

Tradename: AC WonderShroom

Code: 21029

CAS #: 84650-60-2 & 999999-99-4 (or) 68917-13-5 & 999999-99-4 (or) 68917-13-5 & N/A (or) 9057-02-7

Test Request Form #: 11682

Lot #: N240509A

Sponsor: *Active Concepts, LLC; 107 Technology Drive Lincolnton, NC 28092*

Study Director: *Daniel Shill*

Principal Investigator: *Kayla Goodson*

Study Performed:

Mood Survey Analysis

Introduction

Cosmetics are expected to provide more than just physical benefits. Users want to experience emotional pleasure from their cosmetics, ultimately leading to an improved state of well-being. By experiencing increased emotional pleasure through cosmetic application, users are not only satisfied with the beauty attributes of a product but also an elevated sense of self appreciation. Taken together, the physical and perceived effects of product application contribute to the overall product experience.

Accordingly, a Mood Survey Analysis was conducted to evaluate the effect of applying **AC WonderShroom** on immediate and short-term mood state.

Study Principle

Participants completed a mood survey before product application, 24 hours after application, and one week after daily application to demonstrate the dynamic aspects of a product experience and the perceived effects.

Materials

- A. **Mood Survey:** Brief Mood Introspection Scale (Gashke & Mayer 1988)
- B. **Products:** Base Lotion (Cetaphil® Moisturizing Cream for All Skin Types)
- C. **Software:** Excel Analysis ToolPak (Microsoft)

Methods

20 M/F volunteers between the ages of 22 and 54 who were known to be free of any skin pathologies participated in this study. Half of the participants applied 2.0% **AC WonderShroom** in Base Lotion on their forearm daily for one week while the other half of participants applied the Base Lotion alone. The skin test site conditions and treatment are described below (Table 1). Participants completed the following survey before product application, 24 hours after product application, and after one week after daily application:

- A. Pleasant Mood Index (Brief Mood Introspection Scale): This survey provides an evaluation of mood in terms of pleasant or unpleasant. Before the first application, participants indicated how well 16 distinct mood adjectives/phrases described their present mood. After 24 hours and one week of application, the participants indicated how well the same 16 distinct mood adjectives/phrases described their present mood in relation to the cosmetic benefits of **AC WonderShroom** application. Higher scores indicate a more pleasant mood.

Table 2. Descriptions of the Conditions and Treatments for Each Forearm Test Site

Test Site	Condition	Treatment / Test Article Application Description	Lotion PH
1	Base Lotion	Base Lotion	5.4
2	2.0% AC WonderShroom	2.0% AC WonderShroom in Base Lotion	5.3

The data are displayed as averages and t-test analyses were performed with statistical significance accepted at $p \leq 0.05$. Percent change is expressed relative to Baseline values and calculated by the following equation:

$$\text{Percent Change (\%)} = \frac{\text{Survey Score}_{\text{After 24 Hours or One Week of Application}} - \text{Survey Score}_{\text{Baseline}}}{\text{Survey Score}_{\text{Baseline}}} \times 100$$

Results

The data obtained met criteria for a valid study as the Base Lotion performed as anticipated. 2.0% **AC WonderShroom** demonstrated increased mood perception 24 hours after an initial application and after one week of daily application.

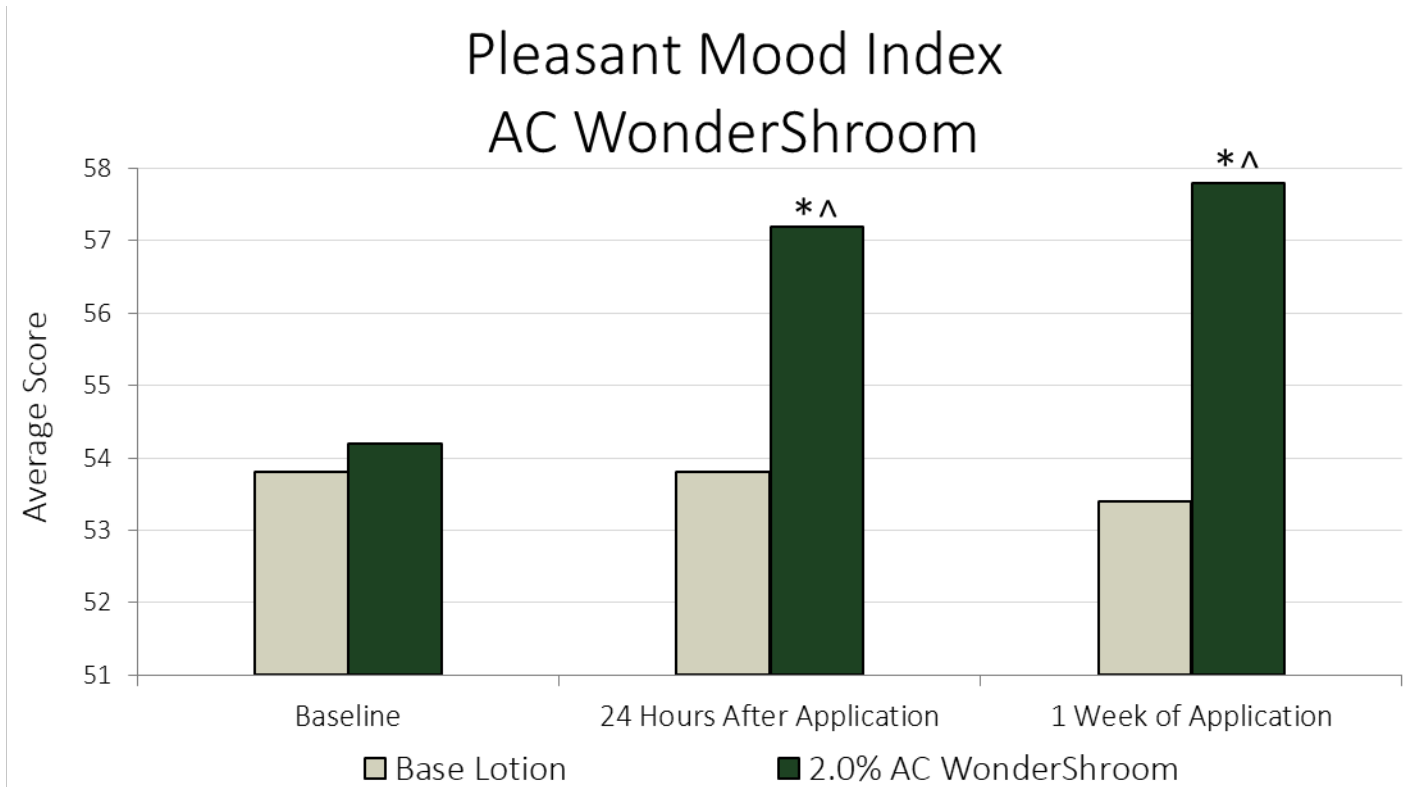


Figure 1. The impact of **AC WonderShroom** application on Pleasant Mood Index scores. The Pleasant Mood Index (Brief Mood Introspection Scale) provides an evaluation of mood in terms of pleasant or unpleasant with higher scores indicating a more pleasant mood. * indicates significance ($p \leq 0.05$) compared to Baseline values. ^ indicates significance ($p \leq 0.05$) compared to Base Lotion.

Table 2. T-test Analysis of Brief Mood Introspection Scale Scores from Baseline to After 24 Hours and One Week of Application of Base Lotion and 2.0% **AC WonderShroom**. * indicates significance ($p \leq 0.05$) compared to Baseline values.

	Base Lotion	2.0% AC WonderShroom
24 Hours After Application	1.00	0.044*
After One Week of Application	0.764	0.036*

Table 3. T-test Analysis of Brief Mood Introspection Scale Scores After One Week of Application. ^ indicates significance ($p \leq 0.05$) compared to Base Lotion within the same timepoint.

Base Lotion vs 2.0% AC WonderShroom	
P-value	< 0.001 [^]

Discussion

Mood Surveys were implemented to assess the impact of topical **AC WonderShroom** application on immediate (24 hours after initial application) and short-term (after one week of daily application) mood state.

As shown in Figure 1, pleasant mood did not significantly change throughout the study with Base Lotion application, indicating the Base Lotion does not have significant impacts on participants' immediate and short-term mood perception (Table 2). Conversely, applying 2.0% **AC WonderShroom** once during a 24-hour period significantly improved pleasant mood perception by 6%, compared to baseline (Figure 1; Table 2). Similarly, daily application of 2.0% **AC WonderShroom** elicited a significant 7% increase in pleasant mood perception after one week of application, compared to baseline (Figure 1; Table 2). These results demonstrate **AC WonderShroom** improves the immediate and short-term perceived pleasant mood of participants with daily application.

Similar results are shown when examining the collective effect between each condition. Applying 2.0% **AC WonderShroom** significantly increased immediate and short-term mood perception compared to Base Lotion at every timepoint (Figures 1, 2; Tables 3, 5). These results demonstrate **AC WonderShroom** elicits acute and short-term improvements in perceived pleasant mood with daily application.

In conclusion, the present Mood Survey Analysis demonstrates applying **AC WonderShroom** augments perceivable mood scores after one and daily applications when added to personal care applications at recommended use levels. Collectively, **AC WonderShroom** elicits immediate and short-term, perceivable mood effects and confers benefits beyond the traditional physical beauty attributes associated with cosmetic products.

References

1. Mayer, J. D., & Gaschke, Y. N. (1988). The experience and meta-experience of mood. *Journal of Personality and Social Psychology*, 55, 102-111.
2. Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.