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## MOISTURIZING CREAMS.

The need to maintain in constant equilibrium the liquids of our tissues derives from the particular chemical composition of the human body, mainly made up of water. Cold, wind, sun, air pollution, diseases or the natural process of aging of the skin cause the progressive dehydration of the cutaneous tissue. It is better to act preventively, trying to oppose the phenomenon, rather than to try to fight it when it is too late.

One of the most important structures, which maintain the skin in a good state of emollience and avoid an excessive dehydration, is the hydro-lipidic superficial film. Its integrity and good functionality are essential to have a healthy skin; in order to have such a skin, some substances of hydrosoluble nature and lipo-soluble substances are necessary. Thanks to unsaturated parts they are able to intimately mix with them.

The use of these moisturizing products, normally at the beginning of the day, can prevent and reduce the dehydration occurring during the day and to use these cosmetic preparations as vehicle for other active ingredients equally important in the management of our aesthetical capital as the UVA screens or protective substances against free radicals.

These products act on the horny or epidermic cutaneous layer where a certain quantity of water is contained, naturally can notably increase for the action of swelling that the various preparations determine at the level of the cutaneous surface. The moisturizing creams realize an igroscopic permanence on the epidermis, but they don't intervene on the passage of water from the underlying layers.

### The epidermis is made up of the following layers:

- **Basal or germinative layer.** It is composed by cells arranged as a palizade on the border line with the derma and responsible for the renewal of the epidermal cells, reproducing by means of mitosis: periodically every cell splits in two parts and the newborn cells are pushed towards the surface forming the thorny layer

- **Thorny or malpighian layer.** It is composed by more cells ensembles of poliedric aspect, flatter than those of the basal layer and separated by the intercellular substance. Also the thorny cells maturing go towards the epidermal surface

- **Grainy layer.** It is the layer of transition between the thorny and the horny layer; its thickness varies from 1 to 4 rows of cells, it is more abundant in the palm-plantar zones and contains a substance (cheratoialin) essential in the process of keratinization



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- **Horny layer.** It is in direct contact with the outside and its thickness varies according to the body zone. The keratinization concludes in the horny layer: here the cells no longer contain nuclei and the terminal products of the cutaneous renewal, are eliminated by the epidermal surface

There are creams, gels, masks containing vegetable moisturizing products. Other products act creating a barrier on the skin that limits the evaporation of the water from the underlying tissues and this indirectly acts as factor of hydration. Good results are achieved with products containing cutaneous bio-activators, as for example vitamins, both regarding hydration and cutaneous normalization.

The moisturizing cream is generally a rather soft and easy-to-apply product. The action of this product is double, because, apart from the primary function of hydration, it has an emollient action, due to sebum-like substances contained in its formulation.