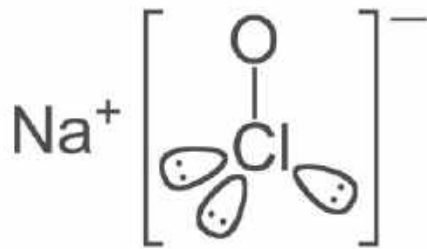




# The New Standard for Therapeutic Cleansing in Problem Skin



Razor burn  
Oily  
Folliculitis  
Ingrown hairs  
Flaky  
Skin Infection  
Redness  
Fungus  
Athlete's foot  
Ringworm  
MRSA  
Atopic dermatitis  
Sensitive  
Itchy skin  
Eczema  
Acne  
Psoriasis  
Dandruff  
Staph  
Radiation irritation



- Microbes and compromised skin lead to skin diseases in >100 million in the US:
  - Eczema / Atopic Dermatitis
  - Folliculitis and Acne
  - Athlete's Foot, Dandruff, Ringworm
  - Cellulitis & Impetigo
- Often Rx products are used first while proper cleansing is ignored
- Hypochlorite baths, effective in Atopic Dermatitis with Staph aureus colonization<sup>(1)</sup>
- Sodium hypochlorite is antimicrobial, anti-inflammatory<sup>(2)</sup> and anti-aging<sup>(2)</sup>
- CLn Skin Care offers therapeutic cleansing with sodium hypochlorite cleansers

(1) Huang JT, Abrams M, Tlougan B et al. Treatment of Staphylococcus aureus colonization in atopic dermatitis decreases disease severity. *Pediatrics* 2009;123:e808–e814.

(2) Leung T, Zhang L, Wang J. et al. Topical hypochlorite ameliorates NF- $\kappa$ B-mediated skin diseases in mice. *J Clin Invest*. 2013;123(12):5361–5370.

# The big idea; a sodium hypochlorite wash



Sodium Hypochlorite  
+  
Surfactants  
+  
“proprietary  
technology”

**Patented**

US, EU, Australia, others



## Bleach Baths

- Anti-microbial
- Anti-inflammatory
- Effective
- Cumbersome
- Poor patient compliance
- Risks + do not use above neck

## CLn®

- Anti-microbial
- Anti-inflammatory
- Effective
- Easy to use
- Good patient compliance
- Safe

INGREDIENTS	FUNCTION
Water (Aqua)	Vehicle
Sodium Laureth Sulfate (SLES)	Anionic surfactant (thickener)
Cocamidopropyl Betaine	Amphoteric surfactant with acidic and basic groups in same molecule
Cocamide MEA	Non-ionic surfactant (chemical stability, mild on skin)
Disodium EDTA	Chelating Agent, preservative, stabilizer
Sodium Hypochlorite	Bleach, very effective disinfectant against bacteria, preservative



- Epiocular<sup>™</sup> tissue in-vitro toxicity testing showed 'non-irritating'
- Patch testing showed no skin irritation or sensitization
- Shown to meet the criteria for the US and European Pharmacopeia Antimicrobial Effectiveness Test
  - Test microorganisms used according to usp 51 test are
    - Staphylococcus aureus, E.coli, Ps.aeruginosa, Candida albicans and Aspergillus brasiliensis (Aspergillus niger)
    - With <10 viable count and a 4.2-5.0 log reduction by day 2
  - Gauges the level of biological activity possessed by the preservative system of a pharmaceutical product
- Kill Rates:
  - 99.9% kill rate of P. Acnes at 30 and 60 seconds
  - 98% kill rate of S. Aureus at 2 minutes
  - 99.9% kill rate of S. Aureus at 3 and 5 minutes

# Instructions for Use for CLn BodyWash and SportWash



1. May use on hair, face or body
2. Wet skin thoroughly
3. Turn water off
4. Use hands to lather thoroughly – 2 minutes
5. May use scrubber or loofah, no wash cloth
6. Scrub nail beds and back as needed
7. Rinse thoroughly
8. Apply moisturizer or other products as needed

## *2 Studies in AD with Staph colonization*



- EASI score improvement 46%
- Reduced itching 39%
- Reduced corticosteroid usage 37%
- Improved quality of life for child 38%
- Improved quality of life for parent 46%
- CLn preferred over bleach baths 88%
- Reduced Staph aureus colonization 100% to 64%

### **View 1<sup>st</sup> Study**

<https://onlinelibrary.wiley.com/doi/10.1111/pde.12150>

### **View 2<sup>nd</sup> Study**

<https://doi.org/10.1111/pde.13842>

For speakers slide deck contact  
Dr. Anwar [dranwar@clnwash.com](mailto:dranwar@clnwash.com)



10 y/o, on Cyclosporine



10 Weeks after CLn<sup>®</sup>

## Single Center, Feasibility Study

### Study Design

- 18 children and adolescents with moderate to severe eczema
- Staph culture positive
- No antibiotics used



Fred Ghali, MD  
Pediatric  
Dermatologist

### Findings

- Significant eczema improvement
- 9/10 would recommend CLn<sup>®</sup> BodyWash over sodium hypochlorite baths

### View Study

<https://onlinelibrary.wiley.com/doi/10.1111/pde.12150>





Baseline



8 Weeks

View Study <https://onlinelibrary.wiley.com/doi/10.1111/pde.12150>

## Sodium Hypochlorite Body Wash as a maintenance intervention to decrease Staphylococcus Aureus Colonization in Pediatric Patients with Atopic Dermatitis



Tanya Bhattacharya‡, BS, Benjamin R. Bohaty, MD†, Lina M. Rodriguez, MD‡, Kathryn C. Durham, MD†, Gil Abramovici, MD‡, Lori Asztalos, MD‡, Dennis P. West, PhD ‡, Adelaide A. Hebert, MD† \*, Amy S. Paller, MD‡\*

†Department Of Dermatology, The University Of Texas Health Science Center at Houston, Houston, Texas

‡Department Of Dermatology, Northwestern University Feinberg School Of Medicine, Chicago, Illinois

\*These Authors Contributed Equally To The Study

## Dual Center: UT Houston and Northwestern University

### Study Design

- 50 children and adolescents with moderate to severe eczema
- 6 week study
- Staph culture positive
- No antibiotics or medicated baths
- CLn BodyWash once daily



**Adelaide A. Herbert MD**  
Professor of Dermatology & Pediatrics  
The University of Texas Medical School, Houston



**Amy S. Paller MD**  
Chair, Department of Dermatology  
Feinberg School of Medicine  
Northwestern University

### Findings

- Dramatic improvement of EASI score (46% at 6 weeks)
- Reduced itching
- Improved quality of life for patient and parent
- Reduced staph colonization
- Reduced steroid usage
- CLn BodyWash preferred over sodium hypochlorite baths

### View Study

<https://onlinelibrary.wiley.com/doi/full/10.1111/pde.13842>



12 yr. old - Baseline



2 Weeks



6 Weeks

Staph colonization and eczema of the hand and popliteal fossa at baseline (A) and 6 weeks (B) post-treatment with sodium hypochlorite wash



(A) Baseline



(B) 6 Weeks



Asztalos et al. Sodium Hypochlorite Body Wash As A Maintenance Intervention To Decrease Staphylococcus aureus Colonization In Pediatric Patients With Atopic Dermatitis. World Congress of Dermatology. June 2015.

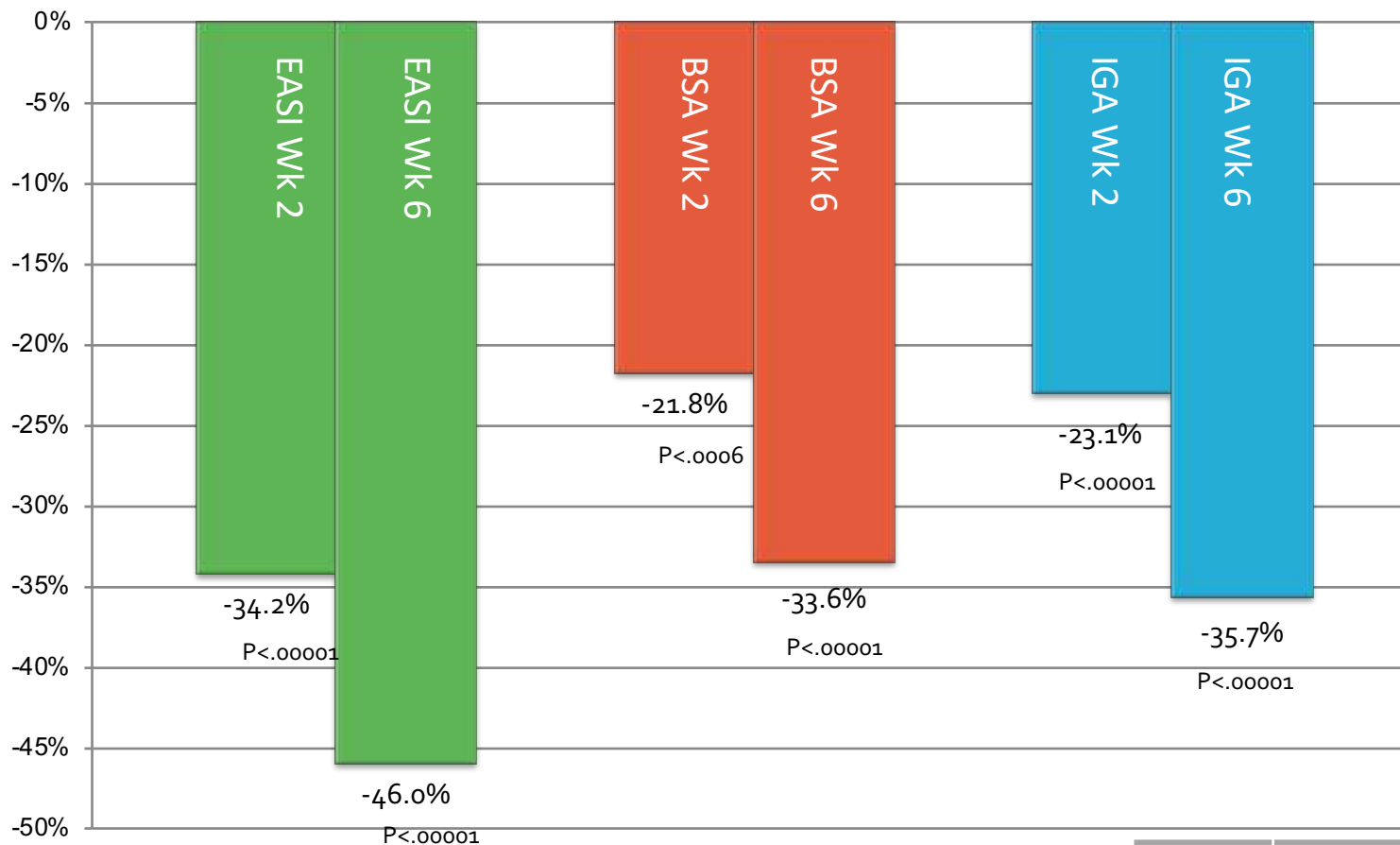
# Eczema Area and Severity Index

EASI Score is a tool used to measure severity and extent of atopic dermatitis. It is a compilation of 4 body regions (head and neck, upper limbs, trunk and lower limbs) multiplied by the severity of four factors: Redness, Thickness, Scratching & Lichenification



# Results of Clinical Severity Scores

## % Mean Reduction from Baseline



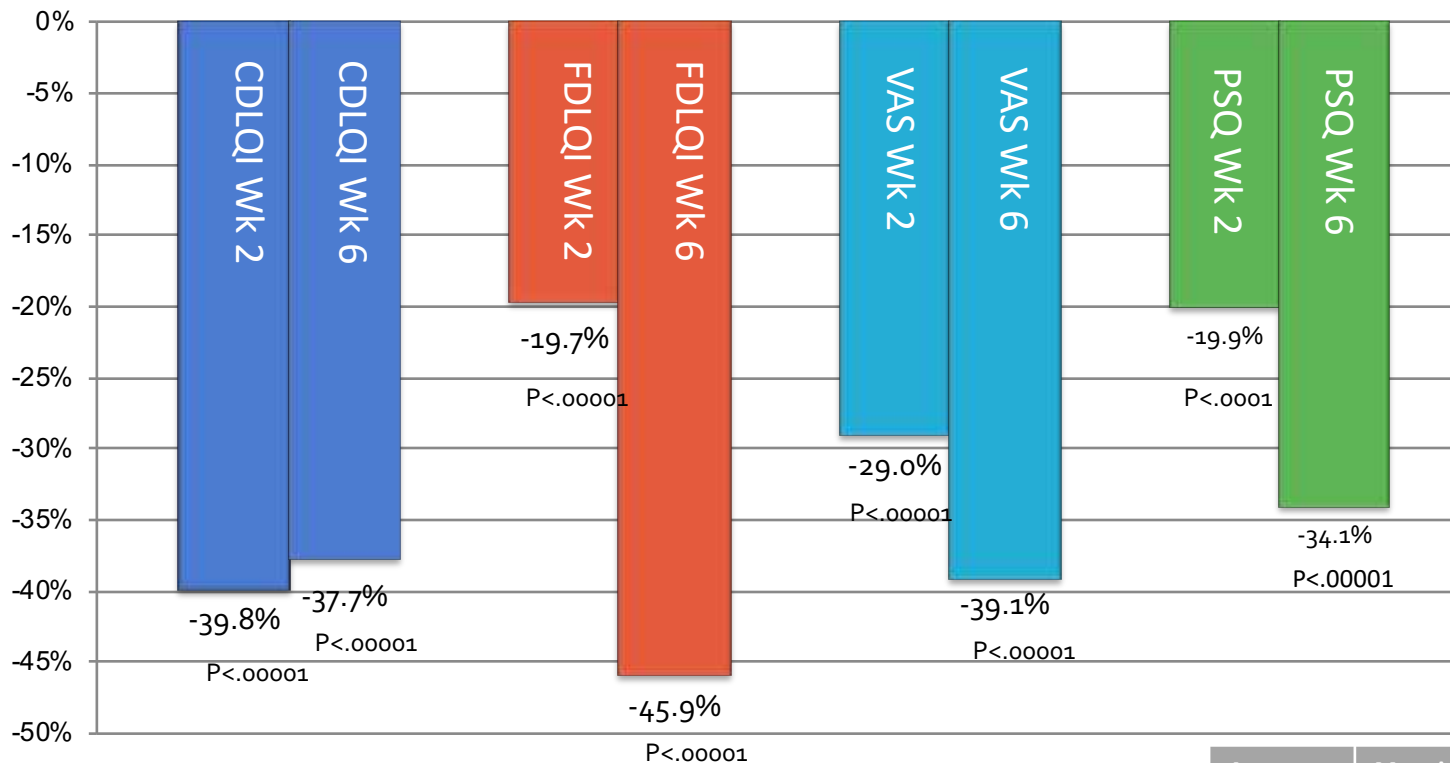
Percent mean decrease in EASI, BSA and IGA at 2 weeks and 6 weeks post-treatment with sodium hypochlorite wash.

Acronym	Meaning
EASI	Eczema Area & Severity Index
BSA	Body Surface Area
IGA	Investigator Global Assessment

Asztalos et al. Sodium Hypochlorite Body Wash As A Maintenance Intervention To Decrease Staphylococcus aureus Colonization In Pediatric Patients With Atopic Dermatitis. World Congress of Dermatology. June 2015.

# Results of Clinical Severity Scores

## % Mean Decrease in CDLQI, FDLQI, VAS and PSQ



Acronym	Meaning
CDLQI	Children's Dermatology Life Quality Index
FDLQI	Family Dermatology Life Quality Index
VAS	Visual Analogue Scale
PSQ	Patient Satisfaction Questionnaire

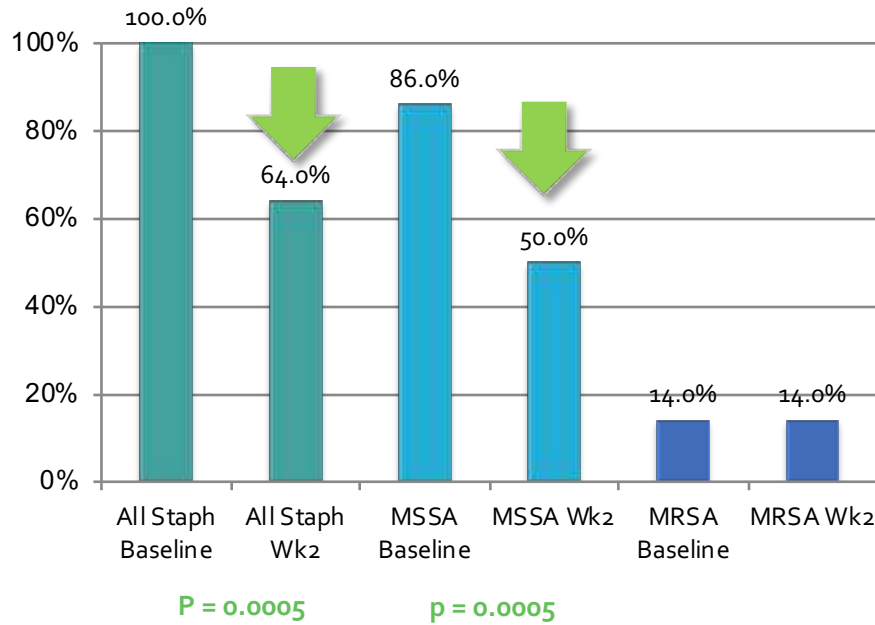
Percent mean decrease in CDLQI, FDLQI, Pruritus VAS and PSQ at 2 weeks and 6 weeks post-treatment with sodium hypochlorite wash.

Asztalos et al. Sodium Hypochlorite Body Wash As A Maintenance Intervention To Decrease Staphylococcus aureus Colonization In Pediatric Patients With Atopic Dermatitis. World Congress of Dermatology. June 2015.



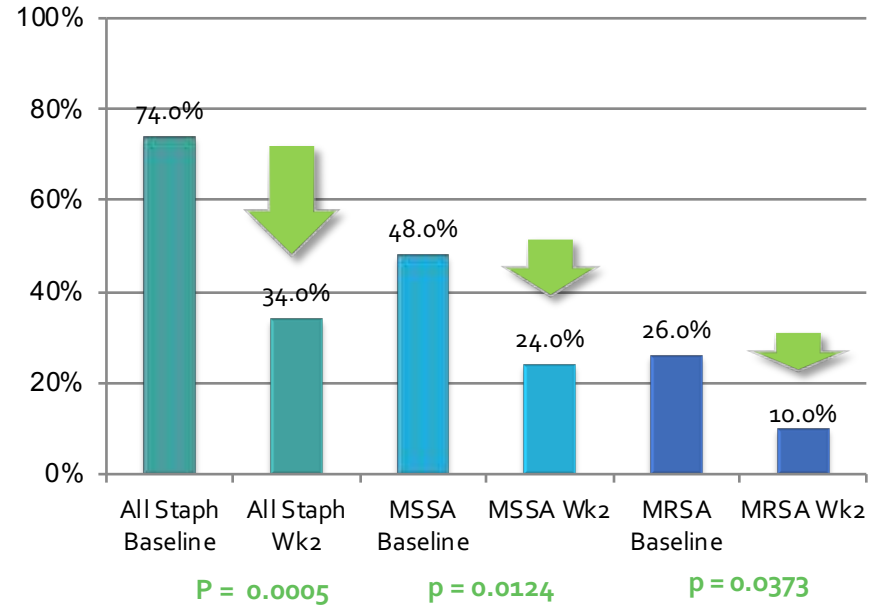
# Results of *Staphylococcus Aureus* Colonization

## Percent Subjects with Positive Culture



Percent of patients who tested positive for the presence of *Staphylococcus aureus* during bacterial culture of lesion swab at baseline and 2 weeks.

## Percent Subjects with Positive PCR



Percent of patients who tested positive for the presence of *Staphylococcus aureus* during PCR analysis of lesion swab at baseline and 2 weeks.



- 50 patients
- No antibiotics or hypochlorite baths
- Excellent safety
- Eczema improvement with excellent efficacy
- Reduced itching
- Improved quality of life for child and parent
- Reduced Staph colonization
- Reduced corticosteroid usage
- CLn BodyWash preferred over hypochlorite baths

1. Asztalos et al. Sodium Hypochlorite Body Wash As A Maintenance Intervention To Decrease Staphylococcus aureus Colonization In Pediatric Patients With Atopic Dermatitis. World Congress of Dermatology. June 2015.

2. Majewski, S, Bhattacharya, T, Asztalos, M, et al. Sodium hypochlorite body wash in the management of Staphylococcus aureus–colonized moderate-to-severe atopic dermatitis in infants, children, and adolescents. *Pediatr Dermatol.* 2019; 00: 1– 6. <https://doi.org/10.1111/pde.13842>

## Jan 2016 NEA online member survey of eczema sufferers:

**1. Overall, are you satisfied with the treatment of atopic dermatitis?**

**86%** reported they were **not** satisfied with the treatment of atopic dermatitis (AD)

**2. Overall, do you think doctors know how to treat atopic dermatitis?**

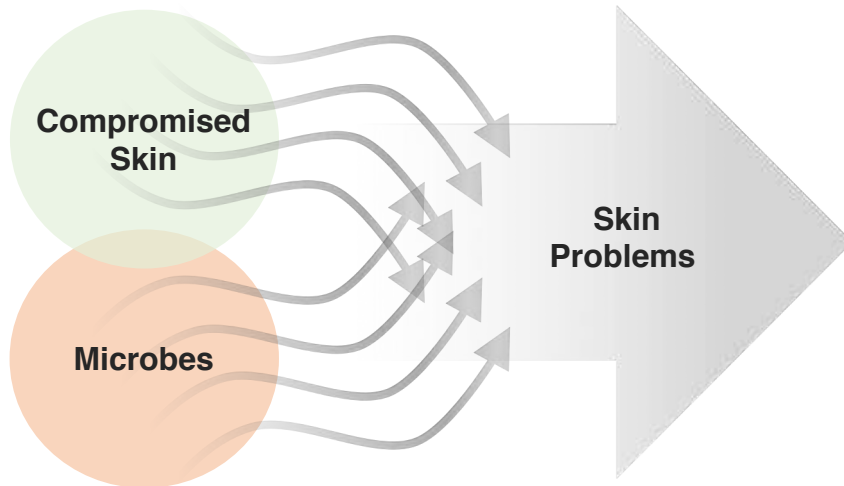
**91%** responded that they think doctors **do not** know how to treat AD

**3. How many doctors have you seen for this problem?**

**56%** reported having **seen up to 5 doctors** for their or their child's AD



# Microbes Cause Eczema Flares and Causes Many Other Skin Problems



## Patient Notices

- Redness
- Rash
- Open Sores
- Itching
- Flakey Skin
- Cracked Skin
- Razor Bumps
- Smell

## Doctor Diagnosis

- Eczema
- Skin Infection
- Atopic Dermatitis
- Folliculitis
- Acne
- Seb. Dermatitis
- Dandruff
- Tinea



Cleansing with CLn®, the first step in managing “Problem Skin”

- ✓ **Improved Skin**
- ✓ **Fast**
- ✓ **Effective**
- ✓ **Safe**
- ✓ **Easy**
- ✓ **Less Antibiotics**
- ✓ **Less Steroids**
- ✓ **No Prescription**
- ✓ **Lower Cost**
- ✓ **Physician Recommended**

# A Versatile Line of Cleansers



**Plus Glycerin**  
For dry skin  
or need for moisturizing

Versatile daily use  
CLn products

**Plus Salicylic acid**  
For oily skin  
or need for deeper cleansing

All CLn® cleansers and shampoos are formulated with sodium hypochlorite

# Sports & Skin Infections



- High rate of skin breakdown
- 29% of contact athletes can be colonized with MRSA
- High rate of staph infections
- High rate of fungal infections
- High rate of antibiotic use
- **Antibiotic resistance rising in sports**

Mitchell et al, Bacterial Sport-Related Skin and Soft-Tissue Infections (SSTIs): An Ongoing Problem Among a Diverse Range of Athletes  
JBJS REVIEWS 2017;5(1):e4 · <http://dx.doi.org/10.2106/JBJS.RVW.16.00006>

- 377 Athletes at Vanderbilt Univ.
  - 224 in contact sports / 153 in non-contact sports
- Nasal and oropharyngeal swabs monthly
- Findings:
  - 62% Staph colonized
  - 29% of contact sport MRSA colonized
  - 23% of non-contact sports MRSA colonized
  - Football players are twice as likely to be colonized
  - Colonization more prevalent in the summer
  - 9 Skin and Soft Tissue Infections; 7 were MRSA

Summary:

Athletes MRSA colonized at higher rates than general population.



## NFL



### Tampa Bay Buccaneers

- Carl Nicks
- Lawrence Tynes\*
- Johnthan Banks



### Cleveland Browns

- Joe Jurevicius
- Kellen Winslow, JR
- Ben Taylor
- LeCharles Bentley
- Brian Russell
- Braylon Edwards



### Washington Redskins

- Brandon Noble\*



### St. Louis Rams

- 5 players



### New York Giants

- Daniel Fells\*



### New England Patriots

- Tom Brady (2008)



### Houston Texans

- JJ Watt (2015)

Key Players

## NHL



### Minnesota Wild

- Christian Folin
- Keith Ballard



### St. Louis Blues

- Jori Lehtera
- Jake Allen
- Brian Elliott

## MLB



### Philadelphia Phillies

- Freddy Galvis



### Chicago White Sox

- Álex Riós

## NBA



### Memphis Grizzlies

- Rudy Gay



### Houston Rockets

- Shane Battier



### Boston Celtics

- Paul Pierce
- Delonte West



### Cleveland Cavaliers

- Drew Gooden



### Denver Nuggets

- Kenyon Martin



### LA Clippers

- Blake Griffin
- Chris Kaman



### Phoenix Suns

- Grant Hill

\*career ending infections

# Best Practices

# Uses: 1. Common Skin Conditions

- Rash, Red, Itchy skin
- Eczema
- Atopic dermatitis
- Seborrheic dermatitis
- Folliculitis
- Acne
- Psoriasis
- Hidradenitis suppurativa
- Radiation dermatitis

## How to use:

Lather in shower for 2 minutes

May apply to problem areas pre shower

## When to use:

After activity or at bedtime



- MRSA / Staph
- Pre-surgical hygiene
- Sports skin infections
- Ablative skin procedures
- Hair removal
- Elder care
- Diabetics
- Wound care
- Athlete's foot
- Smelly feet

## Tips:

### Pre surgery hygiene for 5-7 days

Whole body

Nail beds

Skin folds

Lower extremity needs more attention

## How:

Lather in shower for 2 minutes

May apply to problem  
areas pre shower

## Use Chlorhexidine as usual

one day pre and day of surgery

CLn Shampoo can be used  
on all body



# Product Highlights

- For skin prone to eczema, dermatitis & infection
- Preserved with sodium hypochlorite
- pH 7.8
- No residual cleanser
- Use daily
- Available in 3.0, 3.4, 8 and 12 fl oz.
- **Lather 2 minutes**



- For skin prone to infection, acne, and folliculitis
- Preserved with sodium hypochlorite
- pH 7.8
- Use daily head to toe
- Available in 3.4 and 12 fl oz.
- No residual cleanser
- **Use within 30-60 minutes of exercise or activity**
- **Lather 2 minutes or may leave on before shower**



- For skin prone to eczema, dermatitis, rosacea & acne
- Proprietary formulation with
  - Glycerin
  - moisturizers
- **No Salicylic Acid**
- **Preserved with sodium hypochlorite**
- pH 6.0
- Daily use
- Available in 2.5 and 3.4 fl oz.





- For normal to oily scalp prone to folliculitis, dermatitis & dandruff
- Proprietary combination of
  - **Salicylic Acid**
  - **Glycerin**
  - Moisturizers
  - Skin conditioners
- Preserved with **sodium hypochlorite**
- pH 6.3
- 1-3 x weekly use or as directed
- Available in 8 and 12 fl oz.



- For scalp prone to dryness, itching & flaking
- **No Salicylic Acid**
- Proprietary combination of
  - **Glycerin**
  - Moisturizers
  - Skin conditioners
- Preserved with sodium hypochlorite
- pH 6.0
- Use daily or as needed
- Available in 8 and 12 fl oz.



- For hands, feet, and nails prone to fungus, dermatitis & infection
- Proprietary combination of surfactants, skin conditioners and Salicylic Acid
- Preserved with sodium hypochlorite
- pH 6.3
- Use Daily or as directed
- Available in 8 fl oz.



- Synergies of a great cleanser with a safe, proven acne treatment
  - **Salicylic Acid 0.5%**
  - **Plus CLn<sup>®</sup> BodyWash formula**
- Safe on skin
- Non antibiotic alternative
- Does not discolor clothing
- Use once or twice daily
- Available in 2.5 fl oz.



- Light and non-greasy
- Does not clog pores
- Reduces the appearance of redness and protects the skin's natural barrier
- Niacinamide and Ceramide Complex –
  - antioxidant
  - anti-inflammatory
- **Does not contain sodium hypochlorite**
- **No animal products**
- Apply morning and night as needed
- Available in 2.5 and 3.4 fl oz.



1. Huang JT, Abrams M, Tlougan B et al. Treatment of Staphylococcus aureus colonization in atopic dermatitis decreases disease severity. Pediatrics 2009;123:e808–e814.  
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VIEW: <https://onlinelibrary.wiley.com/doi/full/10.1111/pde.12150>
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5. Mitchell et al, Bacterial Sport-Related Skin and Soft-Tissue Infections (SSTIs): An Ongoing Problem Among a Diverse Range of Athletes JBJS REVIEWS 2017;5(1):e4 ·  
<http://dx.doi.org/10.2106/JBJS.RVW.16.00006>  
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Bohaty et al. CLEAN Study: e-Poster 7728 March 2014 AAD  
VIEW: <https://www.clnwash.com/pdf/BohatyTopMDPosterFinalUpdated03-03-2014.pdf>
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VIEW: [https://www.clnwash.com/pdf/WCD\\_Presentation\\_06-01-2015.pdf](https://www.clnwash.com/pdf/WCD_Presentation_06-01-2015.pdf)

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