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# Immortelle Oil – A Luxurious Elixir for Stretch Marks and Skin Perfection

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### Immortelle Oil – A Luxurious Elixir for Stretch Marks and Skin Perfection

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Grown under the Mediterranean sun, the bright yellow flowers of *Helichrysum italicum* are a valuable source of oils for traditional medicine and skin care. Recently, due to its skin matrix-improving and anti-inflammatory properties, Immortelle has become a premium ingredient in skincare products aimed at achieving firm and even skin, including improved scar formation. Traditional Immortelle essential oil is derived through an expensive distillation process and, like most essential oils, may contain potential allergens [1]. To address this, Lipoid Kosmetik has developed a new approach: an Immortelle Oil Extract (Tradename: Immortelle Oil Pro) that captures the essence of its bright yellow flowers without the irritation potential of an essential oil and at a reduced cost. The lipophilic Immortelle Oil Extract was successfully tested in a massage oil, where it strengthens the skin matrix, resulting in improved appearance of stretch marks, as confirmed by instrumental measurement and in a parallel consumer survey.

This makes Immortelle Oil Pro a luxurious addition to massage and body care applications, targeting a perfected body contour with even and firm skin.

## Immortelle Oil – The Golden Essence for Smooth Skin Solutions

Immortelle essential oil has a long history of traditional medical applications in wound healing or treating hematomas. More recently, it has been shown to aid in scar formation and dermal regeneration after cosmetic surgery [2].

Now, Immortelle oil has been discovered to inhibit collagenase and elastase *in vitro*, two enzymes that degrade collagen and elastin in skin. Since the strength and elasticity of the skin matrix are directly linked to the skin's resilience to overstretching, the inhibition of these enzymes may improve the appearance of stretch marks and enhance overall skin firmness [3]. In addition, Immortelle oil has demonstrated anti-inflammatory activity [4], which may help reduce the redness and visibility of stretch marks.

## The Pursuit of Stretch Mark-Free Skin: A Top Priority in Body Care

Stretch marks and loose skin contours are major body care concerns. They often affect a person's self-esteem and body image, leading to feelings of insecurity and directly impacting the quality of life for many individuals. Not surprisingly, the



**Fig. 1** Immortelle, the golden secret for even skin. Immortelle oil, also known as Helichrysum essential oil or Everlasting oil, is derived from the flowers of the *Helichrysum italicum* (syn. *angustifolium*) plant, a small shrub native to the Mediterranean region. The name *Helichrysum* comes from the Greek words 'helios' (sun) and 'chryos' (gold), referring to the bright yellow color of its flowers.

demand for cosmetic products that improve the appearance of stretch marks and skin firmness is on the rise: According to a Mintel database search, between 2018 and 2022, the number of product launches claiming to improve skin firmness increased by 19%, for stretch marks by 29%, for skin evenness by 63%, and for body contouring by 67% (Figure 2).

From a dermatological perspective, stretch marks develop when the skin is overstretched, often due to rapid weight

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gain, growth, or during pregnancy [5]. This overstretching causes the collagen and elastin fibers in the dermis layer to tear, resulting in stretch marks with a veiny or branched pattern. Initially, stretch marks appear reddish because the rupture of connective tissue exposes deeper layers of the skin with blood vessels. Gradually, as the broken connective tissue is replaced by newly synthesized collagen, the stretch marks fade. While the color changes from red to pale white, making them less noticeable, the new connective tissue lacks structure. The replaced collagen fibrils are disorganized with prominent spaces between collagen bundles, leading to an irregular skin texture and scar formation [6,7,8]. (Figure 3)

#### Smooth Skin Solutions to Improve Skin Firmness and Stretch Marks

Cosmetic strategies that reinforce dermal connective tissue can improve the appearance of stretch marks, often combined with improvements in skin evenness and firmness.

One strategy is to inhibit the degradation of elastic fiber tissues: Preventing the breakdown of collagen and elastin can improve skin matrix strength and elas-

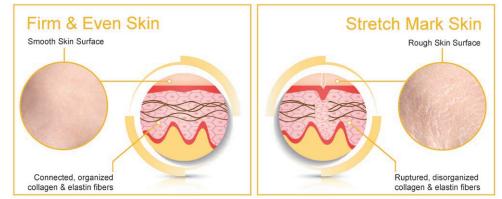
ticity. A second strategy is mechanical stimulation through massage: Massaging affected areas increases microcirculation, which stimulates collagen production, reduces swelling, and improves skin elasticity. A third strategy is to reduce redness and inflammation: diminishing redness and inflammation in red streaks makes them less visible.

Thus, combining massage with a body care product that strengthens the skin matrix is the optimal approach to make stretch marks less noticeable, improve skin firmness and evenness, and refine the body contour [9, 10].

Lipoid Kosmetik utilizes the skin matrix-enhancing properties of the Immortelle flower to create Immortelle Oil Pro, a COSMOS- and NATRUE-certified, triglyceride-based extract. As an oil-based extract, it is ideal for incorporation into products designed for massage, further stimulating dermal fiber renewal.



**Fig. 2** Increase in product launches for stretch mark and body contour products. The data was generated using Mintel's Global New Products Database in the 'Beauty and Personal Care' category, specifically the 'Body Care' subcategory, for the period 2018-2022.



**Fig. 3** Stretch marks form when collagen and elastin fibers are overstretched. Smooth skin (left) has collagen and elastin fibers organized in a regular pattern. When this pattern is disrupted, it results in stretch marks (right), characterized by an irregular skin texture.

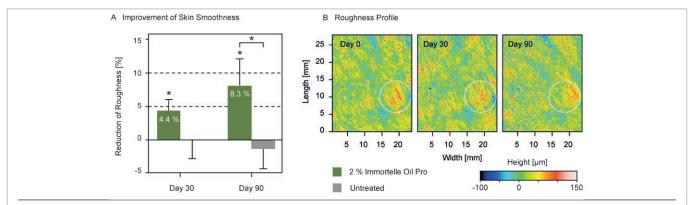
## *In vivo* Study: Immortelle Oil Extract Firms & Evens Skin with Stretch Marks

This study aimed to evaluate the efficacy of Immortelle Oil Extract in improving the appearance of stretch marks, as well as enhancing skin firmness and evenness. It utilized instrumental measurements and consumer self-assessment to gather information about product effectiveness, consumer preference, and the psychological impact of the treatment.

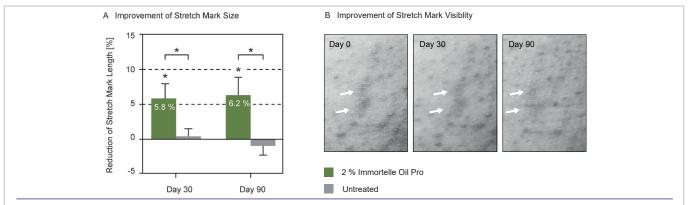
In the study, 20 women treated their stretch marks on the buttocks and thighs with a basic oil containing 2% Immortelle Oil Extract for 90 days, while another stretch mark area was left untreated for reference.

The instrumental assessment evaluated product efficacy by monitoring the 3D microstructure and extensions of individual stretch marks using a Fringe Projection System.

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**Fig. 4 Immortelle Oil Extract makes skin more even, uniform, and smooth.** (A) Skin roughness is significantly reduced after 30 and 90 days of treatment. (B) Representative images of a stretch mark area. Data and images were recorded with a Primos CR $^{\circ}$ . N = 20; Mean + SEM. Wilcoxon signed ranks test vs. day 0 and untreated; \* = p < 0.05.

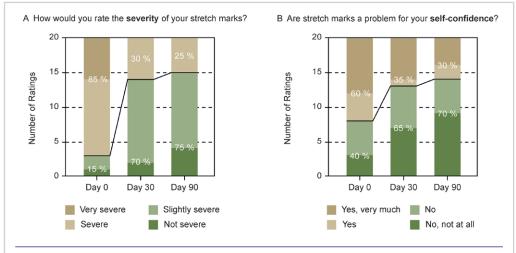


**Fig. 5 Immortelle Oil Extract reduces the size and visibility of stretch marks. (A)** Stretch mark length is significantly reduced after 30 and 90 days of treatment. **(B)** Representative images of a stretch mark area on buttock/ thigh at day 0, 30 and 90. Data was recorded with a Primos CR $^{\circ}$ . Images were taken under studio quality xenon lightening with an IntelliStudio $^{\circ}$  photography stand. N = 20; Mean + SEM. Wilcoxon signed ranks test vs. day 0 and untreated; \* = p < 0.05.

In the self-assessment, participants answered a questionnaire regarding stretch mark visibility, skin relief, well-being, and self-confidence.

As a result, Immortelle Oil Extract makes skin more even, uniform, and smooth (Figure 4).

In addition, Immortelle Oil Extract reduces the size and visibility of stretch marks (Figure 5).



**Fig. 6** Immortelle Oil Extract improves the subjective perception of stretch marks. Each volunteer answered a questionnaire at day 0, day 30 and day 90, rating their opinion on a scale from 0 (best condition) to 10 (worst condition). Results are presented as number of ratings between scores 0-2 (not severe), 3-5 (slightly severe), 6-8 (severe), 9-10 (very severe). N = 20.

# Consumer Self-Assessment of Product Efficacy and Well-Being

**Figures 6**, **7** and **8** show the consumers' self-assessment of product efficacy and well-being.

#### **Summary & Conclusion**

Stretch marks and loose skin are significant body care concerns. They can negatively affect a person's self-esteem and body image, leading to feelings of insecurity and directly impacting quality of life.

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Skin treatments with Immortelle essential oil have long history of traditional medical use, particularly in wound healing and treating hematomas. More recently, it has been shown to aid in scar formation and dermal regeneration after cosmetic surgery, suggesting its potential effectiveness in treating stretch marks.

In response, Lipoid Kosmetik has developed a new Immortelle Oil Extract, a caprylic/capric triglyceride extract derived from organic immortelle flowers (*Helichrysum angustifolium*, *Asteraceae*). This extract is preservative-free, self-preserving, and certified by both COSMOS and NATRUE. The lipophilic active components of the extract strengthen the skin matrix, improving the appearance of stretch marks and increasing skin firmness. Unlike traditional essential oils, this oily extract is less likely to cause allergic skin reactions in individuals with sensitive skin and is more affordable due to lower production costs.

Overall, Immortelle Oil Extract is an ideal ingredient for massage and body care products, promoting even and firm skin while enhancing body contours.

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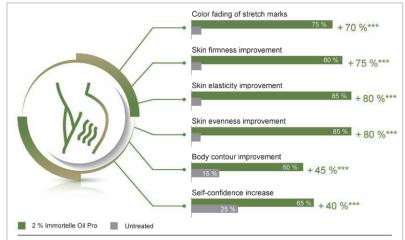


Fig. 7 Immortelle Oil Extract improves the subjective perception of skin uniformity and well-being. Each volunteer answered a questionnaire at day 90, rating their opinion on a scale from 1 (No), 2 (Rather no), 3 (A little), 4 (Yes), to 5 (Yes, very much). Results are presented in % of positive answers (rating 3-5). N = 20. Statistical significance against untreated. \*\*\* = p < 0.001.

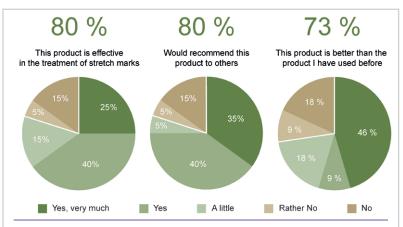


Fig. 8 Immortelle Oil Extract convinces consumers as an effective treatment for stretch marks and body care. Each volunteer answered a questionnaire at day 90, rating their opinion on a scale from 1 (No), 2 (Rather no), 3 (A little), 4 (Yes), to 5 (Yes, very much). N = 20 (left, middle), N = 11 (right).

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