

Minimalist and effective

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Cosmetic products reduced to the essentials: The trend of skin minimalism follows the assumption that even in cosmetics, the maximum is by no means always the best. Neither for the skin nor for the environment.

The "all-round carefree package" – to put it in new German – at a super-saving price is what many of us like best of all. We don't have to think much about it, because everything is taken care of. The shopping platforms on the net present us with these attractive offers day after day with increasing intensity. This also applies to cosmetics. Of course, the expert recognises immediately that universal preparations – equipped with everything that has rank and name in terms of marketing strategy – are not very suitable to meet all skin conditions. If only because the numerous supposed active ingredients are inevitably present in suboptimal concentrations and are not all suitable for individual skin.

Accompanying, burdening helpers

Associated with many ingredients is a high number of excipients that stabilise active ingredients and base:

- Emulsifiers are used for physical (long-term storage) stability.
- Synthetic antioxidants and complexing agents protect against oxidative degradation.
- Preservatives prevent microbiological degradation.
- Fragrances provide pleasant sensory notes.
- Other excipients facilitate the spreadability of preparations and create haptically appealing skin surfaces.

Additives pollute the skin and the environment and sometimes cause intolerances. However, they determine the (low) pricing to a large extent. Many of them can be dispensed with without reducing the substantial effectiveness of the preparations.

The important ingredients

But back to the active ingredients. Are they sustainable in terms of their ecological properties and biological effect?

Reducing their number and increasing their dosage is one way to increase the effective-

ness of the active ingredients – in relation to individual skin conditions. But where can one get reliable information about this? In many cases, the technical literature is not directly accessible and comprehensible. The scientifically based internet platform Google Scholar can be a source here and an important supplement to the empirical values from the institute practice. However, doing your own research takes time. But in the end, it is the key to a sustainable, long-term business and competent, personal advice to the clientele – by the way, a great advantage over the insubstantial empty words of the online shops!

Less is clearly more here

The aforementioned reduction of auxiliary and active ingredients has the decisive advantage of lowering the risk of individual allergies and irritations, as this decreases almost proportionally with the number of ingredients. Another criterion is the dosage: the effectiveness of active ingredients reaches a maximum at dosage and frequency of application and then generally drops. The related keyword of "overdoing skin care" includes many undesirable side effects, most of which are unconscious. Here are some examples:

- Too much hygiene (cleansing) carries the risk of barrier disorders and higher susceptibility to infections. Constant chemical peels (AHA acids) increase the incidence of rosacea and perioral dermatitis if you are predisposed to them.
- Skin blemishes are caused, among other things, when too many lipids get onto the skin and anaerobic microorganisms find ideal living conditions. Occlusive conditions slow down the skin's own regeneration.
- Highly concentrated antioxidants inhibit melanin synthesis and influence the activity of dermal oxidoreductases and the microbiome.
- UV filters in normal day creams burden the skin. Residual radiation that could

benefit vitamin D production is not used.

Harmful substances in cosmetics are difficult to detect because they are often admixtures or impurities that are not declared. Examples are heavy metal contaminations in pigments and MOAH (Mineral Oil Aromatic Hydrocarbons) or PAH (Polycyclic Aromatic Hydrocarbons) in mineral oil components.

Other substances such as polyethylene glycols (PEGs) or essential oils react with other substances only after application to the skin. PEGs release allergenic nickel from costume jewellery. Various essential oils sometimes form toxic or allergenic (per-)oxides only when exposed to air.

Conversely, the pollutant-minimising synthetic substances of anti-pollution preparations are superfluous if the skin barrier is regularly supplied with the physiological skin components necessary for it. This applies equally to "detoxifying" products. According to the recommendation of the German Federal Institute for Risk Assessment (BfR), substances that suppress irritations of other formulation components should be avoided.

Ecological aspects

Vegans attach importance to the fact that animal substances are neither processed nor present in production processes of ingredients and finished products. This touches on the desirable reduction of industrialised animal husbandry. However, environmental issues also include repackaging waste and the recyclability of dispenser and jar materials.

In general, what about the environmental sustainability of the raw materials used? Is their local exploitation, cultivation or chemical synthesis in line with the preservation of the environment and the achievement of climate goals? Is safe disposal via waste and sewage treatment plants assured? This topic area includes, for example, the elimination of complexing agents that are difficult to degrade, endocrine disruptors and dioxin-forming chloroaromatic preservatives.

The modular approach

Banning substances from cosmetics according to the "free from" or "without" philosophy is one way of minimising. Another approach is modular skin care. It asks the fundamental question "What does the individual skin need?" and begins with a skin analysis, which step by step leads to a formulation tailored to the individual. In this case, base creams, gels and lotions with serums (active ingredient concentrates) are adapted to the respective skin condition. Su-

perfluous products are left out from the outset. This procedure leads to minimal storage of a wide variety of finished products. However, the products put together in this way for home care can only be sold as designated, individual services. Alternatively, the foundations and serums are dispensed as stand-alone preparations and used one after the other.

Summary

The potential of minimalist options in cosmetics is high. The "without" philosophy is an increasingly strong trend. Focusing on the essentials accommodates skin physiology and the environment without compromising quality of life.

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