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Fifteen Adults between 18-65 years of age with mild, moderate and severe Eczema (Atopic Dermatitis) who had *Staphylococcus aureus* on their skin participated in this study. We asked them to take a bleach bath twice a week for 12 weeks. Three ounces (~1/3 cup) of concentrated regular CLOROX Bleach was diluted in the bathtub filled with warm water, and the participants were asked to soak for 5 to 10 minutes and apply the bleach water to the entire skin surface. We performed skin barrier measurements (skin dryness, acidity, and strength), itch questionnaires, and collected blood to test for inflammation markers. Skin swabs were also collected to analyze microbes that live in the skin. All these tests were done before the bleach bath treatment, after 6 weeks, and after 12 weeks into the treatment. A small number (5) non-atopic participants defined as individuals with no personal or family history of Eczema, asthma or allergies, participated in the study to determine effects in the normal population.

The results show an improvement in disease severity (EASI) and in skin barrier integrity after 6 weeks and 12 weeks of taking bleach baths shown by decrease water loss (TEWL). Subjects also reported significant improvements in itch intensity, especially better sleep. As has been observed by other publications, we did not see a significant effect on cultivatable *Staphylococcus aureus* from skin swabs even after 12 weeks of bleach baths. There were no significant changes in microbial populations (microbiome) in the skin after bleach baths. Most participants seem to be motivated to continue the bleach baths after completion of the study.

The results were presented in early May 2016 at the Society of Investigative Dermatology Annual Conference in Scottsdale, Arizona and in 2015 in Atlanta, GA.

Bleach baths as add-on therapy in Adult Atopic Dermatitis subjects who are colonized with *S. aureus*:

- Reduce disease severity
- Reduce symptoms- itch and better sleep
- Improve skin barrier- decrease water loss and increase strength of the outer layer (Stratum corneum)

But have no effect on:

- Staph colonization
- Skin dysbiosis-microbial imbalance
- Serum Th2 biomarkers- inflammation signs
- Skin hydration or skin acidity (pH)