

# Sensory Analysis



sustainable powerful superfood  
 functional active ingredient with elegant feel  
 anti-inflammatory  
 film-former, moisturizing, protectant  
 soothing, wound healing

## ABSTRACT

Sensory is a connection created between perception and the senses. Sensory analysis provides an opportunity for personal care products to capitalize on benefits before, during, and after application. Sensory properties can set a product apart in the marketplace and provide strong brand differentiation. Sensory experience may include the way a product feels and performs, even after application. Evaluations typically include sight, smell, and touch to differentiate between products or ingredients. Sensory attributes offer consumers an emotional link to experience luxury, calm, and relaxation on a daily basis.

**Phytofuse Rejuvenate®** capitalizes on the isolated polysaccharides extracted from the *Salvia hispanica* seed mucilage as a natural approach to protective and regenerative skin care. **Phytofuse Rejuvenate®** allows formulators to achieve multiple potent benefits for skin and hair utilizing a plant-derived material, revitalizing and repairing damaged skin while providing softening and emollient benefits for a luxuriant appearance. This unique ingredient also enhances sensory benefits when used in various formulations. This study was conducted to determine the ability of **Phytofuse Rejuvenate®** to offer sensory benefits in a skin care formulation.

An *in-vivo* sensory analysis evaluates the measurement, analysis, and interpretation of participant responses to various stimuli. The study determines any perceivable difference between a control lotion and a lotion sample containing 5.0% **Phytofuse Rejuvenate®**. In this single-blind study, participants were asked to quantify various sensory parameters for the control and experimental samples. Parameters included pick-up, cushion effect, slip, spreadability, drag, coverage, velvety after-feel, silky after-feel, tacky after-feel, and overall skin comfort. Parameters were scored subjectively by the participants and recorded for further analysis. Based on the results obtained, **Phytofuse Rejuvenate®** is capable of enhancing pick-up, cushion effect, spreadability,

## MATERIALS AND METHODS

This study included ten participants. Two samples were compared in this study, including a control Cetaphil lotion and a Cetaphil lotion containing 5.0% **Phytofuse Rejuvenate®** as the experimental sample. Samples of each material were placed on the participant's volar forearm.

**Code Number: 16882**

**INCI Name:** Salvia Hispanica  
Seed Extract

**INCI Status:** Approved

**REACH Status:** Complies

**CAS Number:** 93384-40-8

**EINECS Number:** 297-250-8

**TRF#:** 5200

**Lot Number(s):** 60675P

**Suggested Use Levels:** 1.0 - 10.0%  
**Use Level for Assay:** 5.0%

### Sponsor:

Active Concepts, LLC  
107 Technology Drive  
Lincolnton, North Carolina 28092

**Study Director:** Maureen Danaher  
**Principle Investigator:** Kara Rivera

### Suggested Applications:

Wound Healing, Anti-Inflammatory,  
Film-Forming, Skin Care, Hair Care,  
Natural Cosmetics, Antioxidant

### Benefits of **Phytofuse Rejuvenate®**

- Anti-Inflammatory
- Wound Healing
- Natural Film-Former
- Intense Antioxidant
- Pro-Collagen Synthesis

# Sensory Analysis

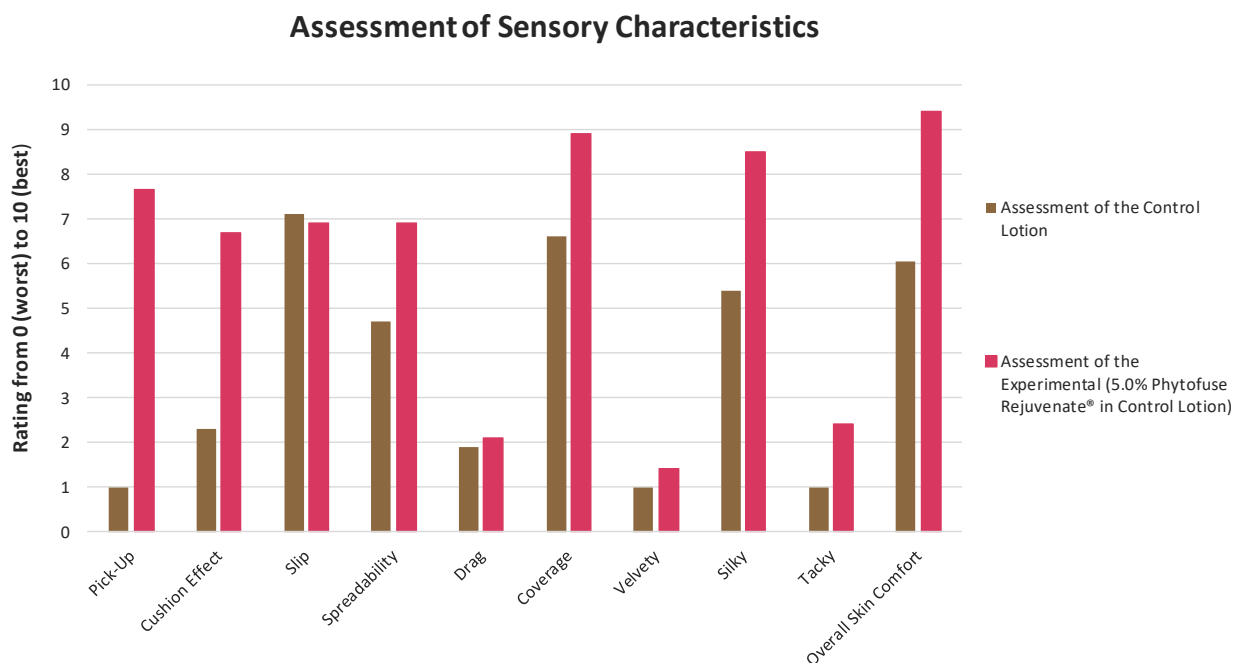
Participants were asked to complete a survey rating the parameters on a scale of 1 to 10, with 1 being the lowest and 10 being the highest using the following parameters: pick-up, cushion effect, slip, spreadability, drag, coverage, velvety after-feel, silky after-feel, tacky after-feel, and overall skin comfort. Descriptions for each parameter were provided to the participants, ensuring a common baseline while strengthening the reliability of the data.

Parameters Tested	Definition Provided
Pick-Up	Ability to pick-up product on finger
Cushion Effect	When the movement of a product is lessened
Slip	Ease of moving a product
Spreadability	Ability to diffuse product over a surface
Drag	Skin friction, light tug during application of product
Coverage	Degree at which product covers skin
Velvety	Powdery after-feel
Silky	Smooth after-feel
Tacky	Sticky after-feel
Overall Skin Comfort	Feeling comfortable on the skin

## RESULTS

Parameters Tested	Assessment of the Control Lotion	Assessment of the Experimental (5.0% Phytofuse Rejuvenate® in Control Lotion)
Pick-Up	1	7.65
Cushion Effect	2.3	6.7
Slip	7.1	6.9
Spreadability	4.7	6.9
Drag	1.9	2.1
Coverage	6.6	8.9
Velvety	1	1.4
Silky	5.4	8.5
Tacky	1	2.4
Overall Skin Comfort	6.05	9.4
Mean	3.705	6.085

**Chart 1.** Average results for participant's sensory assessment.

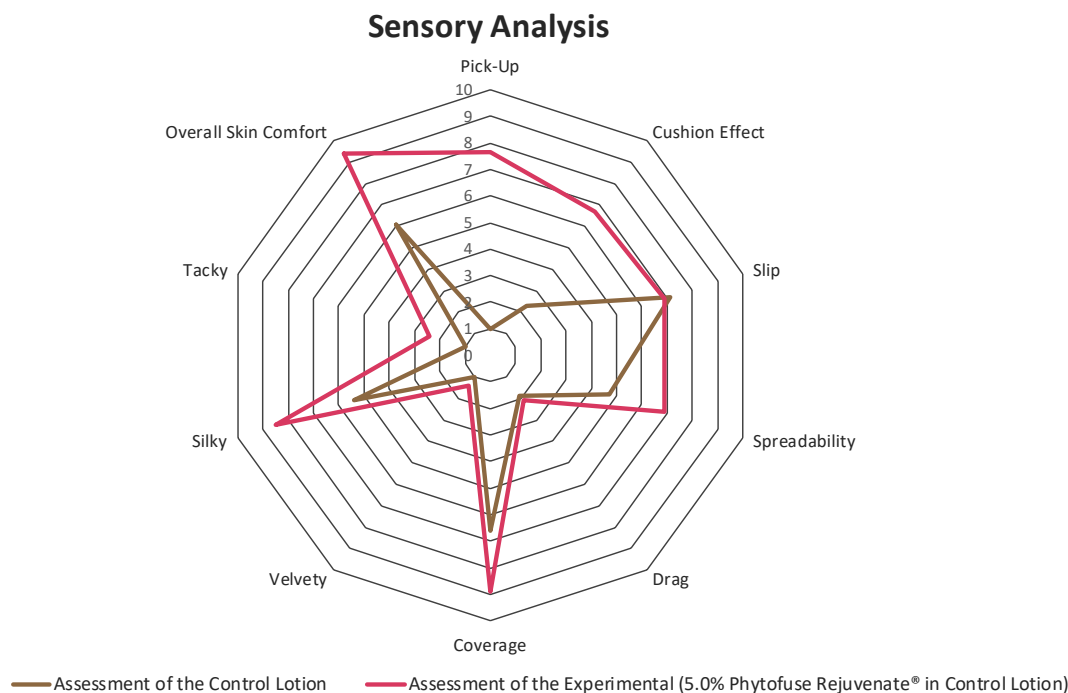


**Graph 1.** Rating of sensory characteristics following sensory assessment.

# Sensory Analysis

Parameters Tested	Percent Difference - Comparison of Control Lotion vs. Experimental (5.0% Phytofuse Rejuvenate® in Control Lotion)
Pick-Up	665.0%
Cushion Effect	191.3%
Slip	-2.8%
Spreadability	46.8%
Drag	10.5%
Coverage	34.8%
Velvety	40.0%
Silky	57.4%
Tacky	140.0%
Overall Skin Comfort	55.4%

Chart 2. Percent difference of sensory characteristics.



Graph 2. Sensory characteristic results for control and experimental samples.

## DISCUSSION

When comparing sensory attributes of the control to the experimental, the benefits of including 5.0% **Phytofuse Rejuvenate®** in a lotion are apparent. In relation to the control, the experimental lotion containing **Phytofuse Rejuvenate®** improved various parameters, including pickup, cushion effect, spreadability, drag, coverage, velvety after-feel, silky after-feel, tacky after-feel, and overall skin comfort by 665%, 191%, 46%, 10%, 34%, 40%, 57%, 140%, and 55% respectively. It is clear in this study that **Phytofuse Rejuvenate®** helps create an added sensory element to finished formulas.