

# Cosmetic preparations with specific attributes

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Although we live in a high-tech environment, the tendency towards spiritual thinking still is firmly established in human reasoning. The so released forces are apparent every day – just consider the global conflicts around religion and religious faith.

**H**uman spirit and faith can move mountains. The resulting placebo effects in the context of pharmaceutical drugs, food supplements, the seemingly miraculous powers of water and many other things in our daily life are scientifically proven.

Placebo effects and the belief in a vast number of still undiscovered powers of Mother Nature undoubtedly also are a perfect business model. Both the sides, consumers as well as manufacturers and providers of the respective articles and services benefit in this case. Whenever the placebo effects of harmless powders, extracts or creams are ample enough to eliminate many of the minor health and skin problems, the objective has been achieved: excellent effects without adverse reactions. Why then academically talking things down when the effects have been statistically proven by scientists?

The business model, above all, utilizes widely spread connotations and prejudices:

- Nature versus chemistry: natural products a priori are better and should be preferred. Chemistry is bad and harmful.
- Gemstones and precious metals are coveted, precious and expensive in all the different cultures of the world.
- Preserved traditions from bygone times belong to our cultural assets. The resultant folk medicines have become very popular.
- “Conventional medicine” has almost become an abusive word and appropriately reveals the inadequacy of the medical faculty.
- The individual attention that humans frequently miss today is replaced by exhaustive product advertising and specifications that address our senses and well-being.

In addition, the cosmetic industry has adopted more and more topics from the medical field in recent decades. Many of the terms such as cosmeceuticals and brand names with a doc-

toral degree illustrate this trend. Also homeopathy, Schüssler salts and Bach flower therapy of the pharmacies belong to this category: their famously zero adverse effects are quoted on every occasion. Well-known health care and pharmaceutical terminology is applied. At least one person with a doctoral degree turns up as the force behind newly developed preparations – even if this person never has seen the respective product.

## Spagyrics & Co

Among other processes, spagyrics comprises techniques to gain essences, or in other words, media that contain herbal active agents. The maceration process, often particularly mentioned in this context, only is one extraction method among a variety of other techniques. The distillation process to isolate and concentrate specific substances also is a popular method. The particular effect of minerals and trace element fractions gained via incineration of plants, with a composition that actually varies from plant to plant, and the reason why these specific salts are supposed to have an optimal effect often is hidden behind rather abstract and empurpled descriptions. It is a fact however that salts can contribute to the NMF (Natural Moisturizing Factor) and that this is the reason why they are added to conventional skin care preparations. Up to this point, spagyrics has a lot in common with conventional cosmetics using herbal components.

Noticeable however are sometimes the concentrations, stated in D-values as otherwise customary in homeopathy. In this context, the term potentiation is used which can easily be misunderstood by pharmaceutically illiterate consumers. In this case, potentiation does not mean improved efficacy but is the technical term for a potentially low concentration. D1 corresponds to a dilution of 1:10, D2 a dilution of 1:100 und so forth. Hence, the oil which is enriched with the herbal active agents gained after macerating a plant – the pharmacists speak of drug extraction here – contains appropriately low doses of the substance.

It has not yet been clarified why spagyric preparations are supposed to be advantageous in comparison to other natural cosmetics and herbal active agents, as often promised by the respective manufacturers. Sound arguments still are missing though!

Macerations in presence of precious metals and gemstones are an interesting point too. Since said materials – gold plays a particular role in this case – are definitely insoluble in the respective media, the claim that the extracts contain specific (magic) power and energy can hardly be revealed to the attentive observer. Components such as “aurum extract” and “liquid alchemistic gold” are fantasy names.

Colloidal gold is formed from aurates by chemical reaction. The acclaimed sensational abilities such as increased intelligence, regeneration and rejuvenation after oral application also belong to the stories with good entertainment value that are published in the web around this precious metal. Quoted are publications in the context of the medicinal aurate therapy whereas the specific results then are carried over to the application of colloidal gold which de facto is incorrect. There is talk of healing various diseases and also of powerful radical scavenging activities which in turn sounds interesting for cosmetic applications. As a matter of fact, this means pulling the wool over consumers' eyes. Purple of Cassius in fact is used as a pigment in make-ups however this is not a recent discovery but old hat which dates back to the 17<sup>th</sup> century.

The situation is different when precious stones, often feldspar or kaolin, are finely ground and the resulting powders then are added to the preparations. They can be utilized as pigments or possibly even healing earth as they have absorptive features when the particles are particularly small. It should be mentioned however that certain common clay powders, as used for instance in the Felke therapy, are far more effective and less costly.

Just to add a remark to the above mentioned distillation: If there is talk of an entitative information or of a particular energy that changes from the plant into the distillate during distillation and there is preserved in order to change over to the consumer during application, it needs to be established that the composition of course has a specific herbal pattern with a particular effect or even not at all. An imputed particular energy or information makes an interesting spiritual and even convincing story though but just is penned to paper for product promoting purposes. Even sensational scien-

tific studies are circulated which however turn out to be flops in the case of a pointed inquiry.

It is most unfortunate that spagyric preparations often are preserved with benzyl alcohol, sorbic acid and benzoic acid which still are popular today for pharmaceutical applications. The mentioned preservatives are not in line with today's health aspirations and hence counterproductive. Due to their allergenic features they are listed in the annex of the German Cosmetic Directive (KVO). The same applies for essential oils with allergenic components which are subject to declaration. In the context of allergenic substances, sometimes the footnote is found „component of natural essential oils“, a reference, which actually is correct on the one hand but nevertheless misleading on the other hand since the components are allergenic and hence subject to declaration. Certain references, such as “no synthetic fragrances“, also lead consumers to believe that the product is safe whereas it contains the above mentioned essential oils.

Concerning the oscillation or light wave “laden” and hence “highly energetic” preparations, it is referred to similar yesteryear's claims regarding the super-water qualities: H. Lautenschläger, Wasser ist nicht gleich Wasser – Wasserqualitäten, Kosmetische Praxis 2005 (4), 8-10 (translated version: Water and water – just not the same things). The claimed benefits of course also are pure fantasy.

Last but not least: The frequently published promises on healing or soothing health problems or skin diseases are not in line with the Cosmetic Directives and only allowed in the context of medical prescriptions.

### **Micro silver**

The situation with micro or nano silver containing preparations is entirely different. Highly dispersed silver has strong antiseptic effects, a feature which is utilized in the context of chronic skin disorders such as neurodermatitis, inflammations as well as in the case of adhesive plasters. Silver has a specific affinity to the sulphurous amino acids of the protein structures of microorganisms. By reacting with sulphur the germs are inactivated and rendered harmless. It should however be mentioned that silver containing preparations also can be disadvantageous when used on a long term basis: they can cause discolorations on the skin through silver precipitations (argyria).

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