Cosmetic effectiveness evaluation of a beauty product supporting the reduction of skin blemishes caused by cellulite.

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Keywords: cellulite, thermography, cellulite degree, tenderness to palpation, effectiveness, duration of the bottle.

### **Summary**

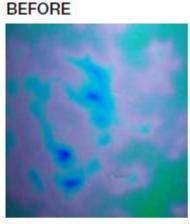
Cellulite, common term for edematous fibro-sclerotic panniculopathy, is an inflammation affecting adipose tissues, interstitial tissues (i.e. situated within the cells) and the thinnest blood vessels on a subcutaneous level. As a consequence of this alteration of the fibrous connective tissues there is an increase in the mass of adipose cells, water retention and fluids stagnation. The development of cellulite can be divided into 4 stages. Of cellulite is due to a complicated interplay of Genetic reasons, Constitutional causes and Hormonal and vascular causes.

This clinical trial aims at evaluating whether the cosmetic product being tested is capable of supporting the reduction of skin blemishes and imperfections caused by cellulite. A group made of 20 healthy female volunteers. To carry out the survey 20 female volunteers affected by cellulite at stage 1 to 3 were selected. All volunteers were chosen by the dermatologist following specific parameters. The product was applied on buttocks and thighs with a light circular massaging motion until the product was completely absorbed. Product was applied pure (not diluted) on clean skin with a light circular massaging motion until completely absorbed. Three knobs of product was the quantity put on each leg twice a day (in the morning and again in the evening). All collected data were grouped together and repeatedly analyzed using ANOVA (Variance analysis). Tukey's test was performed as posttest. Treatment with the product being tested produces a time proportionated thigh circumference thinning. Maximum reduction value (3.1cm) was registered 8 weeks after the beginning of the program. Treatment with the product being tested produces a time proportionated knee circumference thinning. Maximum reduction value (2.1cm) was registered 8 weeks after the beginning of the program. Treatment with the product being tested produces a reduction of the clinical parameter "tenderness to palpation". This reduction is to be associated with an improvement of subcutaneous blood perfusion.

### **Results/Comments**

# **THERMOGRAPHY IMAGES**

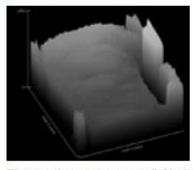
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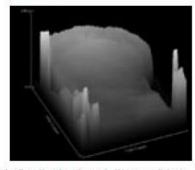


Picture number 1, taken before the beginning of the treatment, shows a thermographic image known as "leopard-skinned" indicating cellulite at its 3 rd stage. Image number 2, taken after the end of the treatment, shows a thermographic image closer to normality and thus indicating cellulite at its 1 st/2nd stage.

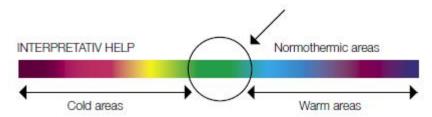
# BEFORE



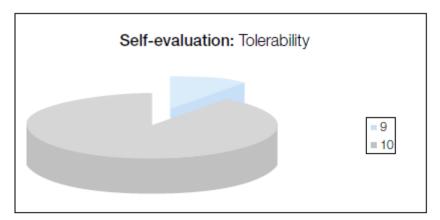
# **AFTER**



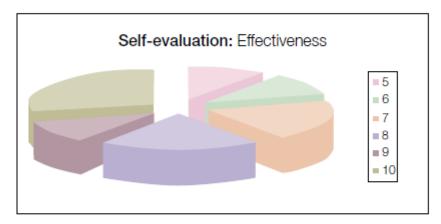
Pictures show cutaneous relief before and after the treatment. It's possible to notice how an application of this product produces an improvement in the aesthetic appearance of the skin, which results smooth and even.



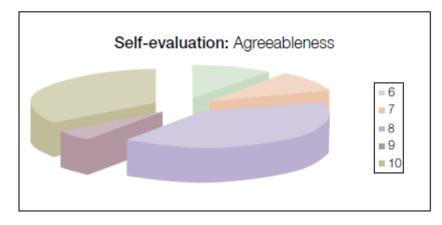
# **SELF-EVALUATION**



Average grade = 9.9

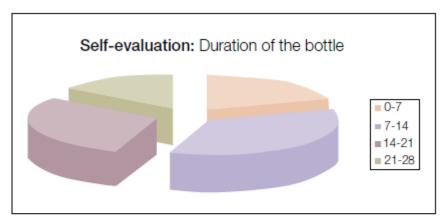


Average grade = 8.0



Average grade = 8.5

### SELF-EVALUATION: DURATION OF THE BOTTLE



The table displays percentage data related to the duration of the bottle divided into classes

	Percentage
0-7 days	20,0%
7-14 days	35,0%
14-21 days	30,0%
21-28 days	15,0%

The middle value of the duration of the bottle is 15.1 days. The median value of the duration of the bottle is 14.0 days.

## **CONCLUSION:**

Given what expounded above, it is possible to declare that during the period of treatment the cosmetic product known as:



had a positive influence on the parameters taken into consideration in all tested subjects. More specifically:

- · produces a thinning of thighs and knees
- produces an improvement of subcutaneous blood perfusion in treated areas
- · reduces skin imperfections caused by cellulite improving skin appearance

The product was also favourably judged by all tested subjects.

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