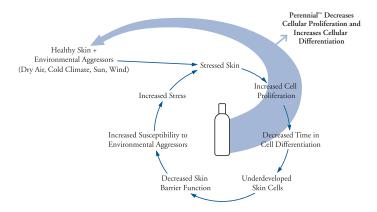
Figure 5. The stress cycle with Nu Skin® Perennial™ Intense Body Moisturizer redirecting the cycle.



Summary

Clinical studies conducted in vitro and in vivo, on both the active ingredient IBR-Dormin™ and on Nu Skin® Perennial™ Intense Body Moisturizer, demonstrate that Nu Skin® Perennial™ Intense Body Moisturizer promotes greater durability against environmental aggressors such as dry air, cold climate, sun, and wind (Figure 5).



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NU SKIN® PERENNIAL™ INTENSE BODY MOISTURIZER CLINICAL BULLETIN

Summarized from a third-party professional assessment performed according to Good Clinical Practices and the Standard Operating Procedures of the organization.

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Survival Strategy for Healthy Looking Skin

Dry air, cold climate, sun, and wind are all environmental aggressors that can set in motion a cycle of increasing cellular stress, leading to dry and flaking skin. The impact of climatic factors, individually and more so in combination, can present a level of stress that decreases the skin's natural ability to produce short-term, adaptive responses.

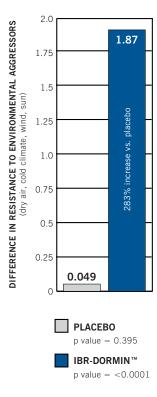
Although the normal range of immediate adaptation to environmental stresses varies from person to person, exceeding the skin's limit can cause significant changes in the skin that set in motion a sequence of events leading to keratinocyte replication. Under stressed conditions, keratinocytes proliferate faster than they can fully differentiate, synthesize and organize the key factors responsible for a healthy and durable skin barrier. This leads to a compromised skin structure and an increase in the loss of water, key minerals, and other moisturizing agents from the skin. In turn, the skin responds by continually attempting to mitigate these effects, resulting in the production of poorly differentiated keratinocytes and an inferior moisture barrier—an effect that can be easily measured using standard instrumental methods (Figure 1).

Figure 1. The Stress Cycle



To address the stressing effects of environmental aggressors, Nu Skin has created Perennial™ Intense Body Moisturizer. It is the first all-over body moisturizer to contain IBR-Dormin;™ a natural compound derived from the bulb of Narcissus tazetta. In the Narcissus plant during dormancy, the bulb is made durable and able to endure environmental stress by producing IBR-Dormin;™ This extract functions as a "slow-down" signal to the cells of the plant. IBR-Dormin;™ has been shown to have a similar effect on the skin and to provide better resistance to stress (Figures 2, 3, and 4).

Figure 2. Resistance of in vivo human skin to external aggressors.

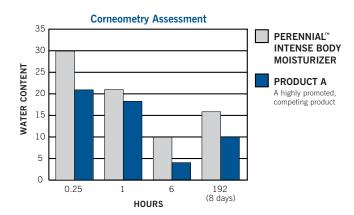


A four-week, double-blind and placebocontrolled study with 92 participants demonstrated that IBR-Dormin™ was successful at protecting against environmental aggressors. An evaluation of skin sensitivity, irritability, fatigue, tautness, suppleness, comfort, and overall protection by the product revealed that IBR-Dormin™ produced significant results.

To confirm the ability of IBR-Dormin™ to decrease environmentally induced stress in the skin, and to document the benefits provided by Nu Skin® Perennial™ Intense Body Moisturizer, a clinical study was conducted. Fifty-two female subjects from 18-63 years of age were divided into two groups: one group using Nu Skin® Perennial™ Intense Body Moisturizer and the other using Product A—a highly promoted, competing product. After a single application of products, corneometer (moisture content of the skin) and evaporimeter (rate of water loss from the skin) measurements were taken at several intervals over six hours and after eight days of twice-daily usage. The results are summarized in Figures 3 and 4.

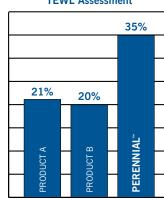
Figure 3 shows that Nu Skin® Perennial™ Intense Body Moisturizer was superior in providing moisture to the skin and retaining that moisture over time when compared to Product A. Nu Skin® Perennial™ Intense Body Moisturizer not only initially provides a lower rate of moisture loss from the skin but also improves the skin's moisture-retention function.

Figure 3. Effect of Nu Skin® Perennial™ Intense Body Moisturizer containing IBR-Dormin™ on skin moisture content.



One of the most significant attributes of an effective moisturizer is the ability to reduce water loss through the upper layers of the skin. By enhancing the skin's natural moisture barrier, Nu Skin® Perennial™ Intense Body Moisturizer has been scientifically shown to reduce the amount of water leaving the skin. Over an eight-day period of product usage, a scientific study of Trans-Epidermal Water Loss (TEWL) showed a 35 percent improvement in the skin's moisture-retention function. Other leading moisturizers tested alongside Nu Skin® Perennial™ were unable to show a statistically significant increase in the skin's moisture-retention function under the same conditions.

Figure 4. Effect of Nu Skin® Perennial™ Intense Body Moisturizer containing IBR-Dormin™ on skin barrier function (rate of moisture loss).



TEWL Assessment