



Nourishield™ 2000L



Clean Label
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Joy Saha, Ph.D.

RD&A Senior Scientist Food Preservation & Protection, Kerry



Nourishield™ 2000L

Buffered Vinegar, Cultured Dextrose

Applications

- Processed meats
- Fresh meat

Nourishield is our portfolio of innovative multifunctional systems of combined technologies/products. Previously Durafresh UC Plus, Nourishield 2000L is a blend of organic acids and peptides that can improve product quality through clean inhibition of pathogens and spoilage in meats and poultry products.

Benefits

- Clean-label “nitrite-free” alternative to curing agents in poultry.
- Replace conventional curing process while providing efficacy against *Listeria monocytogenes*, *Clostridium perfringens*, *Clostridium botulinum*, and spoilage microorganisms.
- Facilitates a “No artificial preservative” claim.
- Can replace HPP.

HPP Replacement

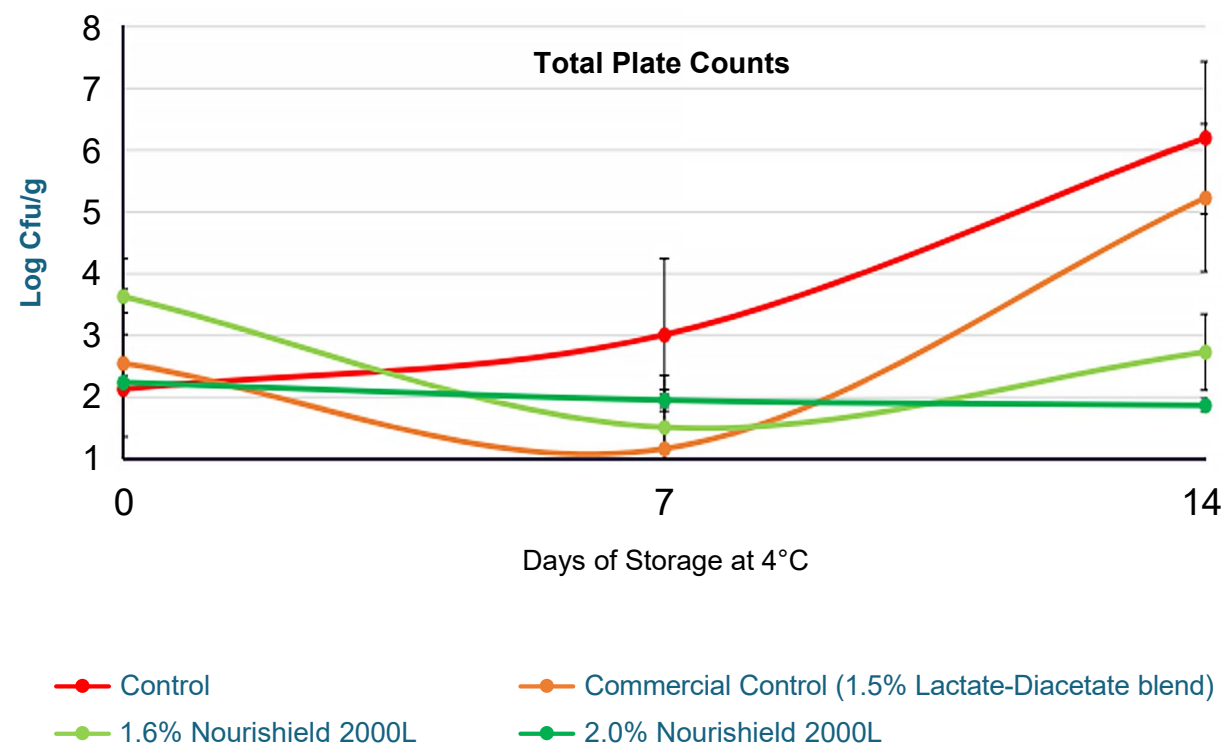
HPP Bottle Necks:

- High cost
- Supply chain
- Energy/water
- Intense process
- Additional packaging requirements

	Use rate %	Price/lb	Cost in use \$/lb	Est. cost per 1M lbs product
HPP Process			\$0.250 - \$0.040	\$250,000.00 - \$400,000.00
Nourishield 2000L (formerly DuraFresh UC Plus)	2.25%	\$3.35	\$0.075	\$75,000
Potential Savings				\$175,000-325,000

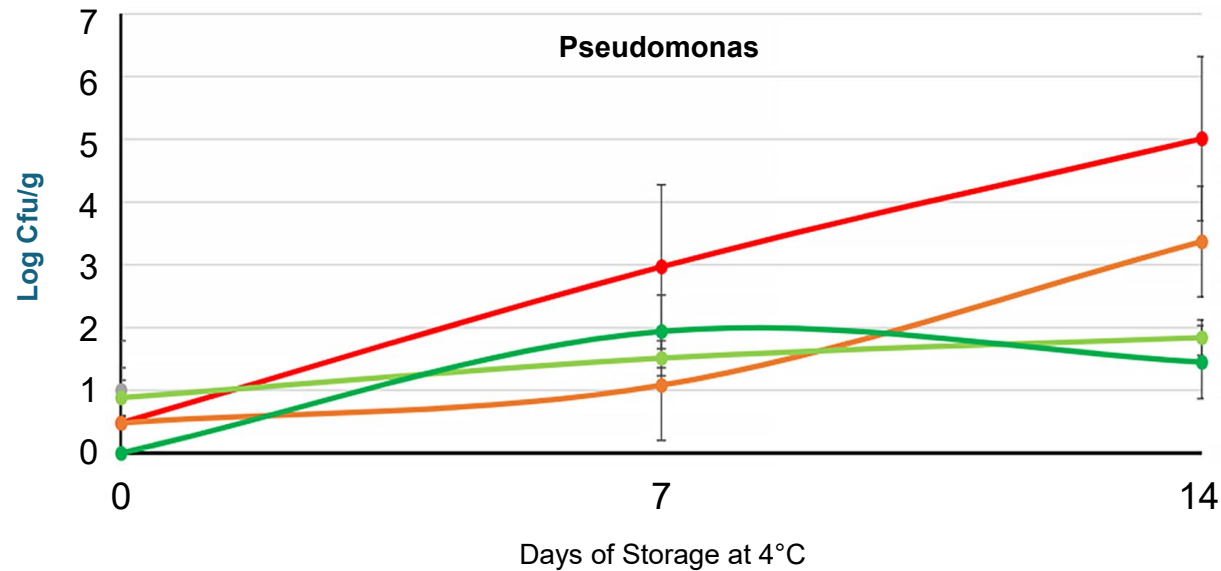
Nourishield™ 2000L on TPC

Meat Conditions: Chicken breasts vacuum tumbled with brine (0.75% salt, 12% pick up)



Nourishield™ 2000L on *Pseudomonas*

Meat Conditions: Chicken breasts vacuum tumbled
with brine (0.75% salt, 12% pick up)

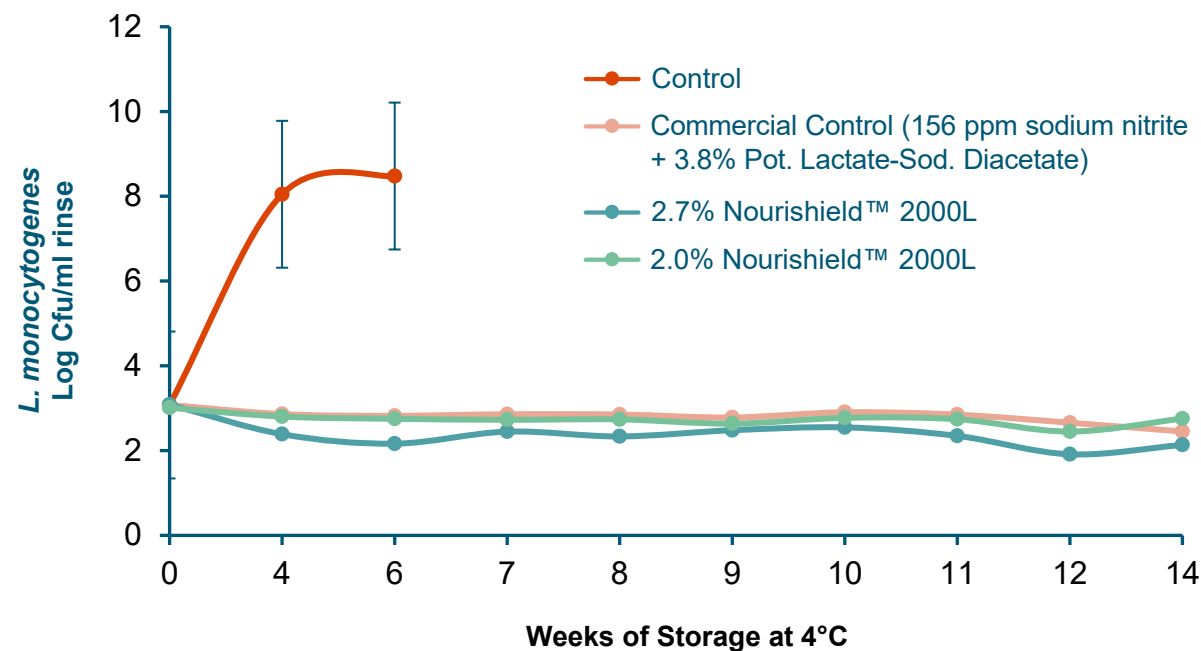


- Control
- Commercial Control (1.5% Lactate-Diacetate blend)
- 1.6% Nourishield 2000L
- 2.0% Nourishield 2000L



14 Weeks in High Moisture, Low Sodium Turkey Meat

Meat Conditions: 6.2 pH, 76% moisture, 1.55% salt, 400 mg sodium / 56g serving



Ingredient Uniqueness

- **First to market solution:** The only solution of its kind on the market. Clean label, natural, nitrite-free solution designed to work well in high moisture and low sodium poultry applications. Patents: US 10,327,463 B2 and US 9,883,689 B2.
- **More authentic poultry:** Antimicrobial for poultry deli meat - enabling a more natural color, taste, texture and flavor and improves quality through shelf life.
- **Pathogen control:** Efficacy against *Listeria monocytogenes*, *Clostridium perfringens*, *Clostridium botulinum*, and spoilage microorganisms.
- **Clean label:** Replaces lactates, diacetates and sodium nitrites on product label with same level of protection for shelf life. New label is buffered vinegar and cultured dextrose. Facilitates “No Artificial Preservatives” or Natural Claim in many regions.



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Questions?

Reach out: joyjit.saha@kerry.com

Thank you!

