## Native Collagen Serum Mousse

Summary of Scientific Evidence

Med**Skin**Solutions

Dr. Suwelack



## Agenda

## Summary of Scientific Evidence Native Collagen Spray

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## Native Collagen Serum Mousse

**High- effective** serum mousse for **intensive and sustainable regeneration**. It supports natural regeneration and skin vitality

Native Collagen Serum Mousse has an **intensive moisturizing** effect and keeps the skin **smooth and supple**. The **skin barrier** function is strengthened, **fine lines are softened**, and the skin **harmonized** and **regenerated**.

## **Key Facts**

- √ 100% highly pure native, soluble collagen
- ✓ Active Ingredients: Soluble Collagen, Niacinamide
- ✓ pH Value: 4.4 4.9
- ✓ Free from mineral oils, silicones & colorants
- ✓ Leave-on Product for home & professional Use

INCI: Aqua (Water), Glycerin, Squalane, Vitis Vinifera (Grape) Seed Oil, Carbon Dioxide, Niacinamide, Tocopheryl Acetate, Sodium Lactate, Soluble Collagen, Leuconostoc / Radish Root Ferment Filtrate, Monosodium Citrate, Myristyl Glucoside, Sodium Levulinate, P-Anisic Acid, Sodium Hydroxide, Acacia Senegal Gum, Xanthan Gum, Lauryl Glucoside, Polyglyceryl-6 Laurate, Lactic Acid

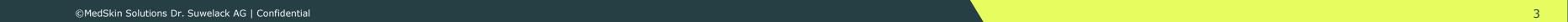
\* Leuconostoc / Radish Root Ferment Filtrate is a natural preservative, not on the black list of the EU regulation (KVO).





# It's all about Skin





## Introduction

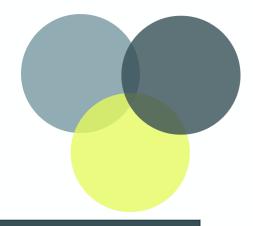
The ability of the skin to regenerate itself is of paramount importance to survival and health. With age and due to stress factors skin moisture is decreased, cell function is reduced.

The skin is constantly exposed to environmental factors such as UV radiation and toxic chemicals. This contributes to dehydration of the skin, destroys skin barrier function and in worse case ends up in irritated and damaged skin. This results increased dryness and accentuation of fine lines, wrinkles and flakiness and even redness. Dark spots can appear.

Additionally, skin ages by progressive deterioration of physiological functions. As part of the biological skin aging process, the stem cells lose their vitality. Some stem cells in the basal layer of the epidermis produce all the keratinocytes that differentiate to the stratum corneum and are renewed every four weeks. In older skin, the epidermal stem cells are less active and lower in number, leading to wrinkles and longer renewal time of the epidermis. The skin looks old, tired and dull!

Regenerating skin needs an extra dose of moisture and smoothing active ingredients in a well-dosed ratio. By providing lasting moisture, enhancing lipids and creating an acidic environment, protective skin functions are enhanced and the barrier is strengthened. For targeted and effective renewal of the skin, the vitality of skin cells should be protected and stimulated. The natural regenerating processes are supported in this way.





## Ingredients explained in short

Ingredient
Squalene
Glycerin
Leuconostoc/ Radisch Root Ferment Filtrate
Soluble Collagen
Monosodium Citrate
Grape seed oil
Niacinamide
Lauryl and myristyl Glucoside
Polyglyceryl-6-laurate
Sodium lactate
Tocopheryl Acetate
Acacia Senegal Gum/Xanthan gum

Function in cosmetic products
Skin conditioning
Humectant
Skin conditioning
Humectant
Buffer
Skin conditioning
Skin conditioning
Surfactant
Emulsifier
Buffering agent
Anti-oxidant
Stabilizer

What that means
Adds moisture and conditions skin
Preserves skin moisture
Moisturizes and conditions skin
Preserves skin moisture
Helps adjust the acid/ base balance of cosmetics
Lubricant on the skin surface, which gives the skin a soft and smooth appearance
Reduces flaking and restoring suppleness
Mixing oils and ingredients
Water-in-oil emulsifier
Stabelizes pH
Neutralized free radicals
Prevents ingredients from separating



# Hero active ingredients

Soluble
Native Collagen
Molecules

Niacinamide (Vitamin B3)



## Soluble Native Collagen Molecules

**Soluble native collagen molecules** have an extremely high water-binding capacity and form a moisture net on the skin, which **reduces the transepidermal water loss (TEWL)**. Soluble Native Collagen Molecules infuse the skin with moisture. This leads to **increased hydration** of the stratum corneum, which lasts for hours.

The use of native collagen **improves skin smoothness** and gives the skin a pleasant feeling. Skin is **plumped and firmed** and water is retained in the Stratum Corneum. It **provides instant moisture** to the skin.<sup>1,2</sup>





## Niacinamide

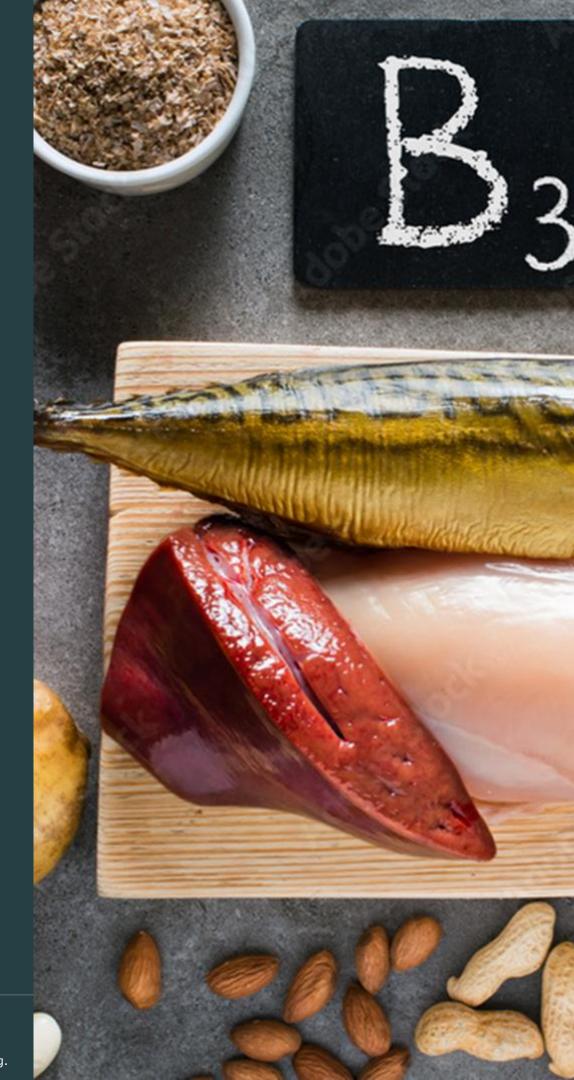
Renewal of the skin is controlled by dermal stem cells. Their activity decreases with age resulting in a visible aging of the skin.

Niacinamide (Vitamin B3) is an essential coenzyme in the energy production in cells and also has a central role in DNA repair. In addition, niacinamide stimulates the production of lipids and ceramide, and it increases key proteins involved in the skin barrier: involucrin, filaggrin and keratin.¹ It strengthens the skin barrier and reduces transepidermal water loss (TEWL).¹

Niacinamide protects the skin from oxidative stress and from protein damage. It has been described to reduce hyperpigmentation and light induced redness.<sup>2</sup> Studies have shown that niacinamide prevents pigments from surfacing on the skin, by inhibiting melanosomes transfer.<sup>2</sup>

Niacinamide also has been shown to reduce sebum production and therefore supports with reducing skin pore size.<sup>3</sup>

In-vitro date show that niacinamide stimulates collagen synthesis in human dermal fibroblasts and is a differentiation marker in normal human epidermal keratinocytes.<sup>4</sup>





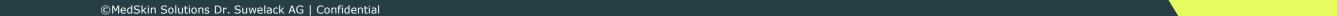
Hakozaki et al. Br. J. Dermatol 2002; 147. 20-31

<sup>3</sup> Draelos ZD, Matsubara A, Smiles K. The effect of 2% niacinamide on facial sebum production. J Cosmet Laser Ther. 2006 Jun:8(2):96-102

<sup>4</sup> Matts PJ, Oblong JE, Bissett DL. A review of the range of effects of niacinamide in human skin. Intl Fed Soc Cosmet Chem Mag.

## Mode of Action







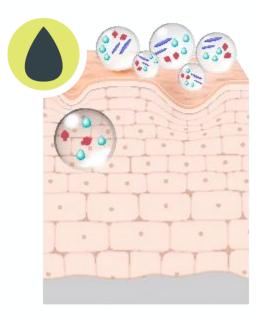
## **Mode of Action**

### **Skin Insight**



- With age and due to stress factors skin moisture is decreased, cell function is reduced.
- This results increased dryness and accentuation of fine lines, wrinkles and flakiness and even redness. Dark spots can appear.
- **Application** of Serum Mousse on the skin and activation & penetration of serum ingredients.

## **Intense hydration**



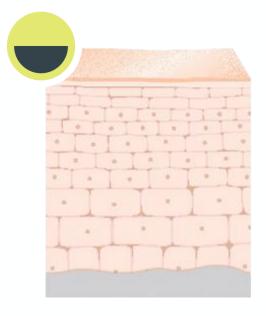
- Soluble native collagen molecules infuse the skin with moisture and form a protective net.
- **Provides instant moisture** to the skin.
- Skin is plumped and firmed, and water is retained in the stratum corneum.
- **Smooths and soothes** skin surface.

#### **Increased skin barrier** function



- High number of soluble native collagen molecules remain on skin surface and infuse surface with moisture.
- Niacinamide stimulates ceramide and fatty acids in stratum corneum.
- **Increased lipid barrier and** skin barrier function:
  - Boosted hydration
  - Reduced TEWL

## Regeneration



- Soluble native collagen molecules ensure deeply hydrated skin.
- Niacinamide lowers sebum excretion and can help reduce pore size and pigmentation.
- Niacinamide protects cell activity and increases cell vitality, stimulates collagen synthesis.
- Regenerated skin:
  - Smoothed lines and wrinkles
  - Harmonized skin tone, even complexion



Moisture



Fatty acids and ceramide

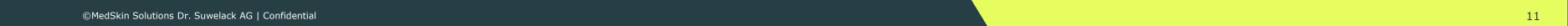






# Scientific Studies





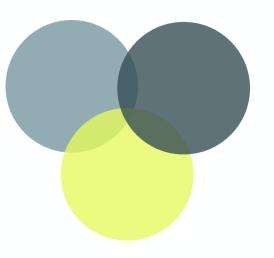
## **Scientific Studies**



- Scientific Literature on Niacinamide
- Data on MDS collagen
- Dermatological Questionnaire
- Ophthalmological Examination
- Patch Test



## Niacinamide strengthens Skin Barrier and increases Lipid Content



#### Study:

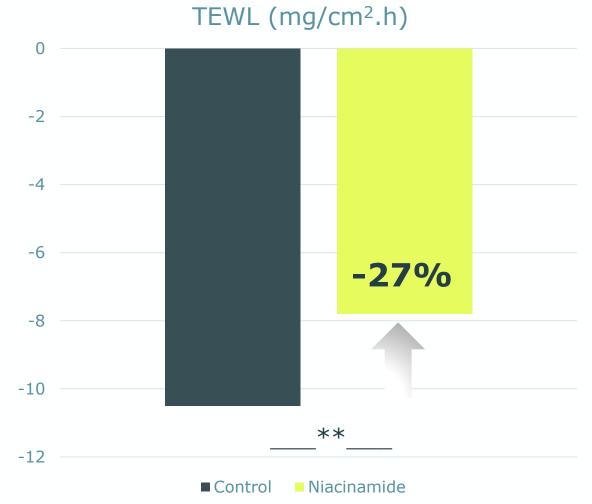
- 12 healthy male volunteers with dry skin
- Twice daily 2% niacinamide for 4 weeks
- Measurement of barrier function (TEWL)
- Measurement of lipids in stratum corneum by tape stripping

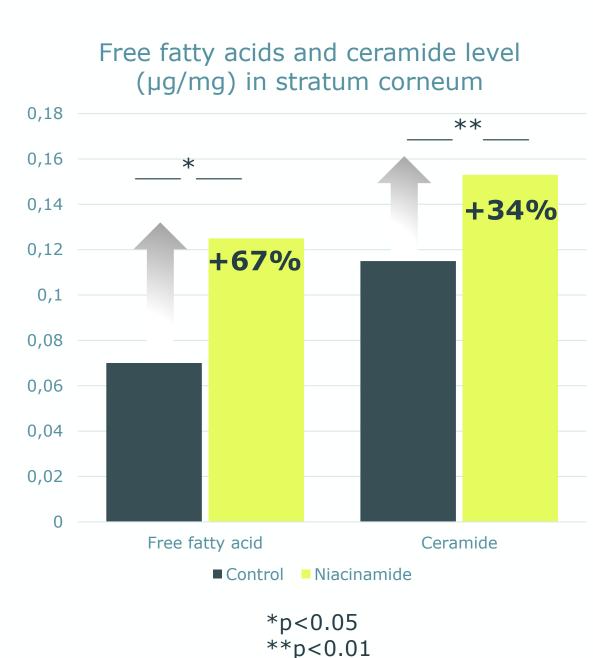
#### **Results:**

○ TEWL is reduced by 27%

#### **What that means:**

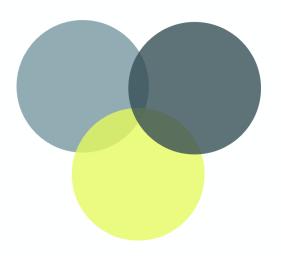
- Skin barrier is strengthened
- Lipids are increased







## Niacinamide prevents Pigments from appearing on the Skin



#### **Study:**

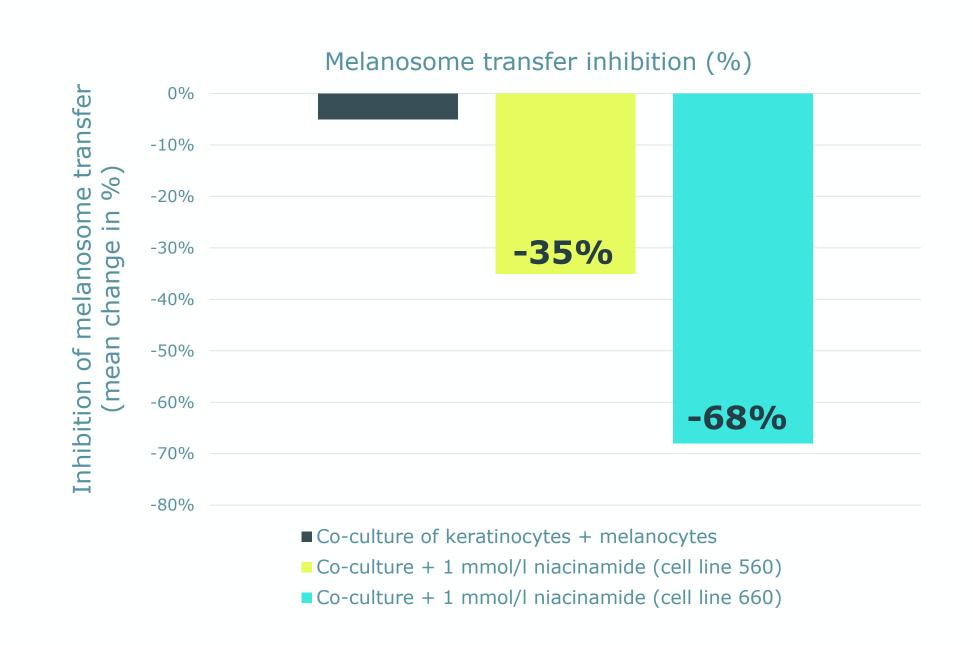
- In-vitro study
- Co-cultures of fluorescence labeled melanocytes/melanosomes and keratinocytes were supplemented with niacinamide (1 mmol/l)
- Measurement after 7 days of keratinocytes carrying fluorescent melanosomes
- Measurement of lipids in stratum corneum by tape stripping

### **Results:**

O Niacinamide inhibits melanosomes transfer by up to 68%

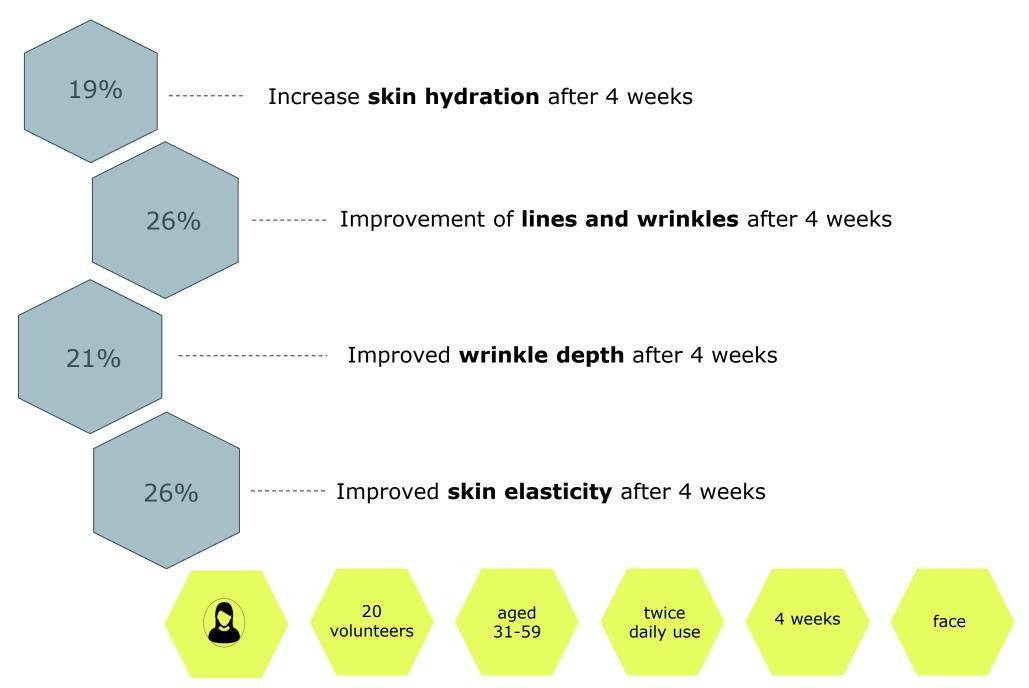
#### **What that means:**

O Niacinamide prevents pigments from appearing

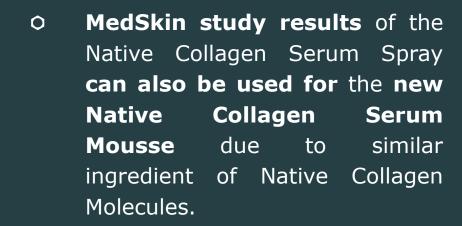




# MedSkin Data on Native Collagen Molecules – Based on the Native Collagen Serum *Spray*

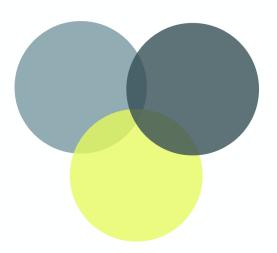


**Study:** Clinical-dermatological application study in 20 volunteers with application of Native Collagen Serum Spray twice a day for a period of four weeks, Dermatest 2013.





## Dermatologic Evaluation Questionnaire - Native Collagen Serum Mousse





"Easy to apply and beautifully rich"

"Pleasantly cool"

"Super compatible, very pleasant on the skin, immediate tightening"

"My skin feels very soft after application"

"Refreshing"

"I have poor sleep quality which causes my eyelids to swell a bit in the morning, this product helps me reduce that swelling"



30 participants aged 23-65 different skin type

## 0

## **Ophthalmological Examination**



**Study title:** Ophthalmological test

Study centre: Dermatest, Germany, 2022

**Protocol:** No use of topical preparations on the test areas (7 days before until end

of test).

Product applied once daily for 4 weeks;

Examination of the eye mucosal and dermal tolerability by an

ophthalmologist



**Result:** 

From the clinical-dermatological and ophthalmological perspective no relevant skin reactions arose, the product was tolerated very well. Neither intolerance reactions in terms of skin irritation nor allergic

reactions (contact dermatitis) were detected.

Accordingly, from the dermatological point of view, the tested product

Native Collagen Serum Mousse exhibits no high potential for skin

irritation and sensitization, when used as intended.







**Study title:** Test for primary skin irritation and hypersensitivity of human

subjects after single application

**Study centre:** Dermatest, Germany, 2022

**Protocol:** Application of the product for 24, 48 and 72 hours under occlusion

Evaluation of the test areas 30 min after completion of the occlusion

**Result:** No evidence of any skin disorder was detected in the test area of any of the

30 panelists after conducting patch testing for 24, 48 and 72 hours

according to the internationally recognized guidelines of ICDRG

(International Contact Dermatitis Research Group).

It can be concluded that the use of the product will not cause any unwanted

skin reactions due to an irritating effect.





## Thank you for your attention



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