

# Study of Alpecin Double-Effect Shampoo

**Product:**

Alpecin Double-Effect Shampoo against dandruff and hereditary hair loss

**Test subjects:**

20 men aged 18 to 55 who suffer from increased dandruff.

**Time period:**

The test subjects used Alpecin over the course of 6 weeks.

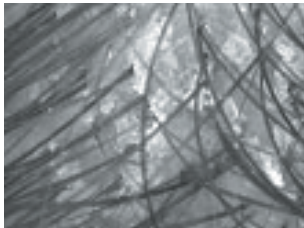


**Problem and study objective:**

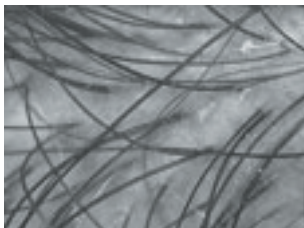
Dandruff as well as the genetic predisposition for hair loss frequently coincide in men. Due to the impact of the male hormone testosterone, the sebaceous glands are stimulated, which enhances microbiological growth and the associated formation of dandruff on the scalp.

Testosterone can also negatively impact hair growth in hereditarily predisposed hair roots and accelerate hair loss.

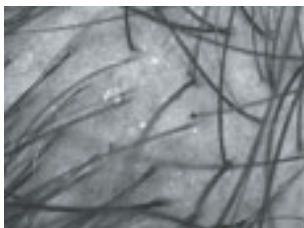
The current study was the first to test the anti-dandruff effect of a novel caffeine shampoo, which contains a caffeine complex as well as an active ingredient combination against dandruff.



*Figure 1: The scalp at the beginning of the study*



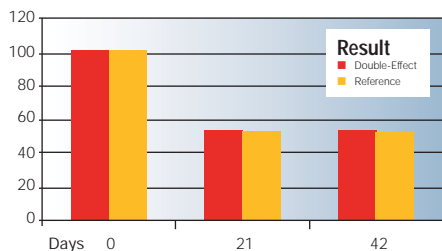
*Figure 2: The scalp after 21 days*



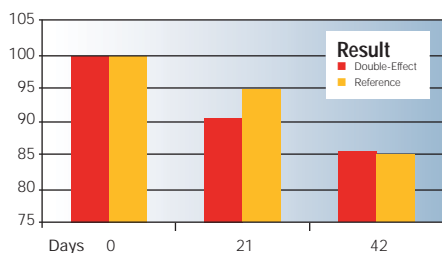
*Figure 3: The scalp after 42 days*

**Study design**

The test was conducted with 20 men aged 18 to 55, who suffered from increased dandruff. Prior to the test, the test subjects were prepared for the study with a neutral shampoo. The test shampoos used were the caffeine-based anti-dandruff shampoo and a comparative market reference product to which an excellent anti-dandruff effect had been attributed. The shampoos were used over a time period of 6 weeks. During this time, the microbiological activity on the scalp as well as the overall amount of dandruff were measured.



Graphic 1: Microbiological activity [%]



Graphic 2: Quantitative dandruff reduction [%]

The condition of the scalp and the formation of dandruff directly on the scalp were recorded with special camera technology, and the images were quantitatively categorized upon conclusion of the tests. In a questionnaire, the test subjects also had the opportunity to provide their subjective assessments of the test products.

## Result

During the quantitative evaluation of the amount of dandruff, it became apparent that the overall measurable amount of dandruff decreased very well in comparison to the market reference product. [Graphic 2]

The antimicrobiological effect against *Malassezia furfur* (microorganisms) was also excellent for both products. The number of germs is approximately reduced by half. [Graphic 1]

The comparison of the scalp images has confirmed the results very well. [Figures 1 to 3]

## Diskussion

The subjective assessment of the anti-dandruff effect confirms the quantitative results. From the users' point of view, the formation of dandruff decreased significantly. Compared to the market reference product, the test shampoo was equally effective. However, the comparative study also showed that dandruff formation on the scalp is subject to strong individual fluctuations and that neither the test shampoo nor the market reference product eliminated dandruff completely in all cases during the period of application.

Additional information on hereditary hair loss is provided by the following studies:

- Penetration of caffeine from a shampoo formula
- Caffeine Complex is Effective in the Treatment of Androgenetic Alopecia

Information is available at [www.Alpecin.de](http://www.Alpecin.de).