## Skin Reset Eye Crème



The skin around the eyes differs from the rest of the face due to several anatomical factors. The delicate skin surrounding the eyes requires specialised care that acknowledges its unique vulnerabilities. This unique crème is tailored to the intricate structure of the skin around the eyes, recognising the complexities that set it apart from the rest of the face. The eye contour is prone to accelerated presentation of ageing, susceptibility to irritants, and the impact of constant facial expressions. As a result, the formulation goes beyond ordinary moisturisation, offering a comprehensive approach to addressing puffiness, dark circles, and lift of the skin around the eye area, while imparting deep wrinkle resistance. Utilising advancements in skincare science, this formulation harnesses 20 innovative ingredients that work in concert to establish a bioactive skin system that delivers tailored action to the unique eye area.

## Formulation Design & Delivery

#### Physiology Synchrony Unlock Method™

This formulation has been engineered in line with the Emma Lewisham P/S Unlock Method™ of product design. This method is anchored on the skin's physiology, piecing together novel combinations of up to 25 scientifically researched ingredients to work in symphony and trigger a coordinated response from the skin. This synchronous activity is designed to deliver formulations that both enhance the skin's condition and amplify its response to achieve leading results.

#### Why did we develop this product?

The development of the Emma Lewisham Skin Reset Eye Crème was prompted by an in-depth understanding of the distinct challenges of the delicate skin around the eyes and the recognition that with this skin being unique to the skin on the rest of the face, a tailored approach is the best way to achieve visible results for the eye area. Identifying the limitations of conventional eye crèmes and the specific needs of this area, Emma Lewisham aimed to create a formulation that would provide a targeted and multi-dimensional solution, with a focus on reducing the appearance of dark circles, puffiness, and fine lines.

### How is the skin around the eyes different to the rest of the face?

There are several factors that differentiate the skin around the eyes to the rest of the face. The skin under the eyes is thinner than other areas of the face, has fewer oil-producing glands, experiences frequent creasing from facial expressions, and visibly reflects our lived experiences such as lack of sleep and allergies<sup>1</sup>.

In contrast to the skin under the eyes having fewer oil-producing glands, the skin on the rest of the face has an abundance of oil-producing glands and therefore a greater ability to reduce moisture loss across the skin's surface. This oil helps to act as a natural protective barrier against environmental factors like pollution and helps to retain moisture in the skin². Due to the lack of oil glands around the eyes, this area has a reduced ability to maintain hydration compared with the rest of the face. As a result, targeted solutions can offer a more optimal ability to nourish and protect this area as it cannot protect itself in the same way.

As we age, our collagen can reduce, which reduces the 'structural' type support of our dermis – the deeper layer of our skin<sup>3</sup>. Our eye area's already thin and delicate skin is particularly susceptible to showing the effects of reduced collagen content, often being the first area that an individual will notice fine lines and wrinkles.

The eye area is also subject to constant movement due to dynamic facial expressions, causing the skin to crease and form fine lines more readily than the rest of the face. This is because skin around the eyes is situated beside muscles that contribute to facial expressions, such as smiling and frowning. This leads to repetitive movements that crease the skin, with those creases eventually becoming visible without those active expressions.

The convergence of these factors is skin that experiences increased susceptibility and increased challenges compared to the rest of the facial skin. As a result of its thinner skin and lowered oil (from less sebaceous glands), coupled with the challenging impacts of ageing (progressive loss of collagen and hyaluronic acid), this delicate skin is the first to show the impacts of experiences and ageing. For this reason, strengthening the

skins structural matrix and collagen production, as well as increasing and maintaining hydration, are the two key pillars of action for this product. Both factors are treated with advanced intensity in the Skin Reset Eye Crème due to their amplified needs around this area.

#### How this product interacts with the above

To target visible impacts related to the eye area such as fine lines, dehydration, puffiness, and under-eye circles, a formulation must be engineered with ingredients that demonstrate an ability to target mitigating behaviours from the skin. The Emma Lewisham Skin Reset Eye Crème works at a cellular level to enhance both the structural component of the skin surrounding the eyes and provide deep, long-lasting hydration, to deliver superior results.

#### Strengthening the skins structural matrix

Skin Reset Eye Crème strengthens the skin's structural matrix harnessing a triple-action approach: increasing collagen, supporting the energy needs of fibroblasts (our collagen-producing cells), and decreasing collagen degradation.

To boost collagen production, this formulation harnesses an innovative derivative of Human Tripeptide-I. Human Tripeptide-I is naturally found in a range of tissues throughout the body, serving as a messenger in the skin to trigger an increase in its natural reparative activities. The role of this unique ingredient in the Eye Crème is to target an increase in collagen synthesis.

Producing collagen (and the other molecules that fibroblasts produce) is a highly energy intensive process for our fibroblast cells. To support collagen synthesis at the highest rate possible, Skin Reset Eye Crème harnesses Ribose to support the energy needs of these fibroblasts. Ribose is a fundamental building block of our ATP molecule which is our body's 'energy currency' and helps to power our fibroblast cells. Research using cultures of human fibroblasts demonstrates that exposing these cells to this ingredient can increase markers of cellular respiration along with increasing their synthesis of collagen<sup>4</sup>.

Further to stimulating fibroblast activity and collagen synthesis, consideration was given to the protection of the skin's collagen, recognising the importance of decreasing its degradation. This phytonutrient-rich formulation contains two potent antioxidants, Caffeic Acid and CoQ10 act to reduce collagen degradation. Caffeic acid is delivered within a hybrid-molecule, linked with

the aforementioned Human Tripeptide-I. This increases the time it remains stable and active, increasing its bioactivity for superior results. CoQIo is a typically large and unstable molecule, therefore the Skin Reset Eye Crème harnesses a specialised microencapsulated liposomal delivery system where in small protective carriers shield the CoQIo molecule, making it stable for controlled release and supports deeper penetration when applied to the skin. This overcomes the bioactivity barriers that traditional CoQIO delivery have faced, protecting and potentiating its beneficial impact on the skin. This formulation's advanced combination of phytonutrients, including these two key antioxidants, deliver unparalleled action in preventing the breakdown of the skin's collagen inventory.

This advanced, triple-action approach significantly increases collagen inventory, an integral element of a strong skin structural matrix, to deliver superior results in wrinkle prevention and reduction.

#### Advanced skin hydration

To strengthen the skin's barrier and support reduction in the appearance of fine lines and wrinkles, Skin Reset Eye Crème delivers advanced hydration. Hyaluronic Acid alone shoulders limitations of duration and extent of impact. For this reason, Emma Lewisham's signature 72-hour moisture-lock system was developed, comprising of Hyaluronic Acid, Saccharide Isomerate and Ceramides. This system is designed to increase moisture, increase synthesis of the skin's own Hyaluronic Acid, and reduce loss of moisture across the skin barrier. Through this coordinated approach, conventional hydration limitations are overcome for hydrated, complexion-enhanced skin that's plumped from within.

#### **Complexion enhancing**

While increasing collagen and hydration and preventing their degradation are the two primary actions of this formulation, additional ingredients have been harnessed to further support achieving a brightened, lifted, and smoothed eye area. The signature moisture lock contributes to strengthening of the skin's barrier and reduces reactivity to irritants, a micro dose of phytoacids to freshen the skin, and the subtle yet powerful illuminating and brightening qualities of ethically sourced mica. This formulation's 360-degree action is designed to give both short and longer-term improvements to the complete eye area.

# Formulation Validation

In order to validate the target formulation enhancements at a mechanistic level, independent *in vitro* testing has been performed. This research was focused on collagen synthesis and protection, along with impact on the collagen-producing cells, the fibroblasts.

Impact Investigated	Methodology Summary	Results
Upregulation of collagen production	Independent <i>in vitro</i> test (2024) investigating the production of Type I collagen by human skin fibroblasts.	Confirmation of the increase in collagen production by up to 67%.
Impact on enzymatic degradation of collagen	Independent <i>in vitro</i> test (2023) investigating the activity of matrix metalloproteinases in human skin cell fibroblasts.	Confirmation of inhibitory impact on enzymes responsible for collagen degradation.
Impact on fibroblast population	Independent <i>in vitro</i> test (2023) investigating the proliferation of human skin cell fibroblasts.	Confirmation of human skin cell fibroblast stimulation, demonstrating an increase in the population of these cells over 24 hours.

## Skin Reset Eye Crème Summary

The Skin Reset Eye Crème is tailored to the intricate structure of the skin around the eyes, recognising the complexities that set it apart from the rest of the face and delivering a unique and tailored approach for superior action. This targeted and multi-dimensional solution works at a cellular level to enhance both the structural component of the skin surrounding the eyes through a triple action approach to collagen production and protection, as well as increasing skin hydration through Emma Lewisham's signature 72-hour moisture-lock technology. Through penetrating targeted action into the deeper layers of the skin this unique eye crème is engineered to deliver superior results in reducing fine lines, dark under-eye circles, puffiness and dehydration.

#### References

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All Emma Lewisham products are formulated according to Regulation (EC)  $N^{\circ}$  1223/2009 which is the main European regulatory framework to strengthen the safety of finished cosmetic products. Emma Lewisham products have been independently reviewed by an expert safety assessor according to these regulations and issued a safety certificate. As part of this review, they have confirmed there are no groups of people, such as pregnant or breastfeeding women, for which Emma Lewisham products would be unsafe.

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