



# ACQUACELL®



- Hydrates Within 15 Minutes
- Reduces Fine Lines in 2 Hours
- Almost Doubles Water Content in Corneocytes in 2 Weeks
- Benchmark in Moisturization

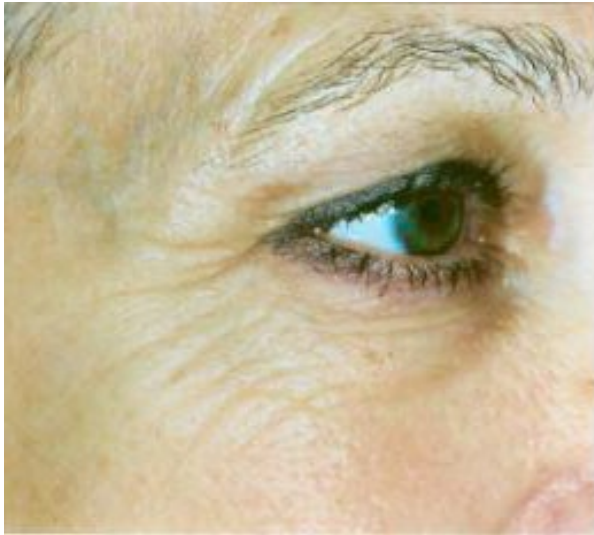
# CONCEPT

Moisturizers make up a large category in skin care. There are different goals when a moisturizer is developed. Very often the concept is to increase the strength of the hydrolipidic barrier. This can be achieved in 10 days. Other moisturizers are for instant gratification and must work within minutes or a few hours, so the consumers can quickly perceive a significant reduction of fine lines.

AcquaCell belongs to the latter category. It reduces wrinkles fast as it delivers water to the top of the skin in corneocytes.

AcquaCell is rapidly taking a strong position in the world as a benchmark in moisturization.

# ACQUACELL IN 2 HOURS



Before AcquaCell



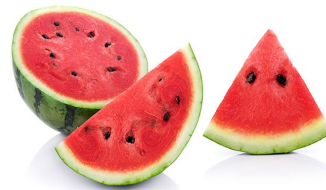
After 2 hours, with 3% AcquaCell

Fine lines are significantly diminished.

Tested on 20 volunteers

# FIELD TO FACE

AcquaCell is a natural complex combining watermelon rind extract, Lens Esculenta (Lentil) Fruit Extract and unripened apple and apple skin in an optimized delivery system. Watermelon rind is one of nature's few materials to contain citrulline. Citrulline is essential to the functioning of filaggrin which forms a critical part of the skin's own water based moisturizing complex. The lentil extract contains vitamin B5 and trisaccharides. The apple starch is a source of polysaccharides, sodium lactate and sodium PCA.



INCI Name: Water (and) Glycerin (and) Citrullus Lanatus (Watermelon) Fruit Extract (and) Pyrus Malus (Apple) Fruit Extract (and) Lens Esculenta (Lentil) Fruit Extract (and) Sodium Lactate (and) Sodium PCA

# MICROARRAY EFFECT ON KERATINOCYTES FOR MOISTURIZATION AND WATER RETENTION

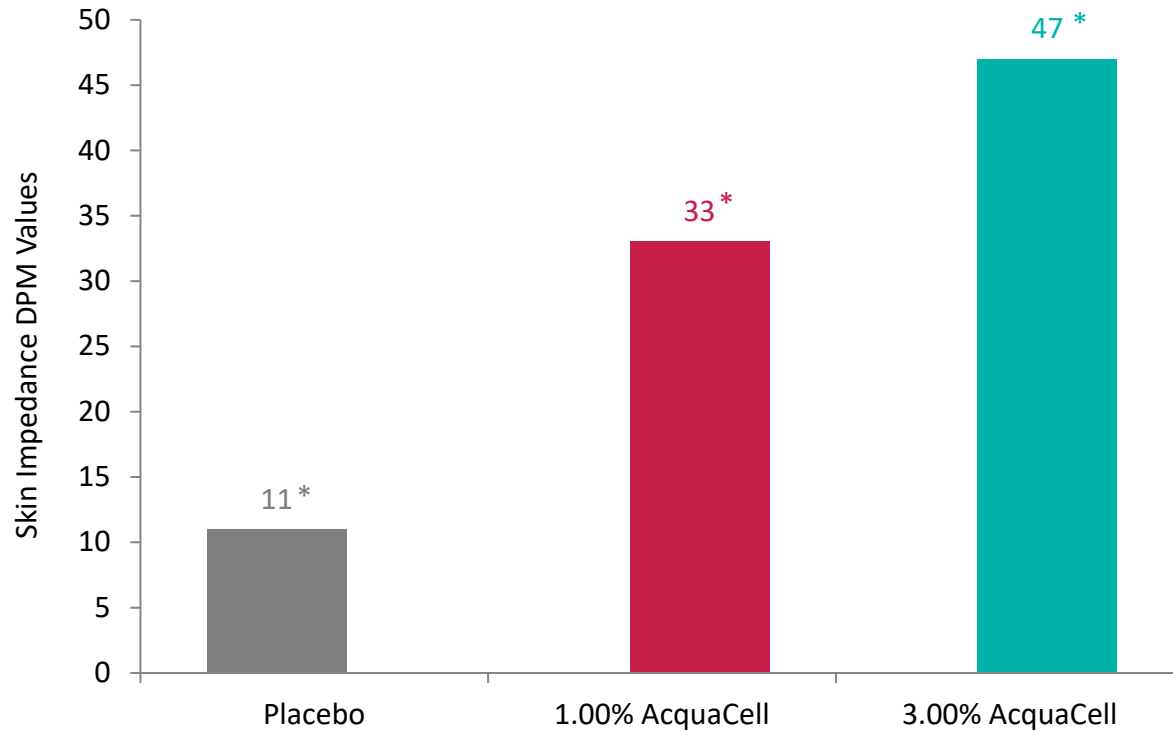
AQP <sub>3</sub>	Filaggrin	Trichohyalin
+144%	+123%	+ 104%

Provides water  
circulation

Part of the NMF supply

Protein in the outer  
envelope of the  
corneocyte; barrier role  
to retain water

# ACQUACELL – IMMEDIATE SKIN HYDRATION (15 MIN.)



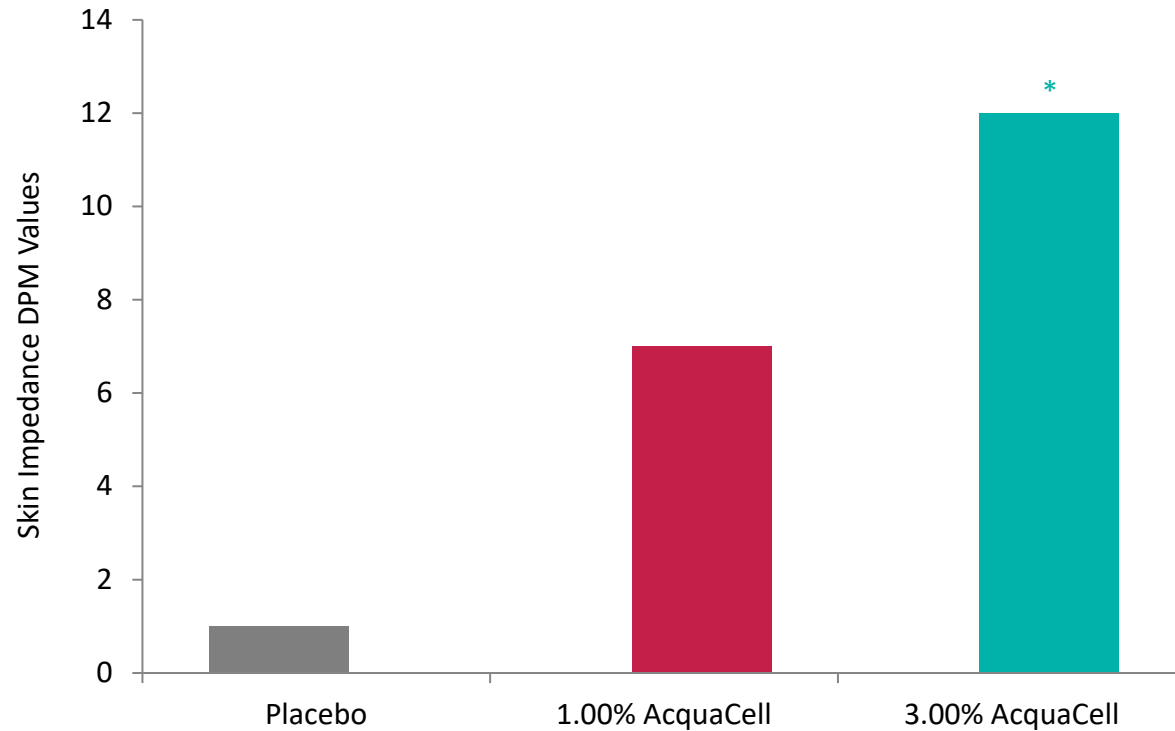
AcquaCell is shown to hydrate the skin after 15 minutes in a dose dependent manner.

## Protocol

Gels containing 1% or 3% AcquaCell were applied to the skin. Measurements taken at various time periods.

\* $p < 0.05$  Student Test

# ACQUACELL – SKIN HYDRATION (24 HOURS) SINGLE APPLICATION



AcquaCell continues to hydrate the skin after 24 hours.

Protocol

Gels containing 1% or 3% AcquaCell were applied to the skin. Measurements taken at various time periods.

\* $p < 0.05$  Student Test

# ACQUACELL – GAIN BACK 40 YEARS IN 10 DAYS!

## Dermatologist Assessment of Dryness on Face

- 1 - Slight Flaking                      Corresponds to 20-30 years old
- 2 – Moderate Flaking
- 3 – Marked Scaling                      Corresponds to 60-70 years old
- 4 – Severe Scaling

\*Data presented are averages of at least 20 subjects and based on a 0-4 point scale described above. Data highlighted in teal are statistically significant  $p < 0.05$  Student Test.

Test material	Conc.	Baseline	Day 1	Day 2	Day 3	Day 5	Day 10
Placebo gel	0%	2.7	2.74	2.71	2.6	2.77	2.66
AcquaCell	3%	2.74	2.42	2.37	1.75	1.4	1.05
% Improvement			12%	13%	35%	50%	61%

Results show a complete reduction of excessive scaling in 10 days, while the placebo has no effect. It seems like people 65 years old get the skin of 25 year olds in 10 days.



# ACQUACELL – REDUCING IRRITATION FOR 10 DAYS

## Dermatologist Assessment of Redness, Skin Irritation on Face

- 1 - Minimal
- 2 – Moderate
- 3 – Severe
- 4 – Fiery Red

\*Data presented are averages of at least 20 subjects and based on a 0-4 point scale described above. Data highlighted in teal are statistically significant  $p < 0.05$  Student Test.

Test material	Conc.	Baseline	Day 1	Day 2	Day 3	Day 5	Day 10
Placebo gel	0%	1.8	1.78	1.82	1.87	1.92	1.89
AcquaCell	3%	1.82	1.7	1.64	1.58	1.47	1.32
% Improvement			5%	10%	16%	25%	30%

Results show a gradual improvement during the 10 days of treatment with AcquaCell, while the placebo has no effect.

# ACQUACELL – INCREASING HYDRATION IN 2 WEEKS

After 2 weeks of AcquaCell use at 3%, cells were recovered by biopsies and weighed. There was 85% more water in cells treated by AcquaCell than those not treated. The cells were then applied onto paper to see how long it would take to lose 90% of water.

Control

30 Minutes

AcquaCell Treated

2 Hours

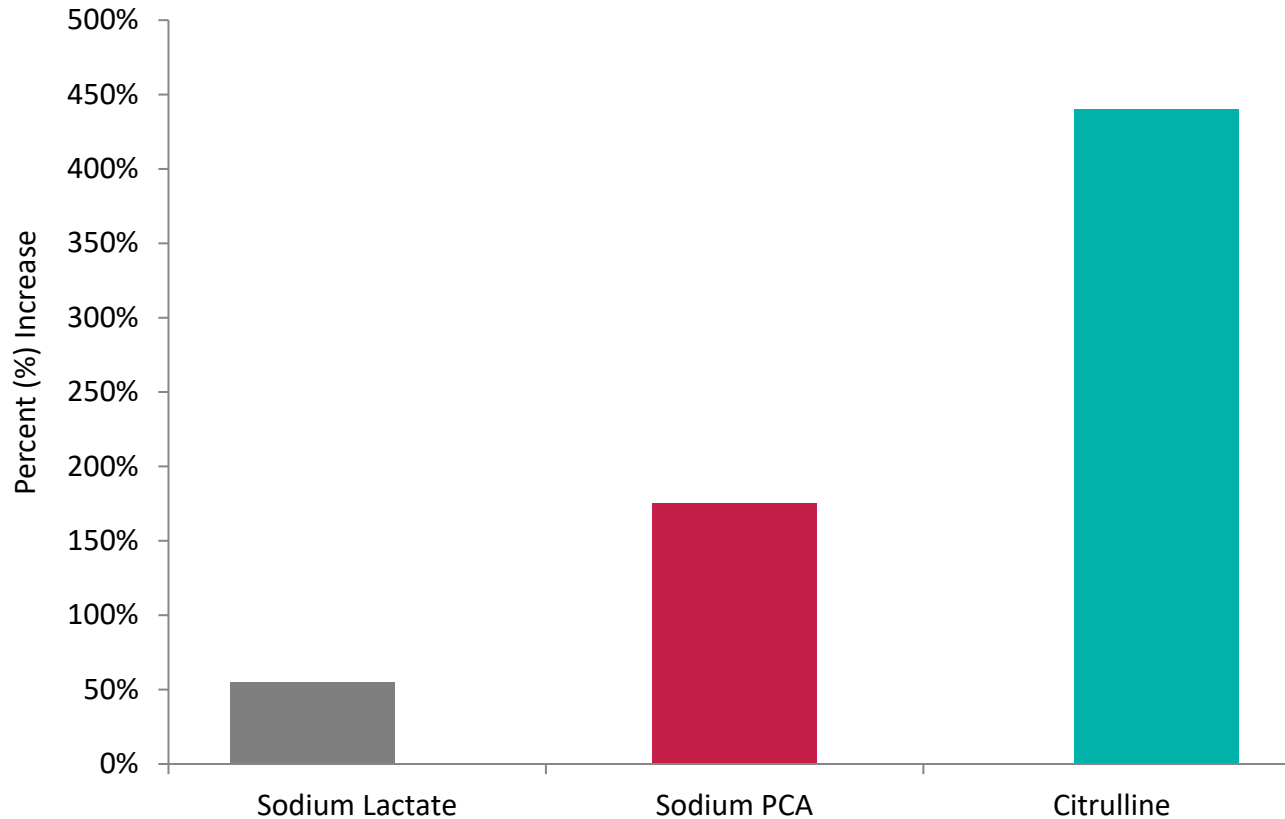
X4

It was more difficult for cells treated with AcquaCell to lose their water. It took 4 times longer than the control cells.

## Protocol

20 subjects, 60 or older with dry and scaly, whitish looking skin used 3% AcquaCell twice daily for two weeks on legs. Cells were recovered from shave biopsies.

# INCREASE OF KEY MOISTURIZERS WITH 3% ACQUACELL, 2 WEEKS



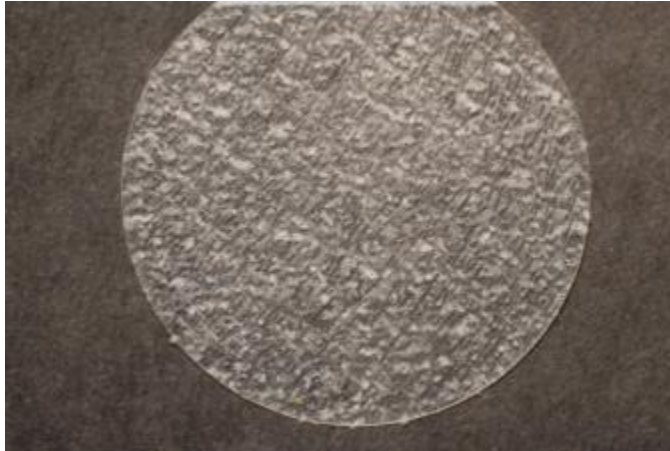
All key moisturizing molecules are increased with AcquaCell.

% increase vs. placebo, test on cells recovered by biopsy.

#### Protocol

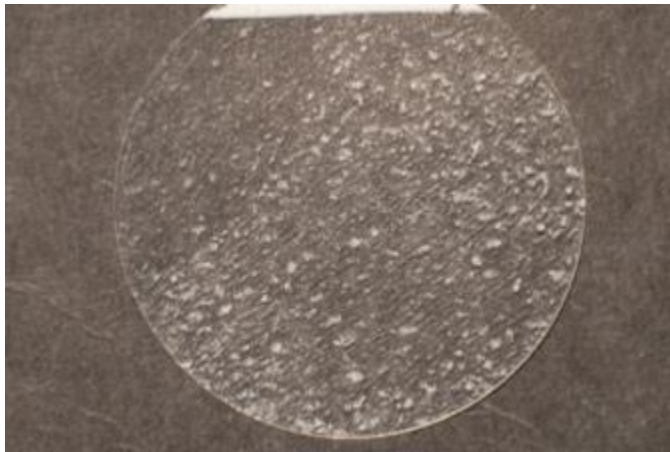
20 subjects, 60 or older with dry and scaly, whitish looking skin used 3% AcquaCell twice daily for two weeks on legs. Cells were recovered from shave biopsies.

# ACQUACELL – FOLLOWING SKIN COHESION FOR 2 WEEKS



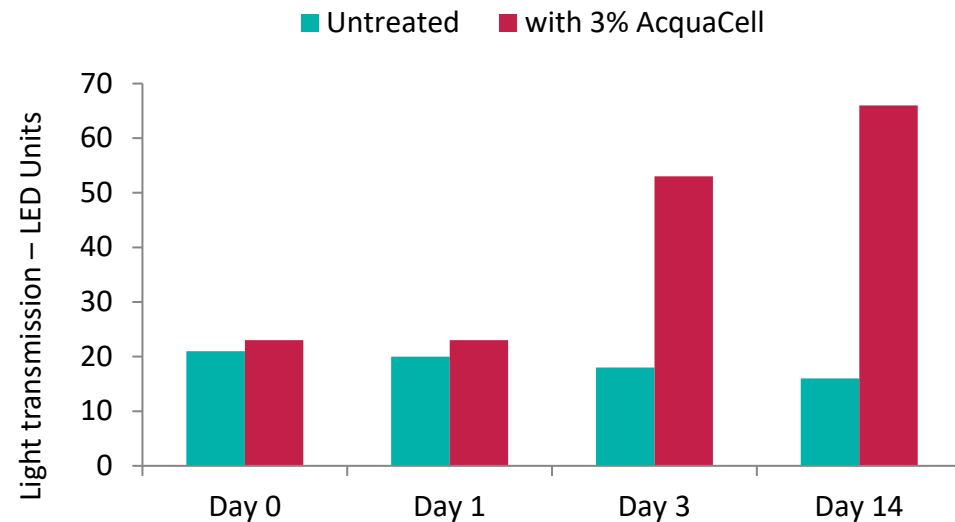
Before AcquaCell

Cells are not cohesive, they are easy to remove.



After 2 weeks with AcquaCell

Tape strips fewer cells as they are more cohesive.



Cell adhesion is dramatically increased between Day 1 and Day 3.

## Protocol

20 subjects, 60 or older with dry and scaly, whitish looking skin used 3% AcquaCell twice daily for two weeks on legs.

# CONCLUSION

## AcquaCell:

- Reduces Fine Lines in 2 Hours
- Increases Intracellular Water by 85% in 2 Weeks
- Increases Sodium PCA by 150% and Citrulline by 450% in 2 Weeks
- Fourteen Tests to Prove Efficacy

# ACQUACELL®

**INCI Name:** Water (and) Glycerin (and) Citrullus Lanatus (Watermelon) Fruit Extract (and) Pyrus Malus (Apple) Fruit Extract (and) Lens Esculenta (Lentil) Fruit Extract (and) Sodium Lactate (and) Sodium PCA

**Preservative:** Potassium Sorbate and Sodium Benzoate

**Suggested Use Level:** 1.00-3.00%

**Formulation Guidelines:** AcquaCell is a clear, slightly viscous liquid with a characteristic odor. AcquaCell is water soluble and should be post-added to formula at a temperature below 50°C. The recommended pH range is 4.0-8.0.

## Global Compliance and Product Features:

For additional information please contact [technical@barnetproducts.com](mailto:technical@barnetproducts.com).

COUNTRY	COMPLIANCE
AUSTRALIA	Listed AICIS; Exempt
CANADA	Listed DSL, rICL; Exempt
CHINA	Listed IECIC
EU	<1 MT Exempt

