



PAEDIATRIC DERMATOLOGY

OPTIMIZING MILD AND NOURISHING SKIN CARE PRODUCTS FOR SUPERIOR CARE OF INFANTS

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Introduction: Infant skin barrier and eyes are highly vulnerable to external irritants during the first year of life. The infant blink response is lower than in adults, which means the capacity for clearing external materials from the eye is lower in infants. An optimal skin care regimen would therefore include mild cleansing in conjunction with moisturizers that replenish naturally-occurring skin lipids and improve skin barrier quality.

Objective: The objective of this research was to optimize mild, gentle and caring infant skin products and benchmark their hydration potential to market-leading infant care regimens.

Materials and Methods: Healthy female adult subjects provided informed consent to participate in randomized application, double-blind, IRB clinical studies. Industry-standard eye irritancy (instillation of dilutions) for the wash products and timed moisturization tests for the lotion alone and in combination with the wash product as a regimen were conducted. In addition, a novel barrier disruption test was used for evaluating the mildness of cleansing products under exaggerated conditions. Test products included baby shampoo, baby bar, tip-to-toe wash, and a lotion. The nourishing product regimen included stearic acid, glycerin, petrolatum, and fatty acids. Following testing on adults, all products were evaluated in infant tolerance and suitability tests.

Results: The regimen of the nourishing tip-to-toe wash and baby lotion was superior in hydration to market-leading regimens. All wash products were well-tolerated in eye irritancy tests and showed similar or less irritation compared to the marketed baby wash product. Similarly, the wash products were less irritating compared to the marketed baby wash control product under barrier-disrupted conditions.

Conclusions: For optimal infant skin care, it is important to consider both product mildness and hydration, as disruption of the baby skin barrier can lead to more serious clinical disorders, and total infant skin care will typically involve a regimen of products.

