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## Influence of selected natural products on functional properties of skin

## **Abstract**

In this study the characteristics of biologically active substances that are present in *Camellia sinensis* extract as well as in Kombucha are presented in the light of their cosmetic properties.

The experimental part of the studies presents results of the work that involved the assessment of acids content present in fermented tea, as well as qualitative and quantitative analysis of microbiological contents of Kombucha drink.

Taking experimental results as the starting point, water mist recipes were developed. The further steps involved preparations of cosmetic products that have finally undergone the series of following tests: physicochemical properties, microbiological content evaluation, stability tests and dermatological trials – all performed in a professional facility.

After successful evaluation of aforementioned properties, the last part of the study was introduced – the experimental studies of white and green tea water mists and their influence on human skin condition. The appliance testing of the skin, performed on weekly basis, involved measurements of its hydration, sebum content, transepidermal water loss level as well as skin roughness. All measurements have taken place before and after a series of cosmetic products application on skin surface, which allowed to objectively assess their real influence on skin condition.

Results acquired during the study may contribute to widening the range of application possibilities of tested natural products in the field of cosmetology and dermatology.