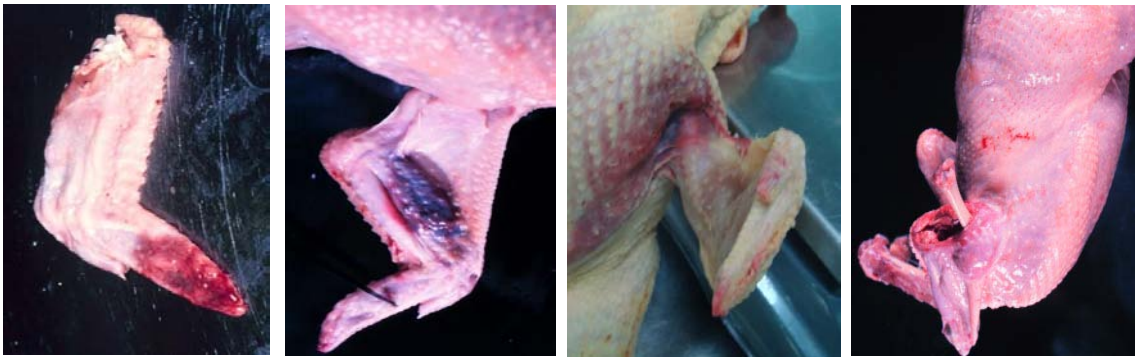
Worthwhile Operational Guidelines & Suggestions

BROILER PROCESSING TIMELY INFORMATION – AUGUST 2011

Activity = (Wing Damage)^2



Birds are substantially more sensitive to light and visual cues than humans. Since dim light conditions has a calming effect on broiler chickens, low lighting is recommended during slaughter to reduce agitation and struggling associated with unloading and shackling processes. Severe wing flapping can lead to blood splash/bruises, red wing-tips, and more importantly to wing fractures and/or dislocations. Spontaneous dislocations are not unusual if the broilers are "encouraged" to flap their wings successively. The elbow joint appears to be the weakest link to yield (i.e., immature articular cartilage and/or collagen matrix) during repetitive wing strokes, powered by proportionately large pectoral muscles. *The key to controlling wing damage in poultry is to reduce wing activity.* Birds use their wings to maintain their balance. Wing flapping during unloading and transfer to hanging pen (i.e., intermittent belt movement and belt-to-belt transfers) and immediately after inversion following shackling is common as birds will attempt to gain normal posture for several seconds. Following this initial bout, some birds will resume wing flapping on the kill line when suddenly exposed to bright lights, loud sounds, elevations, turns or vibrations on the overhead conveyor line, and upon receiving jolts of electricity at the entrance ramp to the stunner. Dim lighting, soft tactile stimulation during shackling (especially when birds are suspended in isolation), use of breast rub bars/curtains and elimination of pre-stun shocks can reduce activity and hence wing damage.

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