzymes (MMP1), increases Type I collagen by 133%, and reduces signs of cellular aging.
- **Antioxidant & Whitening:** Scavenges free radicals (74.91%) and inhibits tyrosinase (24.83%) to brighten skin.
- **Proven Results:** Clinical studies show wrinkle reduction and visible skin improvements within 14–28 days.

## Bounce Back to Youthful Skin: Elasticity, Repair & Glow in 7 Days

Uniproma GmbH's Arelastin P (Elastin, Mannitol, Trehalose) and Arelastin W (Elastin, Trehalose, Arginine, 1,2-Hexanediol, Pentylene Glycol, Water) comprises recombinant humanized elastin engineered to restore skin elasticity, repair damage and combat aging.

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- **100% Humanized Sequences:** Engineered with human-specific integrin receptors and recombinant elastin for superior elasticity and bioactivity.
  - **Biomimetic Structure:** Features a  $\beta$ -spiral structure that self-assembles into elastic fibers, mimicking natural tissue functions.
  - **Clinically Proven Results:** Boosts hydration (+14.7%), elasticity (+17.5%), firmness (+16.4%), and reduces wrinkles (-15.2%) and erythema (-26.8%).
  - **Skin Regeneration:** Replenishes elastin, stimulates extracellular matrix regeneration, and repairs UV-damaged skin within 7 days.
  - **Advanced Transdermal Absorption:** Achieves 18.75  $\mu\text{g}/(\text{cm}^2\cdot\text{h})$  absorption in 30 minutes for deep skin penetration.
  - **Safe and Effective:** Non-toxic, non-irritating formula offering multifunctional benefits for anti-aging and tissue repair.

# Insights Into Action: 5 Takeaways for Marketers & Product Developers

## 1. Focus on Evidence-Based Claims:

*Consumers increasingly demand products with proven results and science-backed claims. Highlight clinical studies and measurable benefits to build trust and credibility.*

## 2. Leverage Plant-Based Innovations:

*Ingredients like Spilanthes Acmella Flower Extract and vegan alternatives to Botox are gaining popularity for their natural, cruelty-free, and eco-friendly profiles. These align with clean beauty trends and ethical consumer values.*

## 3. Emphasize Multi-Benefit Formulations:

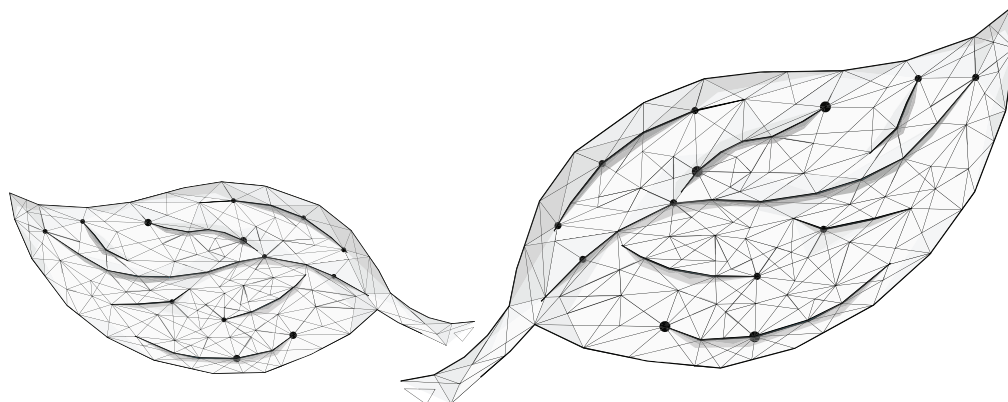
*Ingredients that offer multiple benefits, such as anti-aging, hydration, and brightening (e.g., FytoDis Vegan Botox and Flora Tone-COS), appeal to consumers seeking versatility in their skin care routines.*

## 4. Sustainability Matters:

*Eco-conscious consumers prioritize products with sustainable, non-toxic, and water-soluble formulations. Highlight these attributes in marketing to stay ahead in the clean beauty movement.*

## 5. Incorporate Advanced Peptide Technology:

*Innovations like encapsulated bioactive peptides (e.g., CollPerfect P6) offer enhanced skin penetration, stability, and anti-aging benefits, appealing to consumers looking for cutting-edge, effective solutions.*



# Scalp Care Trends: Rising Consumer Focus on Hair Wellness

According to Circana, the scalp care sector experienced double the growth rate of the overall hair care market in 2024. Insights from Spate and Google further highlight a rising consumer interest in hair wellness, driven by the same longevity-focused mindset that has transformed skin care. In this portion of our trend report, we explore trending ingredients that align with these evolving scalp care demands.

This collection of innovative scalp and hair care ingredients highlights the latest advancements in promoting a healthy scalp, restoring damaged hair and addressing common concerns like dandruff, dryness and irritation. From natural ceramides and bio-fermentation technologies to eco-friendly preservatives and powerful antifungal solutions, these cutting-edge products offer sustainable, clinically proven benefits for both manufacturers and consumers. Whether it's enhancing hydration, reducing dandruff or improving overall scalp health, these ingredients showcase the future of scalp and hair care solutions.

## A Natural Ceramide for a Happy Scalp & Shiny Hair

Sphingo'HAIR Drypure from Croda Beauty Actives is a 100% natural, bio-fermentation-derived ceramide NP designed to restore scalp and hair health. It replenishes the skin barrier with long-chain ceramides depleted by aging, environmental damage and irritants, promoting a healthy scalp and hair structure. Clinically tested, it reduces inflammation, boosts hydration and strengthens the scalp and hair barrier, while enhancing hair shine, softness and moisture retention. Sphingo'HAIR Drypure is COSMOS-approved, sustainable and mimics natural skin ceramides for optimal performance and biocompatibility.

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### Top benefits:

- **Scalp Care:** Reduces inflammation (-11.8%), increases hydration (+36.5%), and decreases desquamation (-42.5%).
- **Hair Care:** Improves shine (+78.6%), softness (+66.8%), and reduces roughness (-40.3%).
- **Skin Barrier:** Enhances hydration (+48.7%) and decreases transepidermal water loss (TEWL) (-37.2%).
- **Inflammation Control:** Modulates pro-inflammatory cytokines like IL-4, IL-13 and heat-activated markers.
- **Sustainability:** 100% natural, green biofermentation process, COSMOS-approved, and IECIC compliant.

## Say Goodbye to Dandruff: Nature's Secret Weapon for a Healthy Scalp

Mane Kancor Ingredients Pvt Ltd.'s Purakan (Punica Granatum (Upcycled Pomegranate Peel), Mentha Arvensis (Cornmint), Carum Copticum (Ajowan)) scalp purifying ingredient reportedly offers a natural anti-dandruff solution in place of traditional ingredients like zinc pyrithione and piroctone olamine. The COSMOS-compliant technology reduces dandruff and rebalances the scalp microflora, per the company, promoting overall scalp health. Its antifungal property decreases the proliferation of *Malassezia furfur* while also significantly and visibly reducing dandruff.

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### Benefits of Purakan:

- Effectively reduces *Malassezia furfur* at low dosages (0.1%-1%).
- Clinically proven to significantly reduce dandruff within one week.
- Outperforms market shampoos on dandruff, pruritis, itching, and flaking.



- Over 85% of participants reported reduced dandruff, and over 80% noted less itching.

#### **Suggested Applications:**

- Ideal for liquid and solid shampoos, hair creams and serums.

#### **Resurrect Your Scalp: Hydration from the Resurrection Bush!**

Rahn AG's Myramaze-Pure (Water, Pentylene Glycol, Myrothamnus Flabellifolia Leaf/Stem Extract, Citric Acid) is designed to strengthen and deeply hydrate even the driest of scalps, per the company. The technology harnesses trehalose, a water-replacement sugar derived from the so-called resurrection bush (Myrothamnus flabellifolia), which protects and repairs the scalp's natural barrier. The ingredient provides deep scalp hydration, soothes irritation and restores the scalp barrier.

#### **Effective Dandruff Control, Reduced Scalp Redness, and Simplified Formulation**

Symrise AG's liquid Crinipan PO Plus (1,2-Hexanediol, Decylene Glycol, Glycerin, Piroctone Olamine) is designed to protect the scalp from dandruff and sebum with enhanced efficacy.

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#### **Benefits for Manufacturers:**

- Pre-optimized combination of ingredients for effective dandruff control.
- Simplified formulation process with no heating required.
- Reduces production time and costs.
- Improved solubility and handling.
- Global regulatory compliance, including China.

#### **Benefits for End Users:**

- Effective dandruff control.
- Reduces scalp redness.
- Decreases sebum production.

#### **Clinical Evidence:**

- Proven inhibition of Malassezia species

(causes dandruff) and Staphylococcus aureus (causes redness).

- Synergistic effect of ingredients compared to piroctone olamine alone.
- Decylene glycol demonstrated ex-vivo sebum reduction and reduced scalp irritation in-vivo.
- Piroctone olamine and decylene glycol both proven effective at reducing dandruff in-vivo.

#### **Kimchi for Your Skin? Meet the Eco-Friendly Preservative for Scalp Care**

White Tiger Ground LLC's WTGPhLA Kimchi Filtrate Organic Preservative is a kimchi-derived cosmetic ingredient that is reportedly clinically proven to improve acne, pores, scalp flaking and hair loss. The ingredient is a clear, colorless liquid that reduces the need for preservatives, per the company. It is suitable for both liquid and gel formulations.

WTGPhLA Kimchi Filtrate Organic Preservative offers a safer, eco-friendly alternative to traditional options like parabens and phenoxyethanol, the company argues. It provides effective antibacterial protection without the risks of resistance or side effects, while remaining cost-efficient and high-performing.

#### **A Scalp-Friendly Superhero for Stronger, Shinier Hair**

Normative's RoseCocktail HC is a natural, upcycled active ingredient created through a dual upcycling process. It replenishes essential hair lipids lost to washing, stress, and treatments. Acting as an endocuticle-edge filler, it repairs cuticle gaps, seals damaged edges, reduces porosity, and strengthens hair structure. Its mechanism restores cuticle integrity, minimizes moisture loss, and enhances smoothness and shine.

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#### **Key benefits:**

- Repairs and strengthens hair structure.
- Reduces porosity and prevents moisture loss.
- Enhances smoothness, shine, and frizz control.

- Protects hair color by reducing dye penetration and bleeding.
- Improves manageability and styling ease.
- Offers eco-friendly performance as a sustainable, biodegradable alternative to silicones.
- Gentle on the scalp, free from harsh chemicals.

#### Applications:

RoseCocktail HC is reportedly ideal for conditioning, hydrating and frizz-controlling hair care products. It is suitable for formulations aimed at improving hair strength, smoothing and shine while appealing to eco-conscious consumers and clean beauty trends. It delivers salon-quality results at home, making it a versatile ingredient for shampoos, conditioners, styling products, and treatment formulations.

### Gentle Scalp Care: Natural Foam for Healthy Hair

Lamberti SpA's Eucarol SoFo (Disodium Coco-Glucoside Citrate, Glycolipids) comprises a 100% natural-origin (ISO 16128) surfactant system pairing glucoside-based surfactants and biotech-derived glycolipids. Eucarol SoFo delivers gentle, effective cleansing with rich, creamy foam, leaving skin soft and moisturized. The technology is therefore ideal for facial cleansers, body washes, intimate care and scalp-friendly shampoos.

Sabinsa Europe GmbH's Nulaurin (Glyceryl Laurate) is designed to support acne-prone skin (reduction in the appearance of blemishes) and scalp health (removal of flakes).

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#### Clinical Results:

- Proven to inhibit acne-causing bacteria (*Cutibacterium acnes*) and common skin pathogens (*Candida albicans*, *Staphylococcus aureus*).
- Effectively targets *Malassezia furfur*, associated with dandruff.
- Clinically validated as safe and effective for light to moderate acne-prone skin.

#### Key Benefits:

- Advanced acne care, addressing the root cause gently.
- Combats blemishes, acne, and dandruff with antimicrobial efficacy.
- Science-backed solution for holistic skin and scalp health.

### Skinification of Hair & Scalp Care: New DHT-blocking Tech

Special Chemicals' SCH ShellCare Scalp (Aqua, Polycaprolactone, Polyvinyl Alcohol, Cucurbita Pepo Seed Extract, Ellagic Acid, Tetrahydrocurcumin, Copper Tripeptide-1, Tripeptide-10 Citrulline, Sodium Hyaluronate, Xanthan Gum, Propanediol, 1,2-Hexanediol, Caprylyl Glycol) uses advanced encapsulation technology with a polycaprolactone (PCL) shell to protect active ingredients, ensuring stability and targeted delivery to the scalp. It combines bioactive peptides, antioxidants and DHT-blocking extracts to strengthen follicles, improve scalp health and promote hair growth. This approach aligns with the skinification of hair care trend, offering high-performance, scientifically backed solutions.

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#### Key Benefits:

- Reduces hair loss by 44.83%.
- Increases hair density by 21.76%.
- Improves thick hair count by 17.41% and fine hair count by 38.04%.
- Strengthens follicles and boosts scalp hydration for healthier hair.
- Reduces inflammation and protects the scalp from oxidative stress.
- Enhances formulation stability with globally compliant encapsulation technology.
- Easy to incorporate into shampoos, serums, and leave-on treatments.
- Scientifically proven results with high consumer satisfaction: 94.74% noticed less hair loss, 84.21% saw increased hair growth, and 68.42% reported thicker hair.

# Insights Into Action: 5 Takeaways for Marketers & Product Developers

## 1. Scalp Care is Booming:

*The scalp care sector is growing twice as fast as the overall hair care market, signaling a major opportunity for brands to tap into this rising consumer focus on hair wellness.*

## 2. Longevity Mindset Drives Demand:

*Consumers are approaching hair care with a wellness and longevity-driven mindset, mirroring trends seen in skin care. Products that address scalp health, hydration, and damage repair are increasingly in demand.*

## 3. Innovative Ingredients Lead the Way:

*Ingredients like natural ceramides and bio-fermentation technologies, such as Sphingo'HAIR Drypure, are at the forefront of scalp care innovation. These ingredients offer clinically proven benefits like reducing inflammation, enhancing hydration, and improving hair shine.*

## 4. Sustainability Matters:

*With COSMOS-approved and eco-friendly solutions here is a clear expectation for sustainable and biocompatible ingredients in product development.*

## 5. Target Specific Consumer Concerns:

*Products addressing common scalp and hair concerns, such as dandruff, dryness, and irritation, while improving aesthetics like shine and softness, can capture consumer attention and loyalty.*

