EVALUATION OF A FACIAL CREAM’S ABILITY IN HYDRATING LOCATION-RELATED FACIAL SKIN HYDRATION UNDER DRY ENVIRONMENTS

A Du(1) - D Green(2) - V Robert(1) - M Yatskayer(2)

L’oreal Research And Innovation, Skincare Lab, Clark, United States(1) - L’oreal Research And Innovation, Clinical Evaluation, Clark, United States(2)

Introduction: Dry skin can occur due to various environmental conditions especially in low humidity with little moisture in the air. The present studies were conducted to evaluate the effectiveness of a facial cream containing glacial glycoprotein and olive-derived squalane in hydrating facial skin, that is known to have location-related differences in the level of hydration, under high temperature and low humidity conditions.

Method: Fifty (50) female and male subjects, ages 20-55, were evenly divided into 2 cells. A climate controlled chamber was utilized to set the temperature and humidity level for cell 1) at 100°F and 20±5% relative humidity (RH) to mimic desert-like conditions, and cell 2) at 72°F and 20±5% RH to mimic typical dry environments such as airplane in-cabin or air-conditioned settings. Corneometer measurements were taken on each of the half face, at 30 unique sites in triplicates up to 4 and 8 hours, respectively. Product was applied to half of the face based on a computer-generated randomization. The other half of the face was left untreated.

Results: The facial cream demonstrated continued hydration across the two test conditions when compared to baseline and to the untreated control site throughout the measurement intervals. Cell 1 showed a statistical significant increase (improvement) in skin hydration for the treated half face up to 4 hours of exposure in the high temperature and low humidity conditions when compared to baseline and the untreated control. Further, the untreated half face showed statistical significant decrease (worsening) in hydration after 2 and 4 hours of exposure while the treated half face continued to show statistical significant higher Corneometer values compared to baseline. For cell 2, there was also statistical significant increase (improvement) in skin hydration for the treated half face up to 8 hours of exposure when compared to baseline and the untreated control.