Effectiveness of Nature-Based Sensitive Skin Products in Self-Perceived Sensitive Skin Population

Hemali B. Gunt, PhD¹, Stanley B. Levy, MD², and Celeste A. Lutrario¹

¹Burt’s Bees Inc., Durham, NC; ²Chapel Hill Dermatology, Chapel Hill, NC

INTRODUCTION

- Sensitive skin is a highly reactive skin type associated with subjective complaints of discomfort with or without visible signs of erythema and desquamation.
- This irritating and sometimes painful condition impacts quality of life but is manageable and treatable.
- The etiology of sensitive skin is still relatively unknown and multifactorial.
- Whole formula, nature-based products may provide superior skin conditioning due to natural ingredients.

OBJECTIVE

The objective of this study was to evaluate the tolerability and effectiveness of:

a) facial cleanser containing natural oil, beeswax and witch hazel; b) daily moisturizer and c) eye cream, both containing natural oils, glycerin and botanical anti-inflammatories in women with self-perceived sensitive skin.

STUDY DESIGN

<table>
<thead>
<tr>
<th>Study 1</th>
<th>Study 2</th>
<th>Study 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=51</td>
<td>N=48</td>
<td>N=55</td>
</tr>
<tr>
<td>30-65 years of age; self-perceived sensitive skin</td>
<td>30-65 years of age; self-perceived sensitive skin</td>
<td>30-65 years of age; self-perceived sensitive skin</td>
</tr>
</tbody>
</table>

- Washout period (days): 7
- Treatment:
  - Facial Cleanser
  - Daily Moisturizer
  - Eye Cream
- Evaluation:
  - Hydration by corneometry
  - Subject perception of change
- Intervals:
  - Weeks 2 and 4
- Statistical Analysis:
  - Change from baseline (t-test); statistical significance: p≤ 0.05

RESULTS

Study 1

Figure 1. Sensitive Facial Cleanser Improves Skin Hydration.

Facial cleanser improved hydration by Week 4. The majority of participants stated that they experienced hydration by Week 2 which persisted through Week 4.

Study 2

Figure 2. Subjects Treated with Sensitive Facial Cleanser Perceive Favorable Benefits to Skin.

Study 3

Figure 3. Sensitive Daily Moisturizer Improves and Sustains Skin Hydration.

Skin hydration improved by 38% from baseline for up to 8 hours after a single application. By Week 2, sustained improvements of 17% were achieved and an additional 8% improvement was achieved at Week 4.

Figure 4. Subjects Treated with Sensitive Daily Moisturizer Perceive Favorable Benefits to Skin.

CONCLUSIONS

- Nature-based sensitive skin products improved and maintained skin hydration and subject-perceived benefits.
- Facial Cleanser maintained baseline levels of hydration and subjects perceived favorable benefits to skin.
- Daily Moisturizer and Eye Cream improved skin hydration and subjects perceived skin health benefits.
- Overall, nature-based products for sensitive skin were shown to be effective and well tolerated in the self-perceived sensitive skin population.

ACKNOWLEDGEMENTS

The authors thank Consumer Product Testing Company, Fairfield, NJ for performing this work.