

Lip care insights – well-tried and new lip care tips

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Soft, smooth and glossy: healthy lips are quite attractive. That is why wax and pigment containing preparations and sticks have become an integral part of the cosmetic skin care routine. Some of the lip care preparations have hardly changed over time, which is quite amazing, while others have been added as a result of recent scientific research.

Lips are a sensitive tactile organ containing lots of nerves. Compared against the other facial skin the lip skin barrier is less developed. Sweat and sebum glands but also hairs are missing. This is the reason why the lip surface is very smooth; it also is continuously moistened and lubricated by saliva. Lips are very resilient because of their relatively thin skin. Lips can follow the slightest move of the jaws and of the muscles of the mouth area. Not to forget their perfect closing function ensured by the ideal surface texture and the moist film. It bears mentioning that the lips are completely relaxed when tightly closed. All the more unpleasant it is when lips are not functioning as normally expected.

Lip area disorders

- Dry lip symptoms develop if the natural salivation is disturbed – which can happen for instance in old age, during illness, due to side effects of medical drugs (as e.g. in psychotropic drugs), radiotherapy, or if the mouth remains open for some time when asleep for instance.
- Barrier disorders of the neighbouring skin are another problem and can be caused by tongue movements over and above the lip area. This eventually leads to degreasing and swelling and, coupled with the presence of minor infections, it may result in irritations, inflammations and rhagades on the lips.
- Also aggressive food like fruit juice or fruits may trigger such types of irritations, inflammations or rhagades. Typical examples are freshly cut pineapple or the contact with fruit peels of oranges and lemons. Triggers are fruit acids, essential oils as well as vegetable proteins and enzymes.
- In extreme cases, the contact with fruit or also inadequate cosmetic products with allergenic preservatives may cause perioral dermatitis. It frequently affects indi-

viduals with rosacea prone skin. Sensitive persons already develop symptoms after the contact with components of toothpastes and mouthwashes. Periodically applied cosmetic fruit acid treatments, chemical peelings and herb peelings increase the sensitivity around the mouth area.

- Lips contain little or even no melanin. The red colour mainly results from the various blood vessels close to the lip surface. They are a sure sign that there is a considerable heat transfer on the lips, particularly when excited. Vice versa though, there also occurs an intense heat loss – which is shown by blue coloration in the cold. Hence a lip protection against cold weather and UV radiation (sun) is an integral part of the lip care.
- The transepidermal water loss of the facial skin and the lips generally increases with low atmospheric humidity, low atmospheric pressure and high temperatures. Examples in this context are air trips, mountain hikes, sun exposure and desert climate. Consequences are tenseness and cracks, above all around the corners of the mouth which still can intensify and become painful with fast jaw movements when chewing or with emotional mimics. Infections caused by bacteria, fungi or viruses may still aggravate the situation.

Shiny lip care: Lip gloss

In all objectivity though, healthy and fully functional lips do not need special care. However, since they belong to the most erogenous zones of the body in terms of sensitivity and visual respect, decorative corrections and accentuations have become popular in the different cultures from time immemorial. Oil and wax-containing creams were the precursors of today's lipsticks. These particular creams with pigments and other colour components still are

used today in a further developed form as lip gloss. The moist and glossy shine signalizes high sensuality.

Although colour and gloss may be subject to the prevailing trend and to seasonal influences, the different nuances of red with or without lustre effects also are predominant in lip gloss. As far as pigments are concerned, the cosmetic industry today focuses on iron oxides (red colours), titanium dioxide (white) and natural or specifically coated minerals based on mica and kaolin. The potentially toxic heavy metals used in previous days no longer are a problem in today's lip glosses. The typical moist appearance is generated with vegetable, mineral and synthetic oils – mostly triglycerides, ester oils, squalane, polyalphaolefins (PAO) and silicones, eventually in combination with waxes and their synthetic variants. In order to facilitate the spreading of the product, manufacturers add synthetic short-chained dicarboxylic acid esters or branched esters of monocarboxylic acids. Skin care additives and moisture retaining substances such as proteins and their hydrolysates, polysaccharides (e.g. hyaluronic acid) and their derivatives as well as herbal mucins such as aloe are integrated into the matrix. They also provide a certain padding effect. Further ingredients are antioxidants such as vitamin E, soothing components such as D-panthenol and bisabolol. Depending on their consistency, the lip gloss preparations are sold in jars, tubes, bottles with brushes or sticks with rotating mechanism.

Lipsticks are free of emulsifiers

Lipsticks and lip liners are basic products of the decorative day care programme. Their semisolid consistency calls for a high percentage of waxes such as carnauba, candelilla, bees wax or mineral waxes. The tendency to vegetable and physiologically safe components has continued since the discussions around the unavoidable swallowing of lipstick components have not yet ceased. Logically this also applies for gloss and other lip preparations. A further point for criticism in this context is the fact that impermeable films in the lip area reduce the natural regenerative capacity since the body gets used to the products. If the products are no longer applied, it may then result in dry lips.

Sticks are insofar advantageous over aqueous creams as they are free of emulsifiers. Nor do they need preservatives because of the missing watery phase; nevertheless sticks often are formulated with preservatives, evidently with the purpose of avoiding the superficial trans-

mission of germs in case that several persons use the same stick. In order to enhance the adhesive properties, sticks frequently contain ricinoleic acid whose triglycerides or hydrogenated compounds are based on 12-hydroxystearic acid that also can fixate the pigments – the same applies for pigment containing creams.

Protection against cold, heat and UV light

Pigment free versions of lipsticks are used as protection against cold in winter or in the case of age- or illness-induced lip dryness. In the mountains or during flights or hot temperatures lip care sticks serve for a temporary reduction of the transepidermal water loss. UV filters are added in order to protect against sunlight. These UV filters frequently are almost colourless titanium dioxide and chemical filters. As with oils and waxes, the toxicological aspects of the filters also have to be considered in these products as the oral ingestion cannot be avoided. Light protection with 50+ is comparatively high. The daily practice however shows that lip protection products mainly are used in closed rooms like day creams, and hence would not need UV filters. If the sticks or creams contain decorative pigments, a light protective factor of 1-4 already is provided.

Beneficial in the case of irritations

In the case of irritations, abnormal redness or cracks in the lip area, the elimination of the above mentioned causes has first priority. Things become difficult if infections are involved. In this particular case, local antibiotics or antifungals eventually have to be applied for a certain period of time. It is important to eliminate wetting areas before administering cosmetic treatments. The areas then can be treated with cosmetic active agent concentrates based on witch hazel (astringent), chamomile (anti-inflammatory), D-panthenol (supports the cell proliferation), boswellia (anti-inflammatory) or liposomal azelaic acid (antimicrobial).

Besides their anti-inflammatory and anti-redness properties, nanodispersal vegetable oils with essential omega-3 and omega-6 fatty acids also can be beneficial in eliminating the tensions arising from superficial barrier cracks. Sun exposure should be avoided since the unsaturated acids can be affected by atmospheric oxygen in UV light. The aqueous oils avoid an occlusive film over the respective areas with the effect that counterproductive skin swellings are excluded and anaerobic bacteria are largely impeded. For the same

reasons, the initial treatment with barrier creams starts with small amounts however with several applications per day.

Vitamins stimulate the recovery

If the cause of damage is eliminated, it is important to accelerate the skin recovery particularly if infections were involved. Experience has shown that physiologically compatible barrier creams (without emulsifiers, perfumes and preservatives) formulated with the vitamins A, B, C and E are the best solution here. This way the breeding ground for new bacteria and fungi infections is fast eliminated. As creams with similar composition are used for the facial area anyway, the lip care can be largely facilitated so and disorders in the lip area can be prevented. Hence it is not necessary to apply an additional lip care preparation. In case that, contrary to expectations, an intensified greasing is necessary, a lipid-enriched vitamin cream can be applied. Alternatively the vitamin cream for facial applications can be enriched with an easily spreadable and plant-based oleogel or one of the above-mentioned lip care sticks. This can also be beneficial for filler-injected lips since the outward lip surface is substantially larger and consequently more dryness-prone.

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