

Triple Action approach of Nimue's NEW fader range

Nimue's NEW Fader range forms part of the Nimue 3 phase system for Hyperpigmented skin. Hyperpigmentation refers to the malfunction of the melanocyte or a disruption of the melanogenesis process, resulting in an overproduction of melanin. To treat the client's concern as a whole, we not only need to look at hyperpigmentation, but also at the skin complexion. Skin complexion refers to the combination of a dull skin, hyperpigmentation, uneven texture and areas of redness and inflammation. Nimue uses a unique triple action approach to actively improve and even out skin complexion.

The Triple Action Approach – Found in ALL the Fader products

- 1. Cosmetic Drone for skin brightening
- 2. A new mechanism of action from the heart of the melanocyte
- 3. Using the skin Microbiote to activate brightening

1. Cosmetic drone for skin brightening (Transformation of Light energy)

Ingredient: Palmitoyl Sh-Tripeptide-5 Norisoleucyl Sh-Nonapeptide-1, Palmitoyl Sh-Octapeptide-24 Amide

The function of this ingredient is to transform light energy into cellular energy, resulting in an increase of cellular energy and a radiant, glowing skin. Why do we want to increase cellular energy? Let's think about our physical energy levels – if our energy levels are depleted or exhausted, we cannot perform physically, mentally or emotionally. The same applies to our actual skin cells. Increasing cellular energy (production is in the mitochondria) will allow skin cells (e.g. melanocytes) to function more optimally, help correct cellular functioning and activity and also increase cellular longevity.

The skin cells can also use this increase in energy to obtain luminosity and radiance resulting in a more youthful appearance.

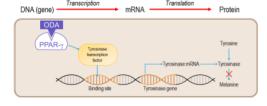
Two additional functions of these peptides are:

- The peptides contain intelligent targeting properties and can target overactive melanocytes to block the melanogenesis process.
- Palmitoyl Octapeptide inhibits Tyrosinase expression.

2. A new mechanism of action from the heart of the melanocyte

Ingredient: Octadecenedoic Acid (ODA)

What is PPARy? PPARy's are nuclear receptors that function as transcription factors which regulate gene expression. Octadecenedoic Acid (ODA) works through a new mechanism involving PPARy binding. Through this action, tyrosinase



expression is reduced leading to less tyrosinase being produced. This will lead to a reduction in the melanogenesis process, through inhibition of the entire metabolic pathway of melanin synthesis, from within the nucleus, the heart of the melanocyte.





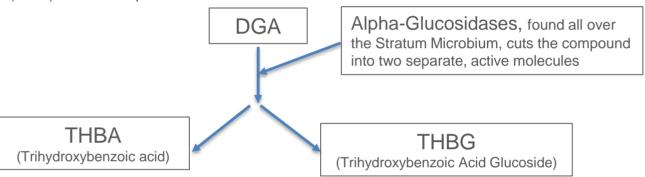


3. Using the skin Microbiote to activate brightening (New generation skin melanoregulator molecule)

Ingredient: Diglucosyl Gallic Acid

The Stratum Microbium is an active living veil on our skin, consisting of more than 10,000,000 microorganisms per $\rm cm^2$. The microorganisms play an important role in skin immunity and has a symbiotic relationship with the epidermis. Through Metagenomics, it has recently been proven that these microorganisms are responsible for the expression of alpha-glucosidases, enzymes that are responsible for breaking glucose into its monomers. These enzymes can be used to activate specific cosmetic compounds into biologically active molecules on the skin surface.

We use this new living layer (containing alpha-glucosidase) to convert Diglucosyl Gallic Acid (DGA) into two separate molecules:



THBA and THBG operate on 7 levels to create an even skin complexion, but THBA is a very unstable molecule and cannot penetrate the skin as is. By using the skin microbiote to convert DGA into THBA and THBG, we can get both these molecules into the skin to perform their function.

There are two biological pathways which can lead to hyperpigmentation. A trigger (UV or trauma) on the surface of the skin leads to the production of ROS. 1. ROS will lead to DNA damage which will activate the melanogenesis pathway (synthesis of melanin and the transfer of melanin to the keratinocytes). 2. ROS will lead to the activation of the inflammatory cascade (production of Prostaglandins which will lead to vasodilation and the stimulation of melanin transfer). The combination of redness and dark pigmented patches can be seen as an uneven skin complexion.

THBG and THBA works on 7 levels within these two pathways:

- 1. Inhibits ROS
- 2. Prevents UV induced DNA damage
- 3. Stops the melanogenesis process
- 4. Decreases vasodilation and redness (stops the production of prostaglandins)
- 5. It controls the inflammatory cascade
- 6. It stops melanin transfer
- 7. It blocks melanin synthesis, even in the presence of UV radiation



