FINALYSE™ Safely reduce *E. coli* with pre-harvest hide wash.

90% OF FECAL SAMPLES **&** **100%** OF HIDE SAMPLES

POSITIVE FOR *E. COLI* ALSO TESTED POSITIVE IN PRE-EVISCERATION SAMPLES.[1]

E. COLI ON HIDES MEANS CONTAMINATION IN YOUR PLANT.

Dangerous *E. coli* O157:H7 is entering your plant on animal hides, indicating a need for control of *E. coli* in live cattle.

In a study of multiple meat processing plants, the prevalence of *E. coli* O157 in fecal and hide samples was significantly correlated with carcass contamination. 90% of lots with positive fecal samples also had positive pre-evisceration samples, while 100% of lots that had positive hide samples also had positive pre-evisceration samples.[1]

WHAT IF YOU COULD SAFELY REDUCE *E. COLI* FROM HIDES PRE-HARVEST IN JUST FIVE MINUTES?

REDUCE PATHOGENS.

What if you could reduce *E. coli* in a pre-harvest hide wash?

MAINTAIN WORKER SAFETY.

What if there were interventions that didn't expose workers to harmful chemicals?

PROTECT EQUIPMENT.

What if you had a microbial solution that was safe on equipment?

THE PROOF IS IN THE RESEARCH.

Finalyse™ effectively reduced *E. coli* 0157:H7 by >1.8$_{Log}$ CFU/g at an exposure time of five minutes.

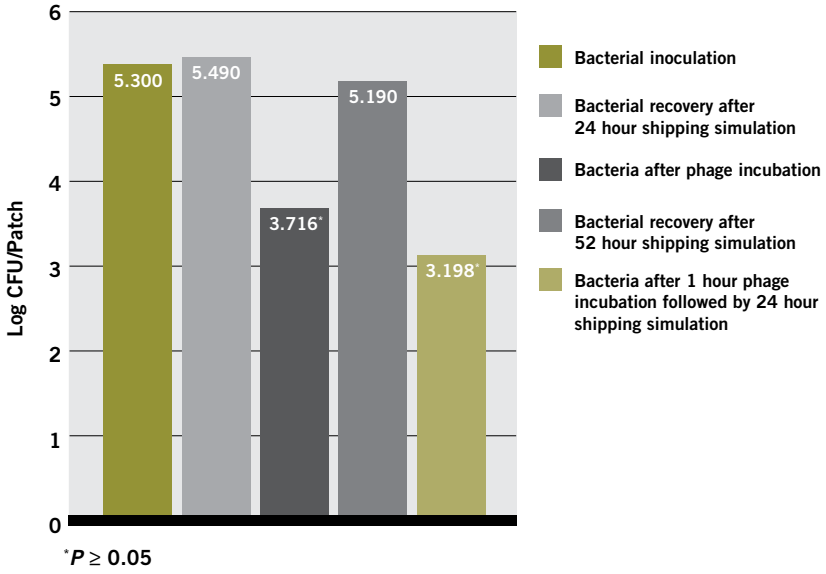
Finalyse reduced *E. coli* prevalence by 44% compared to the previous year and 37.4% compared to the 3-year average.

Finalyse uses naturally occurring phages to weaken the *E. coli* cell wall and replicate, destroying additional bacteria on cattle hides. In just five minutes, Finalyse will have adequately incubated for a >1.8$_{Log}$ log reduction.[2]

EASY APPLICATION.

Applied as an overhead spray system in holding pens or lairage area, Finalyse and the Finalyse Application System™ can easily configure to current pre-harvest, hide-on spaces.

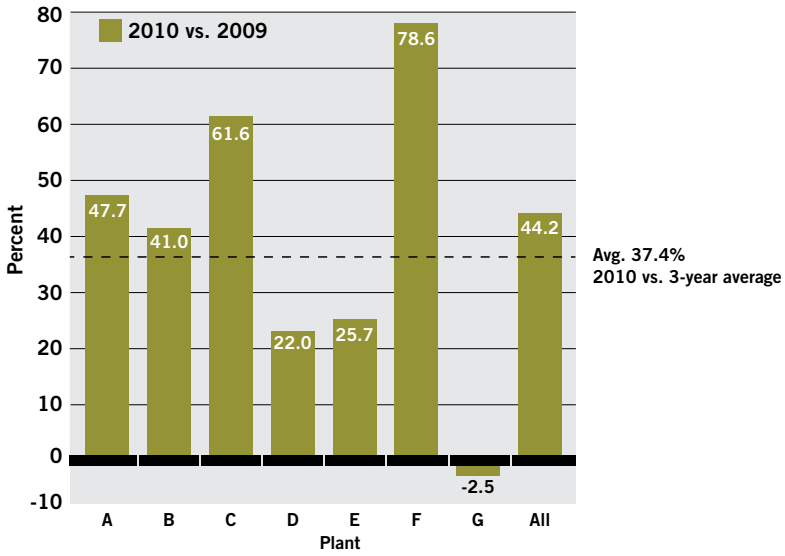
Table 1: Hide patch results 10^8 PFU with 10^5 surrogate Log CFU/Patch



*$P \geq 0.05$

*Based on internal customer data. Data not analyzed for statistical significance.

Table 2: Prevalence of *E. coli* on variety meats[3**]



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PASSPORT
Food Safety Solutions powered by ARM & HAMMER

We are powered by the **#ScienceHearted** vision of ARM & HAMMER™ to meet the growing need for a safe and affordable food supply. Trust us for innovative food safety solutions to reduce the incidence of common pathogens in animal protein products. To find out all the benefits of Finalyse and contact a rep, visit PassportFoodSafety.com.

1 Elder RO, Keen JE, Siragusa GR, Barkocy-Gallagher GA, Koohmaraie M, Laegreid WW. *Proc Natl Acad Sci U S A.* 2000; 97(7): 2999–3003. Published online 2000 Mar 21. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC16181/

2 Pillai S, Rambo C, and McReynolds J. "Finalyse Surrogate Research Model." 2013. Data on file.

3 Weekly VM-EC 7% Update 2007-2010 ytd. 2012. Data on file.