

LunaRose™ Radiant skin overnight



Based on the fruits (hips) of a unique Nordic variety of organic roses that have adapted to the very special day-night cycles of Finland, LunaRose™ regenerates and rejuvenates the skin overnight by providing melatonin-like effects.

The issue

Sleep is vital for overall health. Poor sleep leads to reduced sleep duration, causing negative effects on cognitive performance, mood, and chronic disease risk. Sleep deprivation also impacts skin, making it dry, pale, and prone to wrinkles, dark circles, and inflammation, leading to tired, aged-looking skin.

Melatonin is one of the essential molecules that regulate our internal circadian clock for day-night cycles. It is secreted in our brain during the night, and it helps us to fall asleep. Interestingly, melatonin can also act directly on our skin. It is also produced by skin cells and has strong antioxidant effects. Melatonin synthesis and melatonin receptor expression can be disturbed by different factors, and they decrease with age, which leads to negative effects on the skin.

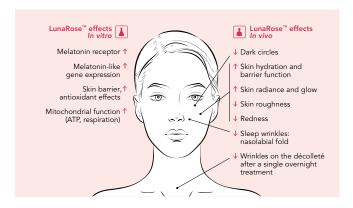
The solution

LunaRose™ upregulates the melatonin receptor expression and changes the expression of circadian clock genes in keratinocytes in a melatonin-like manner. LunaRose™ provides antioxidant and skin barrier-strengthening effects, and it also improves the function of mitochondria, which is known to be diminished in aged cells.

The benefits

Clinical studies on Asian and Caucasian skin have demonstrated that LunaRose™:

- increases skin radiance while reducing skin redness and dark eye circles in sleep-deprived subjects to give a well-rested and awake look
- improves skin barrier function and skin hydration
- reduces wrinkles on the décolleté and in the face, specifically the nasolabial fold
- smoothes the skin on the décolleté after just one single overnight application.





Source

LunaRose™ is based on an extract of rose hips of a special variety of organic *Rosa rugosa* hybrids grown in Finland. These roses have to withstand the harsh and cold Nordic climate. They also adapt to the very special day-night cycles in Northern Europe with very long days and lots of light in summer and long nights and very little light in winter. The roses carry sweetly scented flowers and edible fruits, which are also called rose hips.

INCI (EU/PCPC) Declaration: Rosa Rugosa Fruit Extract (and) Maltodextrin (and) Aqua/Water (COSMOS approved* and NATRUE certified).



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Study results

Melatonin-Like Effect

S-117

Cells: Normal human epidermal keratinocytes

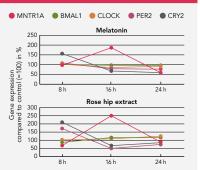
Test compound/ Cells were treated with either 0.1% rose hip extract or **treatment:** 0.001 mg/ml melatonin for different duration periods

(8, 16, or 24 hours)

Parameters: Gene expression by qRT-PCR

→ Both treatments resulted in an upregulation of the melatonin receptor 1 (MTNR1A) after 16 hours

→ Several circadian clock genes showed a similar time-dependent expression after treatment with rose hip extract and melatonin



Radiant and Awake-Looking Skin in Sleep-Deprived Volunteers

S-1257



Volunteers: 43 (f, Asian, 20–48 y) with redness in the face, suffering from

sleep deprivation

Test compound/ Application of a cream containing 2% LunaRose™ or the **treatment:** corresponding placebo on the face twice a day for 28 days

Parameters: Skin radiance (glossmeter, pictures by VISIA® CR).

→ LunaRose[™] had a significant impact in improving the skin radiance and glow by 6.7% in sleep-deprived skin

→ In addition, LunaRose™ improved skin texture, barrier function and hydration while reducing redness and dark circles, resulting in a skin that looks more well-rested





Overnight Anti-Wrinkle Effect on the Décolleté

S-1313



Volunteers: 38 (f, Caucasian, 45–55 y)

Test compound/ Application of a cream containing 2% LunaRose™ or a corresponding placebo once **treatment:** in the evening on the décolleté region, measurements in the morning at day 1 and 7

Parameters: Wrinkle depth (ANTERA 3D®), skin surface volume (Visioscan® VC 20plus)

→ A single application of 2% LunaRose™ in a cream was able to significantly improve skin smoothing in the décolleté area

→ After only 7 nights of treatment with 2% LunaRose[™], wrinkle depth in the décolleté region was reduced by 8.6% compared to initial conditions

→ The positive effect was observed in 100% and 90% of volunteers, respectively





In Addition S-1209/S-1322/S-1228



Increased Skin Barrier Function, Antioxidant Effect: Treatment of normal human epidermal keratinocytes with 0.2% rose hip extract for 24h enhanced the expression of genes related to improved skin barrier function and antioxidant response.



Improved Mitochondrial Function: Treatment of normal human epidermal keratinocytes with 0.2% rose hip extract for 24h enhanced mitochondrial basal respiration, maximal respiration, and ATP synthesis, indicating improved mitochondrial function.



Reduction of the Nasolabial Fold: In a 28-day placebo-controlled study with 42 Caucasian women, a 2% LunaRose™ cream effectively reduced the appearance of the nasolabial fold, which can be aggravated by the sleep position.

Recommended use level: 2%

Characteristics: Powder, water-soluble, without preservatives and alcohol **Applications:** Advanced nighttime moisturizers, summer night elixirs, midnight rejuvenation serums, décolleté overnight firming creams, restful night formulas **Moreover:** Attractive Nordic rose concept, tested on Caucasian and sleep-deprived Asian skin, works after just a single overnight application, for Baby Boomers to Gen Z

Benefits LunaRose™

- For a well-rested and regenerated skin
- Reduction of sleep wrinkles after just one application
- Improved radiance and glow
- Melatonin-like effect
- Improved mitochondrial function