

Energizers - masks and packs

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Masks or packs are essential elements of a large variety of cosmetic treatments. Unfortunately, it frequently falls into oblivion that these products in fact are some sort of quick-change artists. By adding different active agent concentrates and base creams, they are able to adapt to the specific needs of the skin.

Irrespective of the type of mask applied, it is essential to know the different combinations of active agents and base creams to achieve positive treatment results. The present article will give some suggestions on cream masks and packs. In this connection, the different "prescriptions" play an important role.

Masks - a treatment applied in three consecutive steps

In this context, the term "prescriptions" does not involve the mixing of different chemical agents, which, as a matter of fact, is not allowed for cosmeticians according to the Kosmetikverordnung (German Cosmetic Decree), but a useful combination of bases (base creams) and active agent concentrates on the condition that bases as well as active agent concentrates are individual products which were tested for their tolerance and which can also be applied separately.

The preparations can either be mixed in a clean receptacle before the treatment or directly on the skin. It is also possible to start the application with the pure active agent concentrates and continue with the appropriate base cream. In this case, higher active agent concentrations can partially be applied.

In general, the mask treatment consists of three consecutive steps as follows: (1) making the skin receptive for a specific treatment, (2) infiltrating the active agents and (3) closing the skin. This procedure enables the active agents to optimally penetrate the skin and ensure a long-term effect after the treatment.

Receptive skin

An important prerequisite for an effective mask is to prepare the skin in order to make it receptive for the treatment, i.e. the skin will be "opened up". An application of moderate heat in combination with high moisture content, lotions containing D-panthenol (e.g. tonics) or liposome concentrates have proved to be effective for this purpose. D-panthenol additionally offers some welcome side effects:

it soothes the skin and promotes its regeneration especially in cases of stressed and irritated skin. Also cases of extended sun exposure benefit from the above listed properties and applying combinations of D-panthenol with liposome concentrates may even "work wonders".

The "opening" effect of liposomes primarily is due to the fusion of its membranes with the skin barrier layers which become more fluid and porous by integrating the liposome membrane components and above all, the native phosphatidylcholine.

Infiltrating the active agents

Mask treatments should be based on one or only few active agents which can be used in combination with liposome concentrates to improve the penetration of active agents. As a matter of fact, also active agents which already are encapsulated in liposomes can be applied. In this case, the two consecutive steps of opening the skin and infiltrating the active agents are reduced to one single application. While liposomes facilitate the transport of water-soluble substances, carry nanoparticles (nanoparts) liposoluble substances into the skin.

When using vegetable active agent concentrates, it has to be kept in mind, that there are also customers who cannot tolerate these substances. Just an example to illustrate tolerance problems: Whereas hamamelis extract with its astringent effect cures cracked and irritated skin and is very well tolerated by the majority of customers, the small group of individuals suffering from nut allergies, however, may have tolerance problems. As a consequence, any kind of sensitiveness has to be clarified in a preliminary customer consultation.

It is recommended to let the selected mask preparation sink in for about 20-30 minutes. Then, the surplus mask is wiped off and the skin is gently dried with a soft cloth.

Closing the skin

After infiltrating the active agents, the process of closing the skin is an essential step to reverse the increased transepidermal water loss (TEWL), an undesirable side effect when opening the skin for further treatment. An increased penetration, in reversed order, also causes an augmented transport of water out of the skin. DMS base creams (DMS = Derma Membrane Structure) without active agents which, just like liposomes, are part of the membrane family have proved effective for the process of closing the skin. DMS bases are thoroughly integrated into the skin barrier layers and restore the natural skin protection. Liposome components which were applied before are thus "forced" into deeper skin layers and therefore guarantee a long-term effect of the masks. Creams containing mineral oils are less appropriate for this purpose as they rather slow down the intended skin regeneration effects due to their occlusive properties.

After the mask treatment, it might be useful to apply a camouflage layer to cover skin anomalies. Due to manufacturing reasons, mineral oil contents here cannot be avoided yet. It is recommended, however, to apply camouflages only on specific skin parts and to restrict their use to this short period of time when they are definitely needed.

Typical active agent concentrates

The following list gives an overview of some classic examples for active agent concentrates:

Alga extract contains several types of sugar, proteins, amino acids, vitamins as well as minerals and trace elements. The alga has astringent and antimicrobial effects. The polysaccharides and amino acids included improve the skin moistness. The extract has a typical algae smell.

Aloe extract is rich in vitamins, amino acids, polysaccharides, mineral salts, proteins and enzymes. The extract has moisturizing and antiinflammatory effects and preserves a fresh complexion.

Coenzyme Q10 is specifically used in skin care creams for the mature skin in combination with the vitamins A and E. It improves the vitamin effects as well as the antioxidative capacity of the epidermis. The protection against oxidative UV-A impacts has been mentioned in specialised literature. It is recommended to "wrap up" coenzyme Q10 into nanoparticles.

Echinacea extract contains echinacin, essential oils and resins as well as several

polysaccharides. The extract is antimicrobial. Echinacea supports the healing process in cases of minor skin injuries, sun burns and couperosis.

Green tea extract contains alkaloids (caffeine), flavonoids and astringent agents. The extract is revitalising, antiinflammatory and antimicrobial.

Hamamelis extract contains flavonoids, essential oils, gallic acid and different astringent agents (hamelitannin and ellag-tannin) which have antiinflammatory as well as mildly astringent effects in cases of cracked skin. The complex has a soothing effect and supports the healing of superficial skin irritations.

Liposomes are very rich in essential fatty acids and, due to their membrane structure thoroughly penetrate the uppermost skin layer. They support the prevention of bad skin, acne and cornification disorders.

NMF (Natural Moisturizing Factor) consists of different natural components and increases the water bonding capacity of the skin.

D-panthenol is a provitamin of the vitamin B complex. It increases and regulates skin moistness by improving the moistness capacity (moisturizer) and supports the regeneration of the skin and specifically, the cell formation. Panthenol has a smoothing effect on the skin.

Vitamin A (retinol) supports the collagen formation and promotes the regeneration of the skin. Vitamin A is also recommended for the treatment of prematurely aged skin due to UV influence. Vitamin A is encapsulated in nanoparticles.

Vitamin C (ascorbic acid) is specifically used for vitamin creams in combination with the vitamins A and E. It increases the effects of the other vitamins and protects the skin against radicals. Specialized literature also mentions skin barrier regeneration and DNA protection.

Vitamin E (tocopherol) protects the skin against radicals and reduces the noxious influence of UV rays. In addition, vitamin E supports the epithelialization (cell formation) of the skin. It also increases skin moistness capacity.

Besides the specific active agent concentrates, also different oils can be added, as e.g:

Apricot stone oil is a colorless oil with slightly nutty scent specifically used for the young skin. It spreads easily, penetrates well and smoothes the skin.

Avocado oil essentially contains triglycerides of the oleic, linoleic and palmitic acids. In addition, the oil has a high percentage of phyosterols as well as of the vitamins A, D

and E. It is a virtually colorless oil with intense skin care properties.

Jojoba oil is a neutral oil of pale yellow color. It leaves a velvety effect on the skin without feeling greasy. It is appropriate for every skin type.

Macadamia nut oil consists of triglycerides with a high amount of oleic and palmitic acid. It is a virtually colorless oil of very fatty nature, which has strongly smoothing effects and is applied on the mature skin.

Primrose oil: The primrose oil which is rich in gamma-linolenic acid preserves its effectiveness for a long time by encapsulating it in nanoparticles. Furthermore, this method ensures an optimal transport into the skin. It reduces the transepidermal water loss within 2-3 weeks and increases skin moistness. Primrose oil is an effective additive in cases of skin barrier disorders and neurodermatitis.

Wheatgerm oil consists of triglycerides with a high percentage of essential fatty acids, vitamin E, phytosterols and germ lecithin. It is a golden colored oil with a characteristic smell, which easily penetrates the skin.

Already a variety of three bases for the following skin types: dry/low-fat, normal/sensitive and oily, and only a small selection of active agent concentrates and oils offer a multitude of possible combinations. Individual and seasonal adaptations can easily be done. And, there is also a very positive side effect: purchasing the different additives is by far less expensive.

Packs

The handling of packs is similar to the one of masks. As the respective body parts usually are "packed" in a warm fleece, the body heat generally contributes to an increased penetration of the active agents. In cases where a higher dosage of liposomes is used, it is recommended to apply a DMS-base cream after removing the pack, however, this depends on the specific type of skin, as e.g. naturally oily skin may not need this additional treatment. Cream and active agent combinations for packs can eventually be eked out by adding some warm water. Hard water should be avoided as it might damage the skin barrier in cases of sensitive skin and a peeling pre-treatment.

The individual products used in the treatment have to be carefully adjusted to each other and it is recommended to precisely study the INCI-declaration of the components.

A very important criterion for masks and packs is the fact that they should be free of the

preservatives listed in the "Kosmetikverordnung" (German Cosmetic Decree) in order to avoid that these substances are infiltrated into the skin together with the active agent concentrates as this may cause skin disorders in cases of sensitive skin. This also applies for perfumes.

Dr. Hans Lautenschläger