



# Worthwhile Operational Guidelines & Suggestions

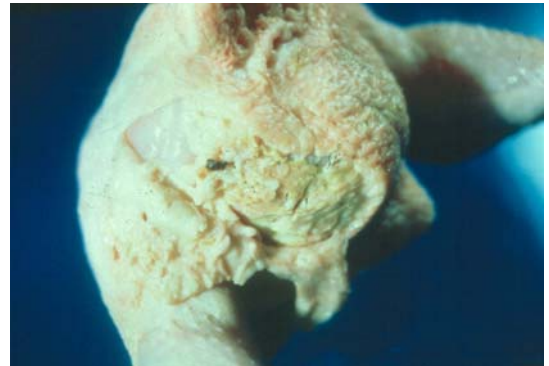
BROILER PROCESSING TIMELY INFORMATION – FEBRUARY 2004

## INFECTIOUS PROCESS (IP) OR CELLULITIS

Cellulitis or IP refers to inflammation of the subcutaneous tissue. In broiler chickens, lesions are characterized by thickened and discolored dermis and presence of yellow colored, caseous exudate under the skin, mostly around the pelvic back region. During processing, carcasses with localized or discrete lesions must be trimmed, whereas, diffuse lesions require condemnation of the entire carcass. Cellulitis is caused by *Escherichia coli*, an organism frequently found in animal environments, introduced under the skin of a bird via loss in skin integrity (i.e., scratches, cuts, punctures, sores). Once inoculated, *E. coli* rapidly multiplies and produces the typical “cheesy” lesions as early as 18-24 hours. Higher incidence of cellulitis is observed in slow feathering males, with restricted feeding/lighting programs, extremes in environment, leg problems/lameness, and with systemic infections (i.e., airsacculitis and septicemia/toxemia).

Control measures for cellulitis must include a combination of:

1. Limiting environmental exposure to *E. coli* (sanitation, drinker management; litter quality, down-time between the flocks),
2. Maintenance of skin integrity (slow feathering lines, optimum feathering, nutrient intake, high placement density, and flock management programs to minimize bird activity, bird migration, flightiness, pile-ups, and competition, especially around feeders).
3. Enhance immune response (optimum availability and intake of Vitamin E, and zinc), especially during the first 2-3 weeks (minimal fat absorption and maximal immune challenge).
4. Effective plant carcass inspection system; on-line or off-line trim/salvage programs to remove affected parts.



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