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Can Active Ingredients Improve the Reach of Men Care Products?

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Introduction

Men's care is a difficult topic. Although the number of new product launches for men is steadily increasing (Mintel GNPD database July 2019), it seems that the use of cosmetic products by men is still mostly restricted to basic needs: rinsing, washing and hygiene products, deodorants, sun care and beard and hair care products. The use of anti-ageing formulations and creams for long-term protection of the skin still appear not to be of particular interest to male consumers. This is also reflected by a recent facial care survey we undertook involving 55 study subjects. Here, only 25% of the women reported that they did not use a cosmetic day care product regularly, while for men the corresponding percentage was 60%. On the other hand, the belief that ageing male skin makes men appear more interesting instead of just old is beginning to be overturned. Today's ideal of beauty is based on a concept of healthy, natural-looking individuals who take care not just of their minds but also their bodies. As such, the use of an anti-wrinkle formulation simply to reduce the depth and number of wrinkles may become less relevant. In contrast, cosmetic formulations need to be consistent with a healthy lifestyle and emphasize the natural attractiveness of the individual. Of course, it is this that the cosmetics industry has already delivered and the way to also address men is to find the right marketing language to convince them to take more care of their skin. This article describes active ingredients suitable for men's care that have different kinds of effects on the male skin.

To be successful, male skin care products must be clearly differentiated from those designed for women. This differentiation is essential to ensure that men do not feel that they are using women's products, which could be perceived as "unmanly". However, to achieve this it is not enough to simply package products differently or supplement them with the phrase "For Men". Other possibilities for differentiation should be taken into account:

1) Targeted applications specifically designed to meet men's needs

By offering products that support daily routine – e.g. that provide for soothing care after

shaving – it is possible to generate interest in using related face care products.

2) "Masculine" ingredients – a medium for differentiation

Ingredients that are already widely associated with masculinity can be used effectively to emphasize the masculine character of a product, such as Tiger grass, Taiga root, taurine and so on.

3) "Masculine" claims - a medium for differentiation

During the conception phase of skin care products, it is advisable to place stress on positive masculine attributes, such as for example, strength, resistance and vitality. This should help bolster men's self-confidence and enable them to identify with the product. Because – and let us be honest – compared to women men have still a harder time admitting mistakes and are therefore not very receptive to skin care products that address any weaknesses they may have.

4) "Masculine" efficacy testing – a way to convince men to use cosmetics

Efficacy testing must also credibly emphasize the difference to women's skin care. The structure and physiological properties

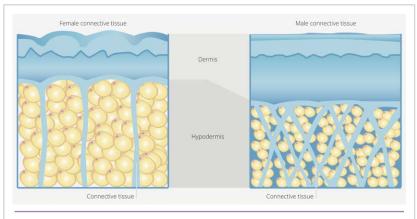


Fig. 1 Female and male connective tissue are differently organised. While the retinaculum cutis in female skin is arranged perpendicular to the skin surface, it is arranged in a criss-cross pattern in male skin.

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of male skin are different; therefore it also has different skin care requirements. For this reason, male skin care products need to be tested on male skin to convincingly demonstrate their efficacy.

Because of biological status and hormonally-related sebum production [1], the moisture supply in young male skin (< 30 years) is usually sufficient. Wrinkles and use of anti-ageing products are not yet something for this group to worry about. At the same time, because of sebum production, shaving and exposure to pollutants, the skin at this age tends towards accumulation of impurities and irritation. Of interest to this age group would be skin care products for sensitive skin, with active ingredients that support the skin's regeneration processes and increase its resistance to environmental influences.

Once men pass the age of 30, the signs of ageing become more apparent. Anti-ageing care will now be of some concern. What are required are skin care products that relieve skin stressed by shaving and kick-start the regeneration process. Products will still be expected to continue to protect against external factors such as cold, dry air and the rays of the sun, as well as improve the level of skin moisture. Men at this age want to remain looking vital, improve their appearance and they put increasing importance on being perceived as younger-looking than they actually are. Products that were hitherto solely of interest to women become the focus of attention, such as special products for the face and neck and for eye care.

Concepts for Targeted Applications

The availability of products for the care of sensitive skin after shaving mean that shaving remains the focus of male skin care – preshaves, aftershaves and shaving foams are well established in the market. In addition, shower products, deodorants and perfumes remain mainstays in lines for men. However, the most extensive growth in future can be expected in the sector of skin care.

Wet shaving in particular is associated with razor burn, which

is the result of an inflammatory reaction of the skin to accidental deep shedding of corneocytes and the microrashes that can result during shaving. The skin reacts with the classic signs of inflammation such as pain, reddening and hyperthermia [2]. The solution can be either curative in the form of provision of the instant relief of the symptoms, or preventive in the form of appropriate preparation of the skin in advance. Both can be achieved with a cosmetic active ingredient that supplements the skin barrier with a substantial amount of $\omega 3$ and $\omega 6$ fatty acids and anti-inflammatory phytosterols (DEFENSIL®-PLUS: INCI Octyldodecanol, Ribes Nigrum Seed Oil, Helianthus Annuus Seed Oil Unsaponifiables, Cardiospermum Halicacabum Flower/Leaf/Vine Extract, Tocopherol, Helianthus Annuus Seed Oil, Rosmarinus Officinalis Leaf Extract) .

In an anecdotal study (**Fig. 2**), an aftershave balm containing 5% of the active ingredient was assessed in terms either of its curative efficacy on application directly after shaving or in terms of its preventive efficacy following twice daily use before shaving for one week in a half-sided, placebo-controlled user test. As the results demonstrate, the inflammatory reaction provoked by shaving was decreased in the curative design in comparison with placebo. The effect was even more pronounced in the preventive approach, which simulates everyday use of the product and is in line with men's daily cosmetic use routines. Inflammatory reactions were visualised using a thermal imaging camera that detected the increase in microcirculation in the presence of skin irritation [2].

(After) Tattoo Care

Tattooed skin needs special care as the body considers tattoo ink to be foreign matter. The body's immune cells continuously attempt to remove the tattoo ink and thus the skin can be permanently in a slightly irritated state [3]. As tattoo ink is deposited on the collagen fibres, metalloproteases secreted by the immune cells designed to facilitate the removal of the ink particles also have a destructive effect on the dermal structure. A specialised daily skin care routine that provides for a soothing effect and simultaneously promotes the necessary maintenance of the dermal network can arrest the development of these premature signs of skin ageing on tattooed skin. In addition to the biological aspects of skin care, factors relating to tattoo quality may also appeal to individuals with tattoos, especially those with the kind of large area tattoos that are preferred by men. In an open application test involving 20 subjects, including eight males, we found that the fading of a tattoo or the blurring of colour were

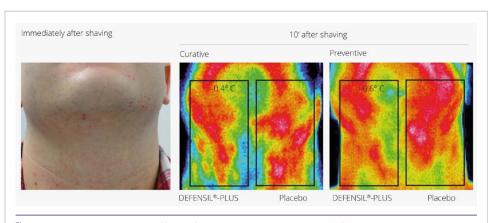


Fig. 2 Curative and preventive effects of a soothing active ingredient (left) compared with placebo (right) after wet shaving.

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of more serious concern to the subjects than the risk that a tattoo might cause skin problems or negative effects. Any such potentially negative impact was readily ameliorated by means of daily application of an after tattoo care product containing the mannan fraction of Bulbine frutescens leaves (LIFTONIN®-XPERT ECO, INCI Water, Mannan, Pentylene Glycol, Citric Acid) [4]. Besides mannan, which has an immune-regulatory and smart collagen-boosting potential, the juice of Bulbine frutescens leaves contain knipholone, an anti-inflammatory compound specific to this genus. Knipholone reduces signs of inflammation and inhibits dermal degradation.

In a user test (**Fig. 3**) involving a male with a freshly made tattoo, we observed the powerful after tattoo care properties of this natural cosmetic active ingredient [4]. The tattoo covered almost the entire upper arm of the male volunteer. Applied to the upper region was a cream containing 3% of the active ingredient while the lower part was treated with

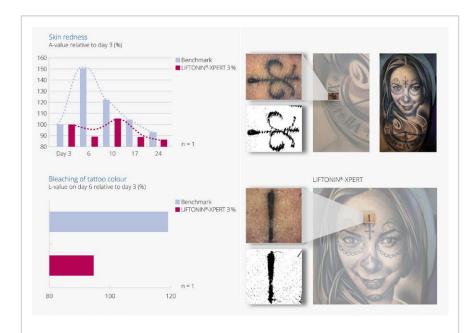
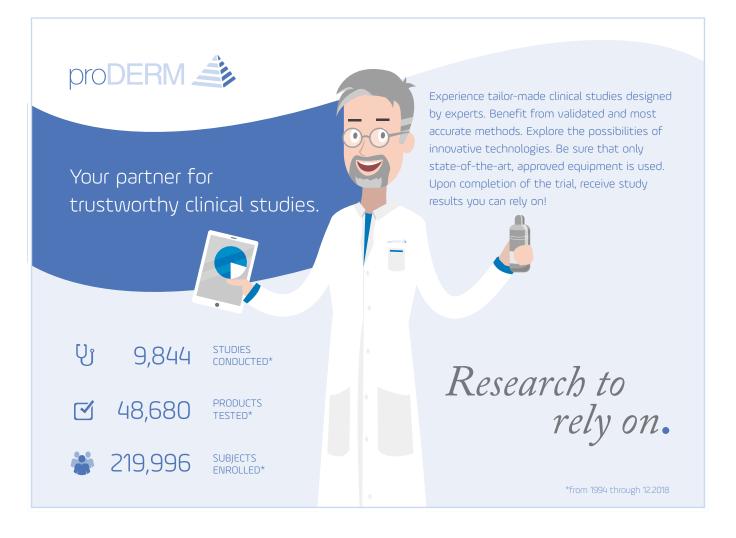


Fig. 3 The mannan fraction of *Bulbine frutescens* soothes the skin after tattooing and promotes the successful adherence of the tattoo colour in the dermis. Top panel left: Skin redness assessed by colorimeter readings (a-value) revealed an instant soothing effect for the active ingredient while a strong response was detected for the benchmark product. Bottom panel left: Colorimeter readings (L-value) revealed a darker staining of the tattoo in the area treated with the active ingredient compared with day 3. Note that higher L-values represent lighter staining (bleaching). Middle panels: Photographs of areas evaluated on day 6. The pronounced reddening of the treated benchmark area (violet, top panels) compared with the area treated with the active ingredient (dash, bottom panels) is obvious. The lower panels are black and white conversions of the images above to show the intensity of the tattoo colour. Treatment was initiated on day 3. n = 1.



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the recommended moisturisation formula of the tattoo studio. The cosmetic treatment was initiated on day 3 after tattooing, as we wanted to avoid interference with open wounds. As a result, the inflammatory skin reaction was controlled by the active ingredient, while the benchmark product was not able to prevent pronounced reddening. This finding was confirmed by measuring the a-values with a colorimeter over 3 weeks. With regard to the details of the tattoo, it appears that the active ingredient prevented early blurring and fading of the tattoo colour, one of the major concerns of those with tattoos. This type of after tattoo care product provides the efficacy and support men want to see in a cosmetic product and can convince them to also use everyday body care products on skin sites other than those with tattoos.

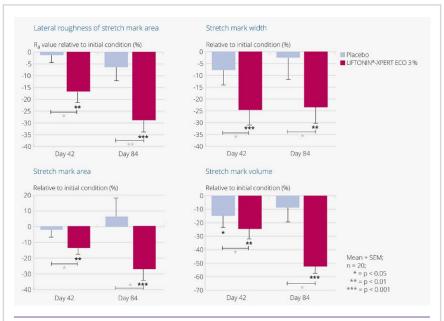


Fig. 4 The active ingredient significantly reduced the size of stretch marks. Lateral roughness was reduced by 29% after 84 days compared to the initial status (top left). The reduction of longitudinal roughness was in the same range (i.e. -26%; data not shown). The dimensions of the stretch marks were significantly reduced as well (top right, bottom left and right).

Stretch Marks

Stretch marks appear after prolonged extension of the skin. The matrix of the dermis is torn apart and loses its density. The subsequent lack of collagen and other matrix proteins is manifested in the form of concave, usually elongated reddened stretch marks. In females, pregnancy is often associated with the development of stretch marks, but rapid weight gain or muscle building also frequently lead to the formation of stretch marks in men. Stretch marks reduce overall skin elasticity and firmness and are an unsightly skin abnormality that can have a significant impact on self-confidence and the willingness to show skin in public, e.g. on the beach on holiday. Taking advantage of the smart collagen management provided by the mannan fraction of Bulbine frutescens leaf juice, application resulted in the impressive alleviation of the negative appearance of stretch marks in comparison with treatment with a placebo formulation [5]. Here (Fig. 4), the incorporation of an active ingredient was essential to generate the desired effect of a cosmetic product designed for men.

Cosmetics for Hard-Working Men

Typically, men already have a thicker callus on their hands and feet in comparison with those of women. When exposed to the kind of repeated mechanical stress that can occur when working in a manual occupation, the callus can become uncomfortably thick, dry and cracked both on hands and heels. A specific moisturisation concept might be the solution. We found that a combination of lichen, moss and fern extracts, all representative of a refreshing forest environment, can re-

duce callus [6] (HYDRACTIN®-LMF, INCI Propanediol, Water, Polypodium Vulgare Rhizome Extract, Cetraria Islandica (Iceland Moss) Thallus Extract, Sphagnum Magellanicum Extract, Citric Acid).

In a study (**Fig. 5**) with 20 volunteers including male subjects, we observed a reduction of the scaling severity score by 89% after 14 days treatment with 4% active ingredient in comparison with placebo as assessed by a dermatologist (not shown). The thickness of the callus was extensively decreased by up to 36%

Besides the efficacy of the formulation, the forest theme can generate associations that particularly address men. Unlike women, who will probably imagine water sounds, sunlight falling through green leaves, a smooth mossy ground to walk

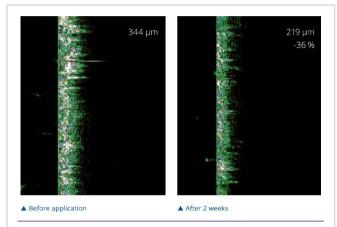


Fig. 5 The illustration shows the result of an example ultrasound measurement before and after the study. In this example, callus thickness decreased by 125 μ m, which corresponds to a relative reduction of 36%. On average, the application of 4% active ingredient reduced the callus thickness by 64 μ m or 20.2%. n = 5.

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on, men might tend to imagine the wilderness, impenetrable, mysterious undergrowth, the smell of earth and the challenge of exploring new things. As such, use of a different marketing language would be of advantage.

Combining "Masculine" Ingredients

In the case of men's care products, performance and the technical details of ingredients are key. As such, a combination of factors already associated with or preferred by men can be of help. An active ingredient that combines taurine and Taiga root, the Siberian ginseng, is a good example (CELLAC-TIVE®-MEN, INCI Water, Glycerin, Taurine, Phenoxyethanol, Chlorella Vulgaris/Lupinus Albus Protein Ferment, Acanthopanax Senticosus (Eleuthero) Root Extract). We are familiar with taurine as an ingredient of energy drinks, with its name derived from Latin taurus, the bull, a symbol of power and perseverance. In the skin, it is osmoregulating, stabilises cell membranes and provides resistance to external stress factors. The Taiga root (Acanthopanax senticosus) is an adaptogen that supports the entire metabolism and increases the body's resistance to physical, chemical and biological stresses. It is used as a tonic against fatigue and weakness and promotes performance, a factor that is highly likely to appeal to men. In combination with a Chlorella vulgaris and white lupin extract, the cosmetic product promotes the regeneration of micro cuts in a keratinocyte cell lawn, increases the survival rate of stressed keratinocytes and provides instant long-lasting moisture on men's skin (Fig. 6).

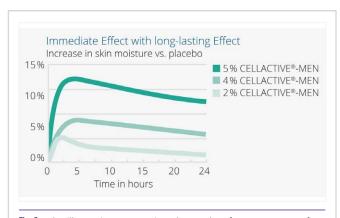


Fig. 6 The illustration summarises the results of measurement of the moisturising effect of the active ingredient. The measurement parameter employed was the percentage improvement of skin moisture in comparison with placebo. Measurements were taken at timepoint 0 and subsequently after 2 h, 4 h, 6 h, 8 h and 24 h.

Conclusions

Skin care products are not yet of any particular interest to the majority of male consumers and there is clearly a potential for improving this situation. Today's healthy living trends can act as a stimulus to encourage men to use cosmetics to help them appear more powerful and healthy. This trend is already apparent in the more highly developed Asian countries but is still not particularly manifest in the European or US markets. Not just social megatrends can motivate men to see anti-ageing cosmetics in a more positive light; this can also be promoted by the employment of suitable marketing concepts and the use of attractive active ingredients. Here the stress can be on the efficacy of the ingredients or the way they correspond with men's outlooks. In this article, we have outlined a number of possible options that can be exploited to get the men onboard when it comes to the use of cosmetics.

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