

Pathogen Control: VALIDATION STUDY



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Validation Study

Overview

- I. Objective
- II. Methodology
- III. Individual Process Steps
- IV. Overall Sequential Pattern
- V. Summary & Conclusion

Validation Study Objective

Validate Changes in:

- Microbial Populations (APC, TCC, ECC)
- *Salmonella* Incidence
- *Campylobacter* Incidence / Load *
- Individual Interventions
- Multiple-sequential Interventions

Validation Study



- Dr. Jarrett Stopforth

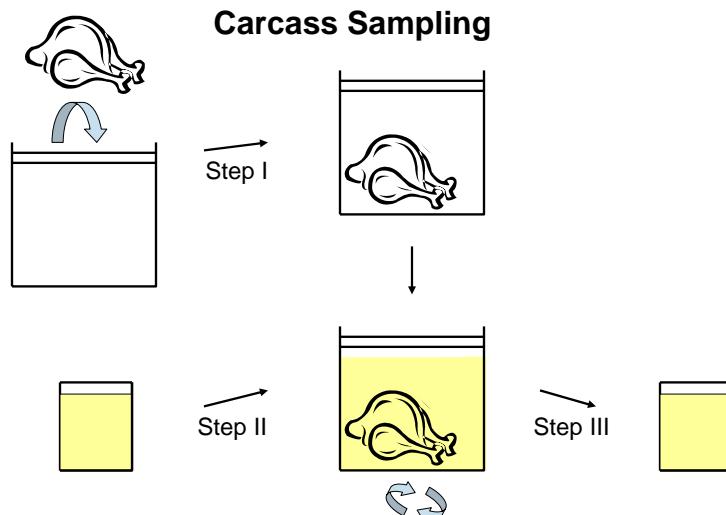
- Science-based
- Statistically Valid

Validation Process

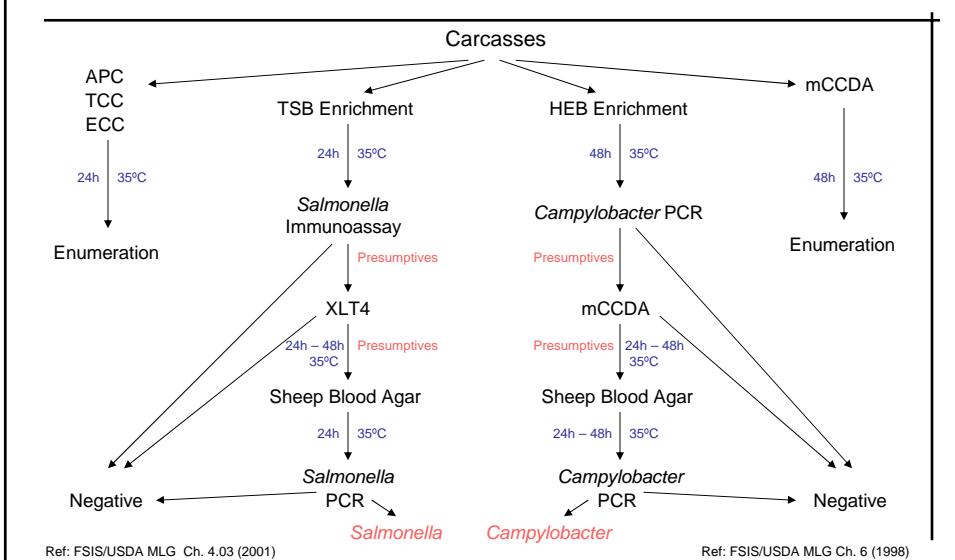
SAMPLING BY STAGE OF PROCESSING

- | | |
|----------------|------------------------|
| 1. NY WASH | 150 (75 Pre- 75 Post-) |
| 2. I/O WASH #1 | 150 (75 Pre- 75 Post-) |
| 3. I/O WASH #2 | 150 (75 Pre- 75 Post-) |
| 4. OLR WASH | 150 (75 Pre- 75 Post-) |
| 5. CHILLER | 150 (75 Pre- 75 Post-) |

METHODOLOGY

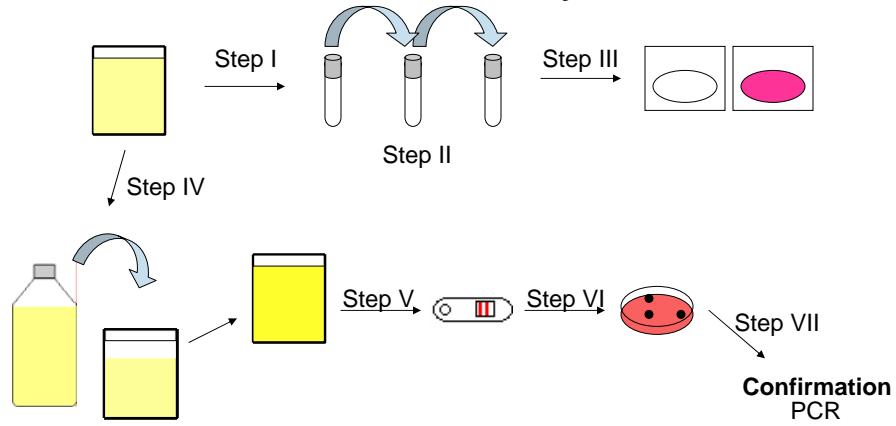


METHODOLOGY

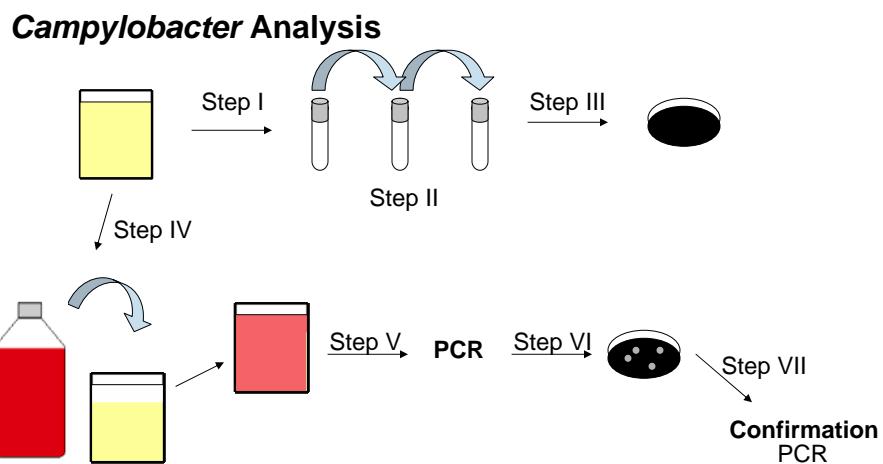


METHODOLOGY

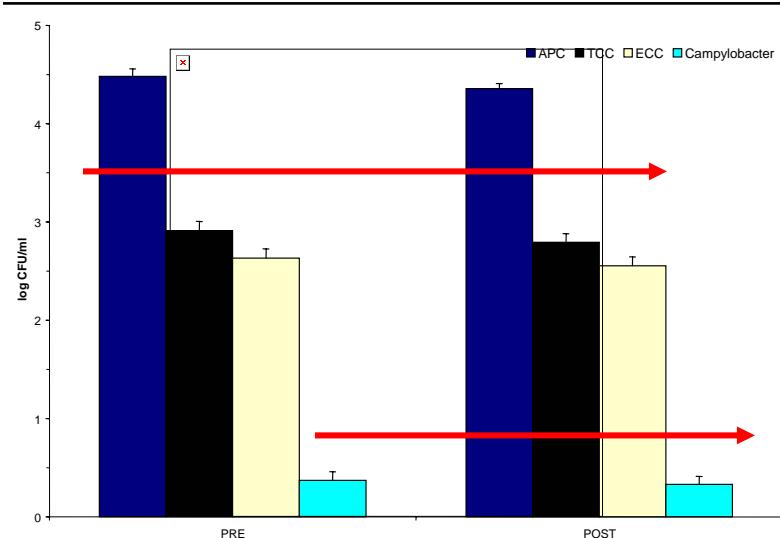
Salmonella & General Microbe Analysis



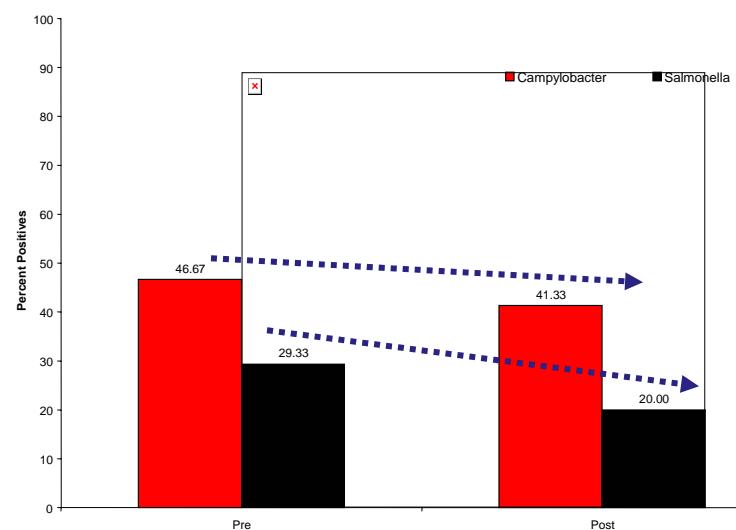
METHODOLOGY



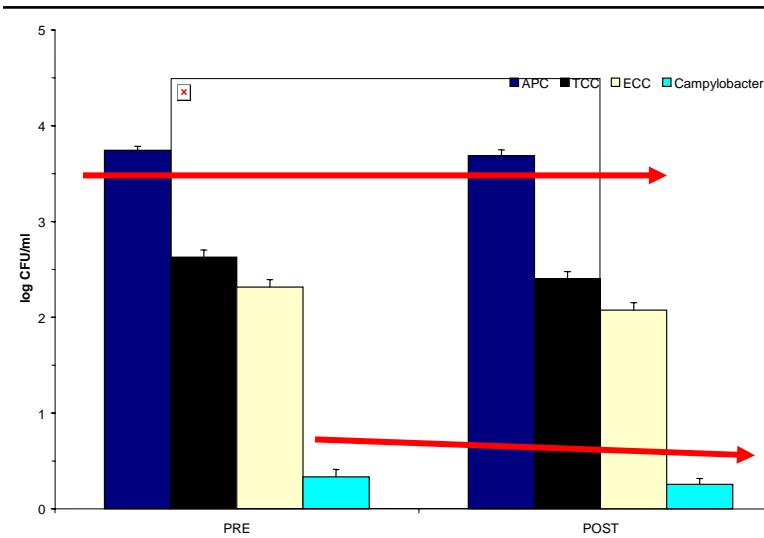
NY Wash ENUMERATION



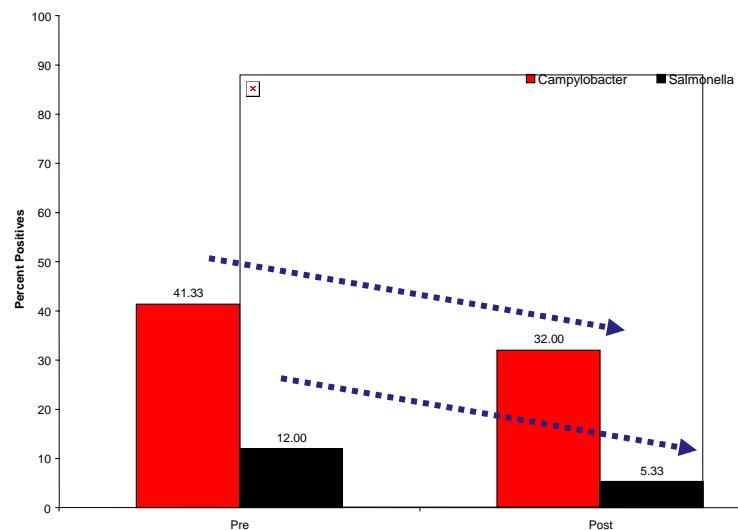
NY Wash INCIDENCE



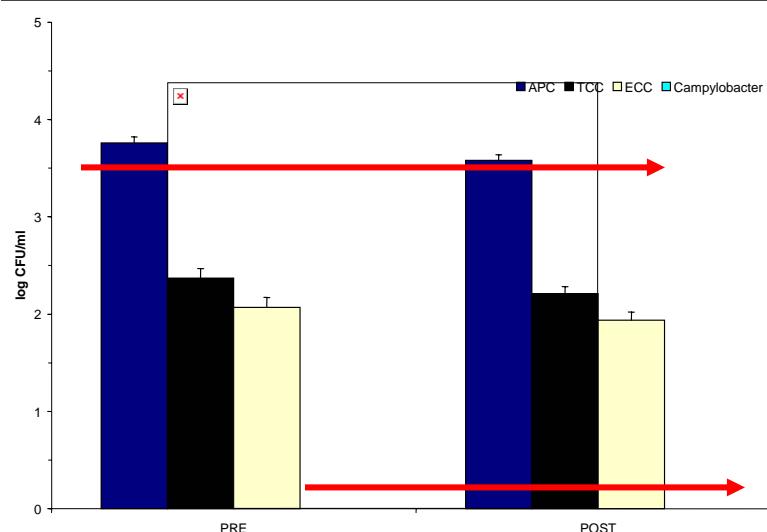
Inside/Outside Bird Wash 1 ENUMERATION



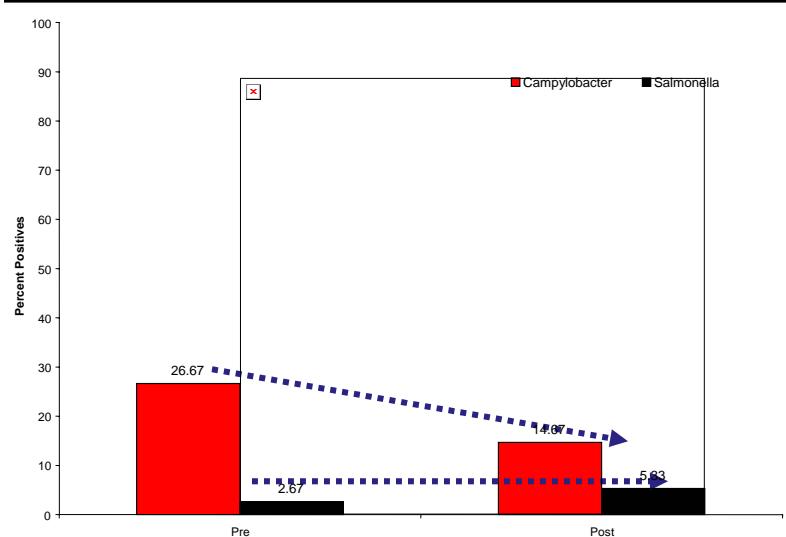
Inside/Outside Bird Wash 1 INCIDENCE



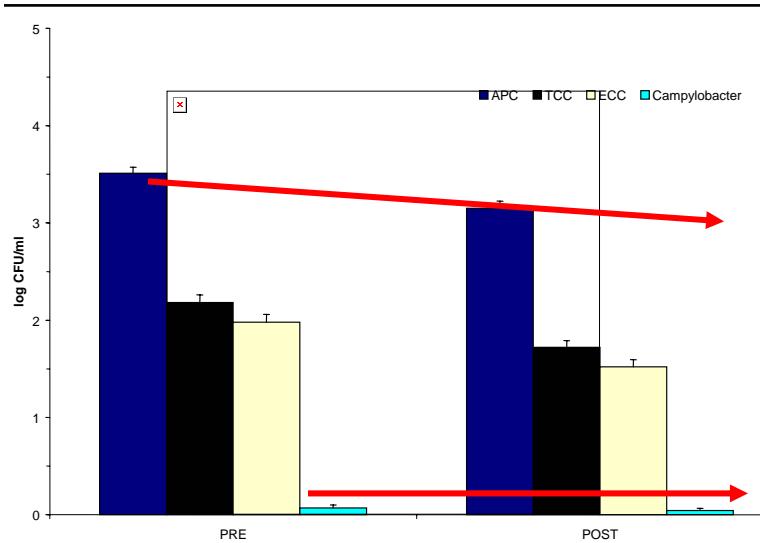
Inside/Outside Bird Wash 2 ENUMERATION



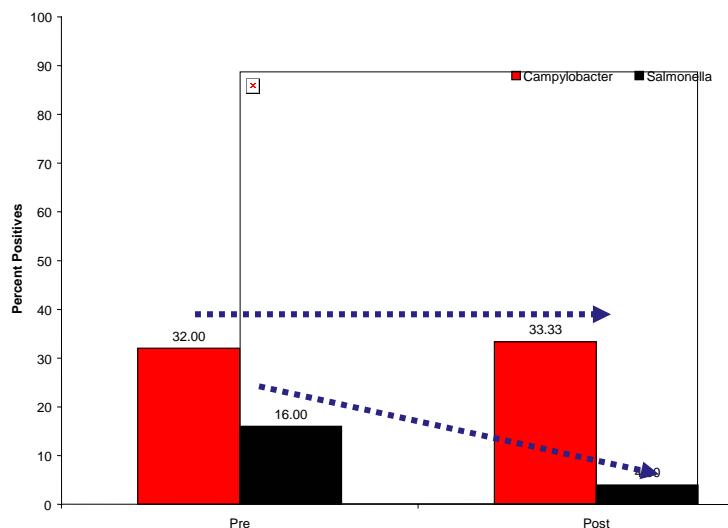
Inside/Outside Bird Wash 1 INCIDENCE



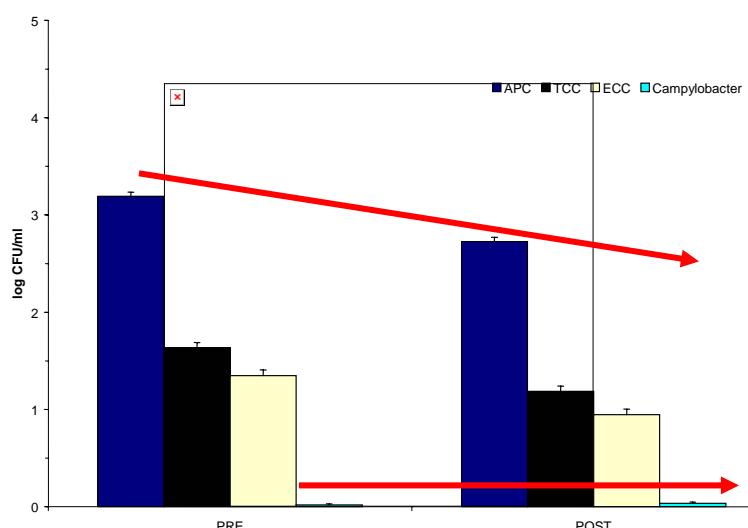
Pre-Chiller OLR Cabinet ENUMERATION



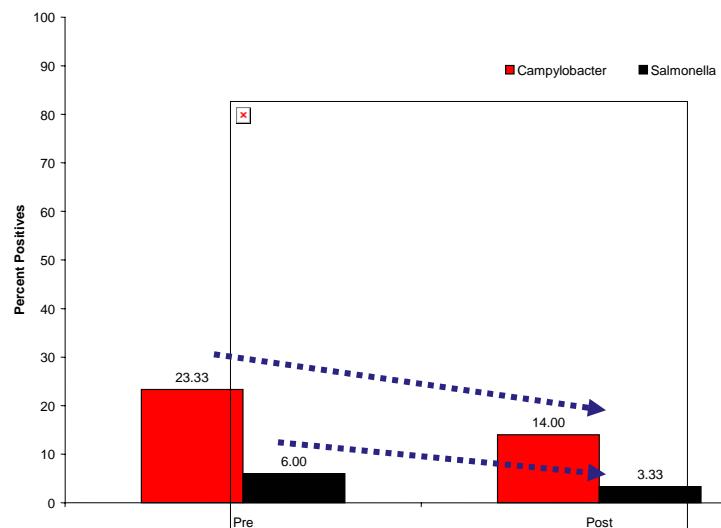
Pre-Chiller OLR Cabinet INCIDENCE



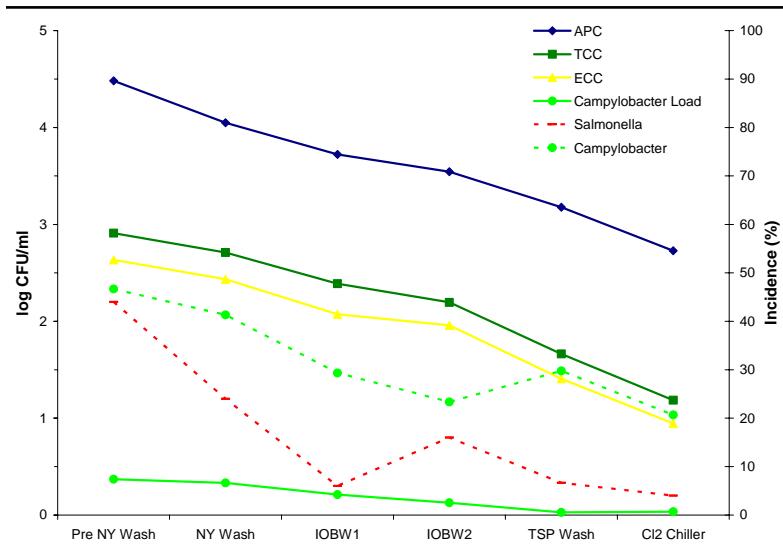
Chlorine Chiller ENUMERATION



Chlorine Chiller INCIDENCE



Multiple Sequence ENUMERATION / INCIDENCE



Validation Study Conclusions

Validated Changes in:

- Microbes (1.5 – 2.5 log decrease)
- *Salmonella* Incidence (30 - 3% drop)
- *Campylobacter* Incidence (46 – 14%)
- Load (< log 1 - ~ 0)
- Individual Interventions – maintain & control
- Multiple-sequential Interventions – overall steady decreases