

Cosmetic acceptability and efficacy evaluation of a nutritive shampoo with jojoba oil

Study Records:

1. **Objective:** A first stage will consist in the sensory evaluation of four shampoos containing jojoba oil in different concentrations; the purpose of this test is to describe the properties of the shampoos; “blind tests” will be performed. A second stage will consist in the *in vivo* instrumental measurement of hair grease through a non-invasive method in order to confirm jojoba oil cosmetic efficacy.
2. **Individuals Selection:** Twenty-two -volunteer- panelists aged between 37 and 65 were selected. They had normal, dry and oily hair biotypes.

Sensorial Evaluation:

1. **Objective:** To describe the properties of shampoos containing jojoba oil.
2. **Methodology:** A differential test, namely, the triangle test, was performed with the four nourishing shampoos involved in the study, whereby two samples of control shampoo without jojoba oil and one sample of shampoo containing jojoba oil were provided to panelists. After that, sensory reaction was analyzed by means of a study known as rub out, during and after hair washing.

Results:

Triangular Test: The panelists detected the samples with jojoba oil.

Sensorial characteristics of different nutritive shampoos

Shampoo OOJ: less concentration of nutritive shampoo (0,2)

Shampoo OJJ: medium concentration (0,6)

Shampoo JJJ: maximum concentration (1,0)

Control Shampoo: with no jojoba oil

Tested Shampoo	Shampoo OOJ	Shampoo OJJ	Shampoo JJJ	Control Shampoo
Viscosity	2	3	4	2
Foam quantity	2	2	2	2
Expansion	2	3	3	2
Washing facility	2	3	3	2
Brightness	3	3	5	0
Disentangle easiness	1	3	5	0
Reminders	4	6	8	1
Smoothness	6	7	8	1
Cleaning strength	3	3	3	1

Conclusions:

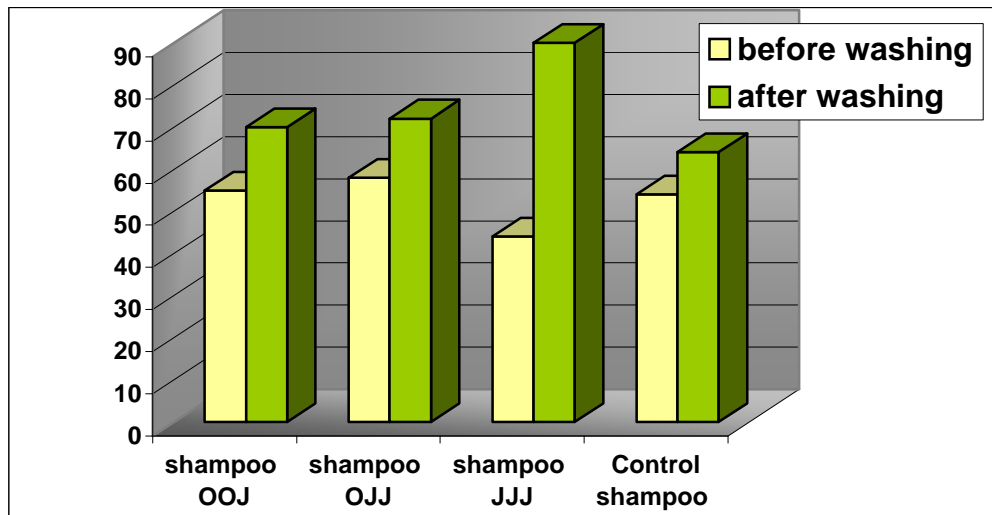
The shampoo with the maximum concentration of jojoba oil showed good viscosity, easy disentangle of the hair, providing more brightness and smoothness compared to the other concentrations.

Concerning shampoo's performance, with respect to residue amount and lubricity protection, sensory and instrumental evidence was given, this is important for the development of various shampoos, for oily, dry and normal hairs, only depending on the jojoba oil concentration.

Instrumental evaluation of cosmetic efficacy

Sebum measuring:

It was carried out with a German sebometer. The test was made with half of the head with the control shampoo, measuring before and after hair washing.



Comparisons of the most representative attributions on sensorial efficacy:

Viscosity, brightness, cleaning strength, disentangle easiness, smoothness, reminders.

