

NEXT GEN SUNSCREEN

Smarter Protection in the Age of Skin Longevity



Evolution of Sunscreen: Sunburn Prevention to Skin Longevity

From Sunburn to Skin Longevity



Sunscreen Evolution

- 1960-70s:** Introduction and standardization of the Sun Protection Factor (SPF)
- 1980s-90s:** The Scientific Shift: Broad-Spectrum and UVA Recognition
- 2018-Present:** Environmental, Regulatory, and Holistic Skin Wellness Shift



Why Sunscreen Innovation Must Accelerate

Sunscreen has evolved but consumer needs have evolved faster. Why?

- ✓ Environmental stressor: Rising UV intensity, pollution, blue light exposure, etc.
- ✓ Skin diversity & personalization
- ✓ Increased aesthetic procedures (microneedling, lasers, PRP)
- ✓ Longevity & skin health movement
- ✓ Consumer distrust of one-size-fits-all solutions

“The next generation of sun care will be personalized, adaptive and biologically intelligent.”

The Science Responds: Emerging Technical Solutions

Next-Generation UV Filters – Safer & Efficient

Bio-derived & Marine inspired filters

- **Bacfarm:** Bio-derived UV filter using deinoxanthin, from *Deinococcus radiodurans*.
- **Symrise:** Mycosporine-like amino acids (MAAs), found in marine organisms

Hybrid Filter Optimization

- **Kolmar's UV-Duo Plus** technology to encapsulates inorganic UV filters with organic components

Repurposed Molecular Photoreceptors

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Advanced Sunscreens for Extreme Environments

Adaptive UV Protection Systems

- **Kao Corp: Humidity-Controlled Sunscreen** Humidity-responsive UV protection film technology.
- **Shiseido:** Forms a durable, water-repellent film only on contact with sweat or seawater

Self-Healing & Durable Film

- **Shiseido: Anessa AutoRepair Technology™:** Self healing sunscreen film.

Thermal Management Sunscreens

- **Tsinghua University:** Engineered TiO2 nanoparticles to reflect over 90% of solar radiation

Long Lasting Photoprotection

Thermal Management Sunscreens

- **Sonrei: OrganoShield® technology**
- Organogel-based systems to improve adhesion and water resistance

Bio-adhesive UV Filter Systems

- **Skinosive: Bio-adhesive filters.** Reduces wash-off & enables extended protection duration

Silicone-enhanced Polymeric Film

- **SoiRX: SPORT WATERBLOCK® system.** Clinically tested to provide ≥97% SPF after 8 hours in water & reduces cumulative UV damage

Skin Health, Repair & Longevity Sunscreens

DNA Repair & Bio-inspired Protection

- **ISDIN Eryfotona Actinica SPF 50+.** Photolyase-based DNA repair (CPDs) that reduces photoaging, improves skin recovery.
- **Gadusol: Naturally derived, reef-safe UV absorber.** Supports protection with biological compatibility

Longevity-targeting Actives

- **OneSkin OS-01 Face & Body SPF 30+.** Reduces senescence and inflammation & improves long-term skin resilience.

Hybrid Protection and Recovery

- **Universkin Dual Shield 50.** UV filters with barrier repair systems & supports recovery and multi-condition protection.

Balanced Photoprotection: Protecting Skin while Preserving Vitamin D

Bioactive-enabled Adaptive Photoprotection

- **Skeyndor: Age photo defense with D+] TECH technology**
- Year-round sun protection. Uses combination of fructooligosaccharides derived from beet and chicory providing anti-pollution & broad-spectrum coverage.

Selective Spectral Filtration

- **Solar-Derma-Tech: Solar D sunscreen with unique patented formulation**
- Includes UVA radiation filtering agents and UVR filtering agent

The Future of Sunscreen

INVISIBLE

Embedded Protection



SPF-infused skincare (moisturizers, serums, makeup)



UV-protective fabrics replacing body sunscreen

INTELLIGENT

Adaptive & Responsive



Self-healing, skin-transparent semi-permanent nanofilms



AI-driven protection adapting to UV, sweat, humidity, and genetic makeup.

BIOLOGICAL

New Paradigms



Harmonized Water: The Science of Frequency-Based Sun Protection



Bio-engineered melanin/ Super melanin

FutureBridge Insights

- Skincare–suncare convergence is accelerating, with sunscreens increasingly positioned as daily-use products that improve skin quality, not just protect it.
- Innovation in UV filters remains constrained, particularly in highly regulated markets, limiting true formulation differentiation despite rising consumer expectations.
- Next-gen innovation is less about new UV filters and more about how existing ones are optimized—through delivery systems, boosters, and smarter formulations.

About FutureBridge

FutureBridge is a techno-commercial consulting and advisory company. We track and advise on the future of industries from a 1-to-25-year perspective to keep you ahead of the technology curve, propel your growth, identify new opportunities, markets and business models, answer your unknowns, and facilitate best-fit solutions and partnerships using our platforms, programs, and access to global ecosystems and players.