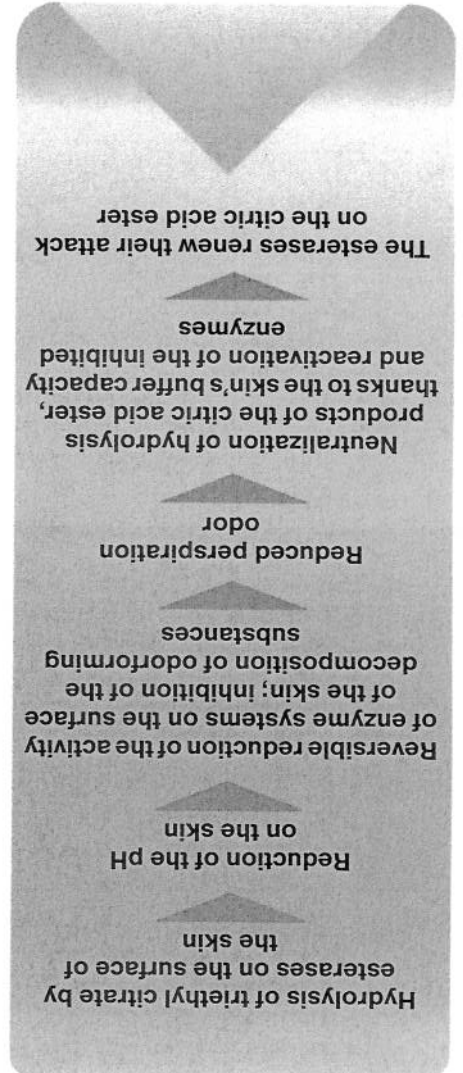


**Close-to-nature active agents Deodorant active agents**

**Principle of efficiency**



**HYDAGEN C.A.T.**

**HYDAGEN DEO**

There are various methods of reducing unpleasant body odors caused by perspiration. These include the use of deodorants, antiperspirants and antitranspirants. Such methods are differentiated by their action mechanisms, for example inhibition of the growth of microorganisms by microbicidal agents, suppression of perspiration, absorption or simply disguising the odors.

However, transpiration and perspiration are natural functions of the protective organ skin, and should not be underestimated. A bacterial flora is present on all healthy skin and is responsible for maintaining the normal status quo. It prevents pathogenic organisms from establishing themselves and maintains the acid protective barrier. In addition, bacteria, with the help of their enzymes, break down perspiration, discarded flakes of the stratum corneum, and sebaceous matter. The bacterial degradation products that are formed are the source of the perspiration odor. This odor can develop quickly and intensively, especially in the armpits, because the sweat glands are particularly numerous here



and the moist, warm conditions promote the growth of microflora.

**HYDAGEN DEO and HYDAGEN C.A.T. are two non-microbicidal active agent products whose effectiveness is based on altering the enzymatic bacterial metabolism. This means that they neither destroy the microflora nor do they inhibit the necessary and natural process of transpiration. The active agent is triethyl citrate. This ester is one component, the existence of which has been proven to be present in nature, e.g. in fruit juices obtained from sour cherries and red currants, and in fermentation processes that take place during the production of wine (14, 15).**

HYDAGEN C.A.T. contains the pure citric acid ester, while HYDAGEN DEO contains a combination of the citric acid ester and butylated hydroxytoluene. The deodorizing properties of both products are based primarily on the inhibiting effect of the citric acid ester on the enzymatic activity of the bacteria on the surface of the skin. This effect is supported by the addition of an antioxidant to HYDAGEN DEO, to inhibit autooxidative decomposition of the unsaturated compounds present in sebaceous matter.

With HYDAGEN C.A.T. and HYDAGEN DEO a form of purely natural deodorant is possible.



The occurrence of the active substance triethyl citrate in nature: sour cherry, red currant.