

PAULIG HEALTH & BEAUTY PRODUCT PORTFOLIO

SCIENTIFIC BACKROUND

Dr. med. Sylvia Paulig

Paulig Health & Beauty - Product Portfolio

A Smart Ecosystem for Health, Beauty, and Vision Longevity

HEALTH PRO with Resveratrol

1. Product Concept

HEALTH PRO with Resveratrol is an innovative dietary supplement inspired by the latest scientific insights into healthy longevity. Resveratrol, a natural polyphenol found in grapes and berries, has been recognized in biomedical research as a key activator of cellular defense mechanisms.

2. Mechanism of Action

- Mitochondrial Activation: Resveratrol stimulates sirtuin pathways (notably SIRT1), enhancing mitochondrial biogenesis, boosting cellular energy production, and reducing oxidative stress.
- Antioxidant Activity: Neutralizes free radicals and protects DNA, lipids, and proteins from oxidative damage.
- Anti-Inflammatory Modulation: Influences NF-kB signaling, exerting anti-inflammatory effects—central to delaying aging.
- Vascular Protection: Clinical evidence shows positive effects on endothelial function and microcirculation, contributing to cardiovascular prevention.

3. Relevance for Healthy Longevity & Anti-Aging

- Cellular Aging: Protects mitochondria and the genome, reducing agerelated tissue dysfunction.
- Neuroprotection: Emerging evidence suggests protective effects on the brain, supporting cognitive health.
- Systemic Benefit: Supports glucose and lipid metabolism, closely linked with healthier aging.

4. Safety & Evidence

- International data (EFSA, FDA, peer-reviewed studies) confirm safety of Resveratrol at daily doses up to 150 mg.
- No severe adverse effects reported within this range.
- Free from allergens, GMO, gluten, and lactose.

5. Summary

HEALTH PRO with Resveratrol is a premium supplement that promotes healthy longevity by enhancing mitochondrial activity, providing antioxidant protection, and modulating inflammation. It is an ideal preventive strategy for adults seeking to preserve cellular vitality and resilience.

BEAUTY PRO

1. Product Concept

BEAUTY PRO is a targeted supplement designed to support skin, connective tissue, and cellular vitality. Its formula combines essential amino acids and metabolic cofactors— glycine, proline, lysine, and carnitine—playing central roles in collagen synthesis, energy metabolism, and tissue regeneration.

2. Mechanisms of Action

- Glycine & Proline: Core collagen components essential for elasticity, firmness, and wound healing.
- Lysine: Supports cross-linking of collagen fibers, vital for strength; also involved in immunity and calcium metabolism.
- Carnitine: Enhances mitochondrial energy metabolism by transporting fatty acids into mitochondria—key for cell repair and endurance.

3. Preventive & Health Benefits

- Skin & Connective Tissue: Stimulates collagen synthesis, slows structural breakdown, and supports anti-aging effects.
- Metabolic Balance: Enhances energy production and reduces fatigue through optimized mitochondrial function.
- Bone & Joint Support: Strengthens connective tissue and improves mobility via amino acid–driven regeneration.
- Systemic Prevention: Delays tissue degeneration linked to aging.

4. Safety

- All four ingredients are naturally present in the body and considered safe.
- No significant side effects observed at standard doses.

5. Conclusion

BEAUTY PRO combines collagen precursors with mitochondrial activators, providing a scientifically grounded, safe strategy to support youthful skin, resilient connective tissue, and overall vitality.

Shared Principle - HEALTH PRO + BEAUTY PRO

<u>Cellular Protection + Structural Regeneration</u>

- HEALTH PRO: Activates sirtuins, promotes mitochondrial biogenesis, provides antioxidant and anti-inflammatory effects.
- BEAUTY PRO: Supplies collagen-building amino acids and carnitine for mitochondrial energy.
- Synergy: Resveratrol protects and "repairs" cells, while amino acids drive the structural formation of collagen and tissue integrity.

Collagen Triple-Helix Formation

- Collagen is the major structural protein in skin, muscles, joints, and the cornea.
- Glycine, proline, and lysine are essential for forming the stable triplehelix structure.
- Lysine strengthens collagen cross-linking; carnitine improves cellular energy for efficient repair.
- Together with resveratrol's antioxidant effect, this promotes robust collagen formation and reduces degradation.

Relevance for Skin, Muscles & Connective Tissue

- Skin: Improves elasticity, firmness, and wound healing.
- Muscles: Enhances regeneration and stability, counteracting agerelated muscle loss.
- Connective Tissue (tendons, bones, joints): Reinforces matrix with stable collagen fibers.

Ocular Relevance - Corneal Health

- The cornea is >60% collagen, ensuring transparency and stability. Resveratrol protects keratocytes from oxidative stress and inflammation.
- Amino acids foster new collagen fibrils, maintaining clear corneal structure.
- Preventive benefits include slowing corneal degeneration, supporting post-surgical healing, and protecting against ocular aging.

Societal Impact

- Combined supplementation provides:
- Cellular prevention: ↓ oxidative stress, ↑ mitochondria, ↓ inflammation.
- Structural regeneration: ↑ triple-helix collagen, ↑ tissue strength.
- Supports healthy longevity by reinforcing skin, muscle, connective tissue, and ocular health—cornerstones of a productive, resilient society.

PAULIG LIPIDSPRAY

PAULIG LIPIDSPRAY is an advanced ocular surface solution for dry eye syndrome, one of the fastest-growing health issues globally.

Unlike water-based artificial tears offering only temporary relief, Lipospray restores the essential lipid layer of the tear film.

Functions of the Lipid Layer

- Stabilizes the tear film, preventing premature evaporation.
- Protects and nourishes the cornea.
- Provides a natural antimicrobial barrier.

Relevance

Rising digital device use, increasing LASIK patients, and environmental dryness from climate change have made dry eye a widespread condition impairing comfort and quality of life.

Benefits of LIPIDSPRAY

- Restores lipid balance.
- Supports corneal nutrition and regeneration.
- Strengthens ocular surface defenses.

Conclusion

PAULIG LIPIDSPRAY sets a new standard in preventive and therapeutic eye care by addressing tear film instability at its root cause.

Synergy – LIPIDSPRAY + BEAUTY PRO:

- LIPIDSPRAY: Stabilizes the tear film's lipid layer, reduces oxidative stress, and protects the cornea.
- BEAUTY PRO: Supplies amino acids and carnitine for collagen synthesis and tissue strength.
- Synergy: External lipid protection + internal collagen support = enhanced ocular surface stability, epithelial regeneration, and elasticity.

HYALURON PADS with Aloe Vera

PAULIG HYALURON PADS are sterile, preservative-free wipes for gentle cleansing and hydration of the eyes and skin.

- Hyaluronic Acid: Deep hydration and tissue regeneration.
- Aloe Vera Extract: Anti-inflammatory, soothing, refreshing.
- Safe by Design: Ophthalmologist- and dermatologist-tested, suitable even post-surgery.
- Convenience: Individually packaged for hygiene and travel.

OUR UNIQUE HYALURON

OUR UNIQUE HYALURON is a medical-grade formulation reflecting over 30 years of ophthalmic and regenerative expertise.

- Four molecular sizes of HA (including ultra-small ~10 kDa from biofermentation).
- Large molecules: Surface hydration and protection.
- Small molecules: Deep penetration, repair, and regeneration.
- Purity: 99.6% pharmaceutical-grade HA.
- Clinically validated for periocular safety.

Differentiation

Penetrates multiple skin layers for elasticity and regeneration. Ultra-small molecules are usually reserved for medical use.

Synergy - HYALURON PADS + OUR UNIQUE HYALURON

- PADS: Sterile cleansing, aloe vera soothing, hydration prep.
- OUR UNIQUE HYALURON: Multi-level hydration, structural collagen support.
- Synergy: Natural, non-invasive rejuvenation—safe, effective, luxurious.

EYE CONTOUR ROLL-ON with MATRIXYL® Peptide

- Matrixyl® peptide: Stimulates collagen renewal, reduces wrinkles and puffiness.
- Cooling roll-on applicator: Improves circulation, refreshes the contour.
- Ophthalmologist-tested: Safe for sensitive periocular skin.
- Dual benefits: Instant cosmetic effect + long-term regenerative care.

<u>Synergy – Eye Contour Roll-On + OUR UNIQUE HYALURON</u>

- Roll-On: Collagen stimulation, reduced lines, puffiness relief.
- OUR UNIQUE HYALURON: Multi-size HA, surface plumping + deep hydration.
- Synergy: Progressive anti-aging, restoring elasticity and firmness to fragile eye skin.

LASH & BROW BOOSTER

- Stimulates growth & volume of lashes/brows.
- Peptides & plant extracts energize follicles.
- Hormone- & prostaglandin-free, safe for sensitive eyes and contact lens users.
- Cruelty-free, ophthalmologist-tested.

Synergy - Lash & Brow Booster + BEAUTY PRO

- BEAUTY PRO: Supplies amino acids for collagen and keratin.
- Booster: Delivers peptides and botanicals directly to follicles.
- Synergy: Internal collagen support + external follicle activation = stronger, denser lashes & brows.

MACULA PRO

MACULA PRO is a scientifically formulated supplement to protect against age-related macular degeneration (AMD).

- Lutein & Zeaxanthin: Filter blue light, reduce oxidative stress.
 Omega-3
 (DHA & EPA): Retinal membrane integrity and antiinflammatory balance.
- B-complex + Vit C & E: Energy metabolism and antioxidant defense.
- Zinc & Copper: Retinal enzyme cofactors and immune support.

Unique Positioning

- Based on AREDS & AREDS2 evidence, optimized with additional longevity nutrients.
- Preventive and supportive management of early and intermediate AMD.
- Ophthalmologist-formulated for safety and efficacy.

Synergy - MACULA PRO + HEALTH PRO

- MACULA PRO: Protects macula, reduces retinal oxidative stress.
- HEALTH PRO: Improves systemic mitochondrial health, reduces homocysteine.
- Synergy: Eye-specific protection + systemic longevity = holistic prevention of age-related degeneration.

THE INTELLIGENT SYNERGY - A SMART PRODUCT LINE

The Paulig Health & Beauty Collection is more than products—it is an intelligent ecosystem for health, beauty, and vision longevity.

Internal Regeneration

- HEALTH PRO → mitochondrial activation.
- BEAUTY PRO → collagen & connective tissue.
- LIPIDSPRAY -> ocular surface protection.
- MACULA PRO → targeted macular support.

External Protection & Rejuvenation

- OUR UNIQUE HYALURON + HYALURON PADS → deep hydration & cleansing.
- Eye Contour Roll-On → peptides + HA for youthful eyes.
- Lash & Brow Booster → stronger, denser expression.

Smart Synergies

- MACULA PRO + HEALTH PRO = systemic longevity + macular protection.
- BEAUTY PRO + Lash & Brow Booster = collagen + follicle strength.
 Eye Roll-On + OUR UNIQUE HYALURON = peptides + HA for eye contour rejuvenation.
- HYALURON PADS + OUR UNIQUE HYALURON = sterile cleansing + HA penetration.

Result

A 360° Smart Product Line grounded in over 30 years of ophthalmic and medical expertise:

- Protecting vision.
- Enhancing beauty.
- Extending healthy longevity.