Moisturizing + Film-Forming + Nourishing + Conditioning







Technical Information:







Product Code: 20036

INCI Name: Hydrolyzed Kale Protein & Hydrolyzed Carrot Protein & Hydrolyzed

Lemon Protein

INCI Status: Proposed

Suggested Use Levels: 1.0–10.0%

Suggested Applications: Moisturizing, Film-Forming, Nourishing, Conditioning



Kale

Health Benefits:







Vitamin A and E

- o Increases hydration
- o Increases elasticity
- o Boosts collagen production

Vitamin C

- o Helps make the collagen needed for skin strength
- Antioxidant



Carrots

Health Benefits:







Antioxidants

Protect and heal while also providing anti-aging benefits to skin

Vitamin A (beta-carotene)

- Most advantageous antioxidant packed into this vegetable
- Provides protection from damage-causing free-radicals
- Nourishes overly photo-exposed skin and plays an essential role in skin maintenance
- Aids in repairing skin damage
- Helps to balance and hydrate the skin's cells to alleviate dry, chapped or scaly skin



Lemons

Health Benefits:







The Juice

- Source of Alpha Hydroxy Acid (AHA) citric acid
 - Typically contains between 5 and 8 percent citric acid
- Vitamin C
 - Fresh lemon juice has been recommended in some herbals as a treatment for sunburn
- Natural skin lightener
 - Relatively high acid content, coupled with antioxidant activity

The Peel

- Antioxidant properties
- Anti-tyrosinase activity
 - Balances skin tone

Protocol:







Purpose:

To determine whether **ACB Kale Protein Blend** enhances shine, dry and wet combability, manageability and smoothness of the hair in addition to volume, conditioning, and moisturization

Materials & Methods:

- 2.0% ACB Kale Protein Blend vs. a control shampoo
- 2.0% ACB Kale Protein Blend vs. a control conditioner

Sensory evaluation was conducted for baseline, participants rated hair 1-10

½ Subject's head washed with control, ½ washed with ACB Kale Protein Blend

Subject's hair was dried using round brush and hair dryer

Sensory evaluation was conducted for each side, participants rated hair 1-10



Half Head Study:



Figure 1. Full Head Baseline Photo of Untreated Hair









Figure 2. Half-Head Treated



Half Head Study:



Figure 3. Full Head Baseline Photo of Untreated Hair







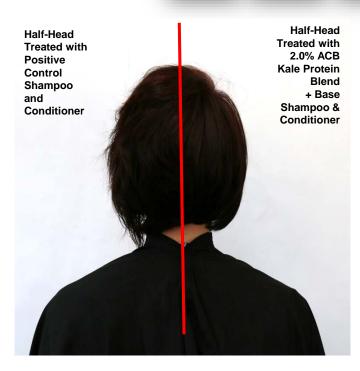


Figure 4. Half-Head Treated



Half Head Study:



Figure 5. Full Head Baseline Photo of Untreated Hair







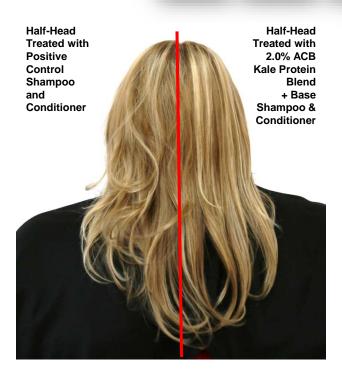
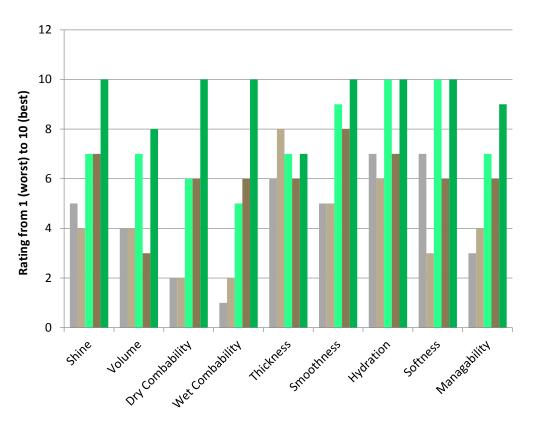


Figure 6. Half-Head Treated



Assessment of Hair Characteristics



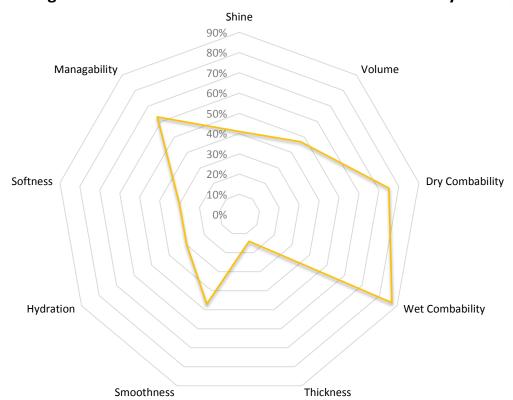


- Baseline Assessment of Untreated Hair
- Assessment of Half Head shampooed with Untreated Control
- Assessment of Half Head Shampooed with ACB Kale Protein Blend
- Assessment of Half Head Conditioned with Untreated Control
- Assessment of Half Head Conditioned with ACB Kale Protein Blend



Figure 10. Rating of hair characteristics (1-10) following sensory assessment

Changes in Hair Characteristics from Baseline to Post Style









Shine: 41%

Volume: 47%

Dry Combability: 75% **Wet Combability: 87%**

Thickness: 14%

Smoothness: 47%

Hydration: 30%

Softness: 30%

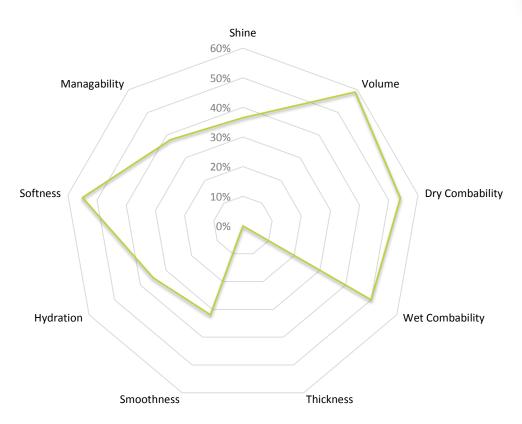
Manageability: 63%







Treated Half vs. Control Half After Application & Style



Percent Difference:

Shine: 37%

Volume: 59%

Dry Combability: 54% **Wet Combability:** 50%

Smoothness: 32%

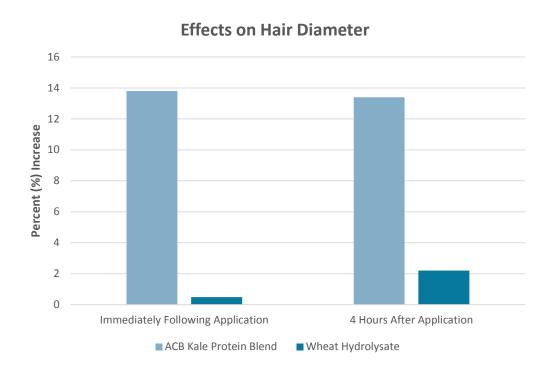
Hydration: 35%

Softness: 55%

Manageability: 38%



Volumizing Assay





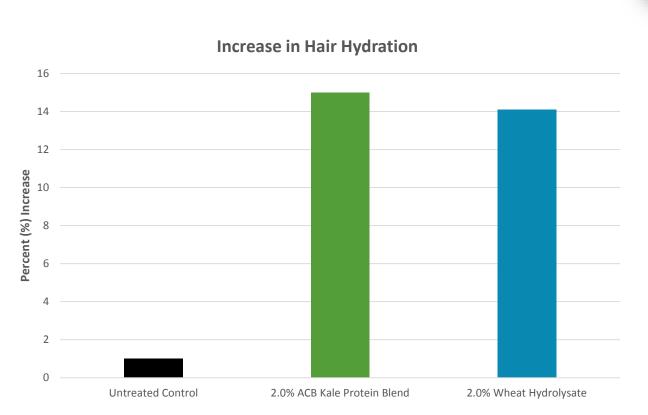




- Equipment: Zeiss Axioplan Microscope/lenapol Polarized Light Microscope/iSolution Software
- Materials: 60 individual strands of hair
- Test Quantity: 2.0% in Water
- Frequency of Application: Single Application
- Frequency of Measurement: Baseline, immediately following application & 4 hours after application



Hydration Assay







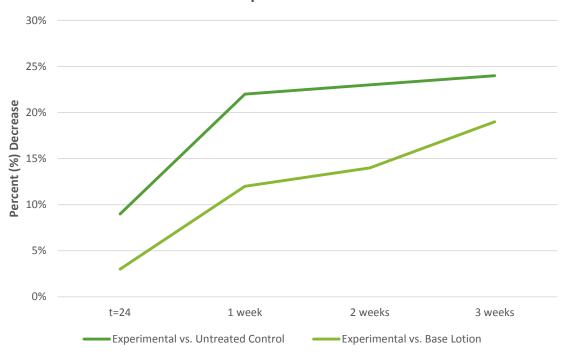


- Equipment: DPM 9003 Nova Impedence Meter
- Principle of measurement:
 Conductance, single frequency
- Subjects: 10 (m/f)
- Test area: Hair
- Concentration of active used: 2.0%
- Frequency of application: Single Application



TEWL Assay

TEWL Comparison Over Time









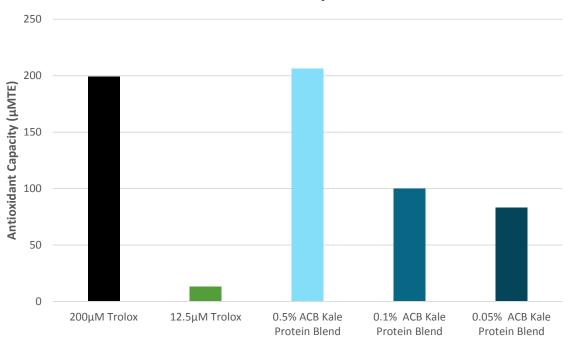
- **Equipment:** DermaLab Combo
- Principle of measurement: Ultrasound Probe
- Subjects: 10 (m/f)
- **Test area:** Volar forearms
- Concentration of active used: 2.0%
- Frequency of application: Twice Daily



ORAC Assay







- Trolox® is used as the positive control
- Solutions were prepared at two concentrations for a reference
- Fluorescent measurements were taken every 2 minutes for 2 hours
- ACB Kale Protein Blend exhibited similar strong antioxidant properties similar to 200µM concentration of Trolox®



Cellular Viability Assay

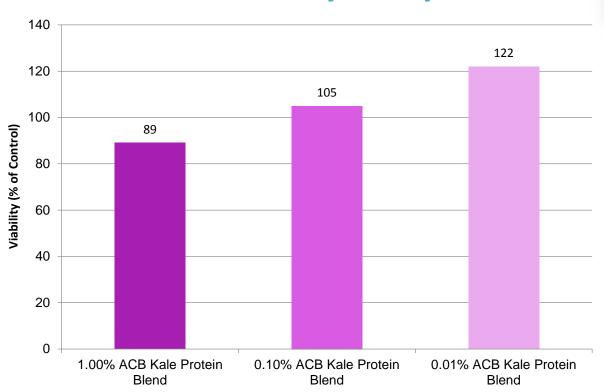


Figure 15. Cellular Metabolism of ACB Kale Protein Blendtreated fibroblasts expressed in terms of percent of control.







- Human dermal fibroblasts were seeded into 96-well tissue culture plates
- Concentrations: 1.00%, 0.10%, 0.01%
- Ten microliters of viability reagent was added to 90µL of cell culture media in culture wells
- **ACB Kale Protein Blend** exhibited comparable results by increasing cell metabolism



Hair Care Benefits:

- ✓ Increases Softness
- ✓ Improves Shine
- ✓ Increases Manageability
- ✓ Enhances Combability
- ✓ Increases Volume
- ✓ Hydrates







Skin Care Benefits:

- ✓ Moisturizes
- ✓ Conditions
- ✓ Heals
- ✓ Improves Barrier function



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ACTIVE CONCEPTS LLC



THANK YOU

For more information –Visit our website! www.activeconceptsllc.com

