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AUBURN UNIVERSITY
DEPARTMENT OF POULTRY SCIENCE



WORTHWHILE OPERATIONAL GUIDELINES & SUGGESTIONS

Mechanically Separated Chicken – Minimizing Foodborne Pathogens

Not ready to eat (NRTE) comminuted poultry includes ground chicken or turkey, mechanically separated product, and hand or mechanically deboned product further processed to reduced particle size. USDA-FSIS *Salmonella* performance standards for comminuted chicken or turkey are 25% or 13.5% maximum acceptable positives (13 or 7/52 samples). *Campylobacter* performance standards are 1.9% for both chicken and turkey (1/52 samples).

Application of antimicrobials to chicken or turkey frames may be a useful method for the reduction of *Salmonella* and *Campylobacter* in comminuted poultry products. When *Salmonella* inoculated chicken frames were dip treated with 0.6% cetylpyridinium chloride (Cecure®), 0.1% peracetic acid (Peragonn™), or 1.5% acidified lactic acid, *Salmonella* were reduced in ground product after 24 hours of refrigeration. Peracetic acid, 0.3% propionic acid, acidified lactic acid, and 0.1% lauric arginate were the most effective for reducing *Campylobacter* in ground product.

Commercially available bacteriophage, such as Salmorex™, have also been shown to be advantageous when used on chicken parts prior to grinding. (Grant et al., 2017, Poult. Sci. epub pex062)

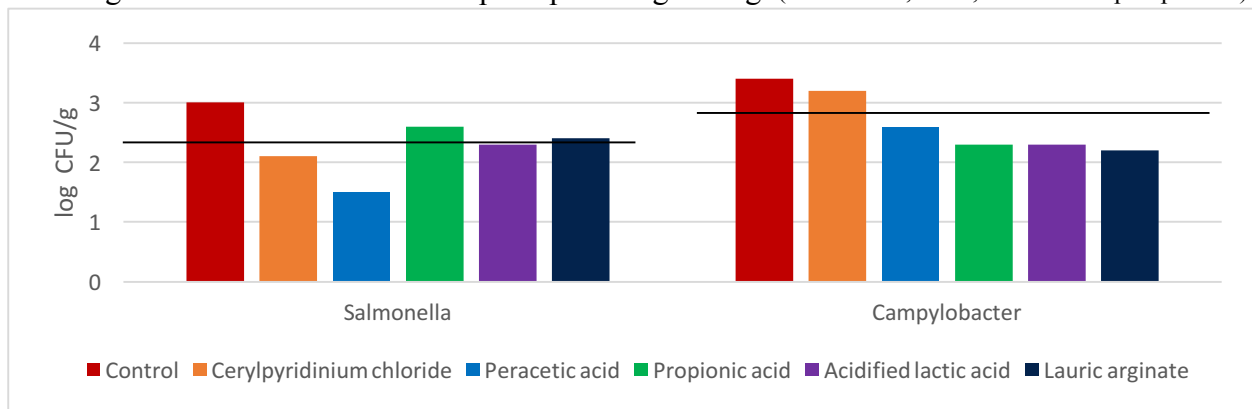


Chart adapted from Morre et al., 2017. Poultry Science, epub ahead of print pew497.



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