


HACCP-Based Inspection Models Project: Baseline Results for Young Chickens

Prepared for US Department of Agriculture
Food Safety and Inspection
Service

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Overview

- Organoleptic data collection procedures
- Baseline organoleptic results
 - ✓ Ante-mortem
 - ✓ Passed
 - ✓ Condemned
- Microbial data collection procedures
- Baseline microbial results
 - ✓ *Salmonella*
 - ✓ Generic *E. coli*

Baseline Young Chicken Plants (16 Plants)

	Plant	Plant Location
P192	Gold Kist	Guntersville, AL
P468	Townsend's of Arkansas	Batesville, AR
P517	Marshall Durbin Poultry	Hattiesburg, MS
P548	Cagle's	Collinsville, AL
P646	Cagle's	Pine Mountain, GA
P687	Columbia Farms	Columbia, SC
P758	Choctaw Foods	Carthage, MS
P1249	Rocco Farm Foods	Edinburg, VA
P1307	Marshall Durbin and Company	Jasper, AL
P2686	Cagle Keystone Foods	Camilla, GA
P6505	Claxton Poultry Company	Claxton, GA
P6651	Tyson Foods	Shelbyville, TN
P7632	Zacky Farms	Fresno, CA
P7903	Perdue Farms	Accomac, VA
P7987	Amick Processing	Batesburg, SC
P20245	Cagle Keystone Foods	Albany, KY

Baseline Organoleptic Data Collection — Young Chickens

In-Plant Correlation

Conduct Organoleptic Data Collection

Ante-mortem

- Conduct interview once a day for 5 weeks

Passed

- Examine 80 carcasses a day for 5 weeks (2,000 carcasses per plant)
- Select carcasses after the final wash but before the chiller

Condemned

- Examine 10 carcasses from condemned barrel 8 times a day for 5 weeks (2,000 carcasses per plant)

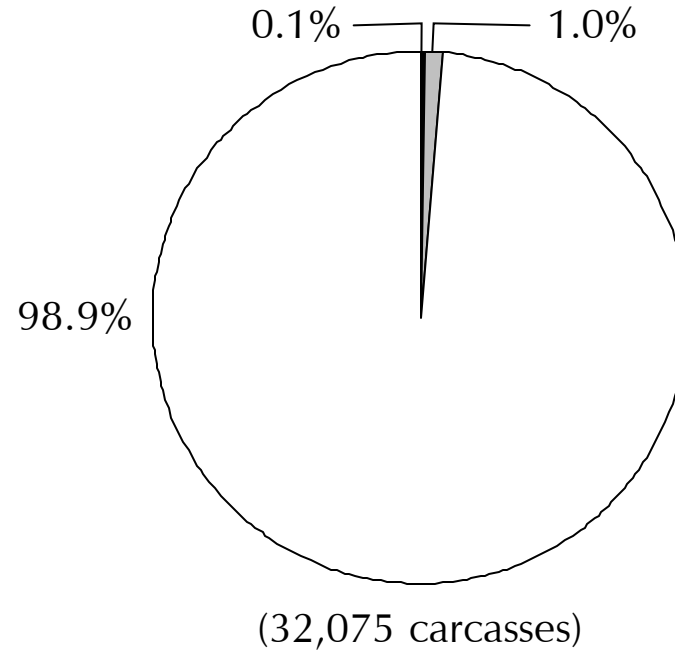
Send Completed Forms to RTI
for Analysis

Baseline Organoleptic Results for Ante-Mortem — Young Chickens (16 plants)

Sample days*	380
Ante-mortem activities performed at time of interview (% of sample days)	68.2%
<i>For Days When Ante-mortem Activities Performed</i>	
Mean number of times ante-mortem activities performed by FSIS inspector per day	1.3
Any lot inspected on ante-mortem found unsuitable for food by FSIS inspector (% of sample days)	0.8%
Records made of ante-mortem activities (% of sample days)	27.0%

* Number of sample days is less than number of days of data collection (n=399) because on some days, the VMO was not available for the ante-mortem interview.

Baseline Organoleptic Results for Passed Sample — Young Chickens (16 plants)



- Food safety — diseases
- Food safety — zero tolerance for fecal contamination
- No food safety conditions (includes some carcasses with OCP conditions)

Note: Although some carcasses had multiple conditions, we assigned each carcass to one category so the percentages would sum to 100%. Food safety diseases were the overriding condition.

Description of OCP Localized Conditions — Young Chickens (I)

Condition	Description
Extraneous material — ingesta	Any recognizable particle
Extraneous material — other	Any recognizable amount (e.g., unattached feathers, grease, bile remnants, whole gall bladder or spleen, etc.)
Lung	Whole lung or partial
Oil glands	Whole glands or yellow fragments
Feathers	1 feather or more of any size
Cloaca	Any portion of the terminal portion of the intestinal tract with mucosal lining
Bursa of fabricius	A whole rosebud, or identifiable portion with 2 or more mucosal folds
Esophagus	Any portion with identifiable mucosal lining
Crop	Complete crop or partial with mucosal lining

Description of OCP Localized Conditions — Young Chickens (II)

Condition	Description
Trachea	Any identifiable portion
Hair	1 hair or more of any size
Long shank	Both condyles must be covered
Breast blister	Any of any size; if membrane “slips” or if it is firm
Bruises	1 bruise or more $\geq \frac{1}{2}$ ” (don’t count areas showing only slight reddening)
Lesions (tumors, synovitis, airsacculitis, IP)	Any inflammatory tissue, exudate, or tumor (any size)
Fractures	Must be opening through the skin (compound fracture)
Sores/scabs	Any of any size (don’t count healed sores or scabs that have been removed for the most part)
External mutilation	To skin and/or muscle; caused by equipment in the dressing process; not normally a single nick on the skin

Baseline Organoleptic Results for Passed Sample, OCP Localized Conditions* — Young Chickens (16 plants) (I)

	% of Carcasses (n = 32,075)
Extraneous material — ingesta	13.4
Extraneous material — other	13.3
Lung	12.9
Oil glands	18.9
Feathers	48.1
Cloaca	1.6
Bursa of fabricius	3.5
Esophagus	2.3
Crop	9.8

Note: Some carcasses may exhibit multiple conditions.

* Not all localized conditions are finished product standard (FPS) defects. See pages 6 and 7 for description of localized conditions.

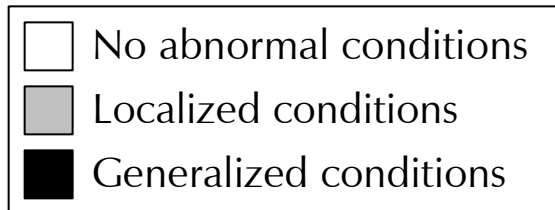
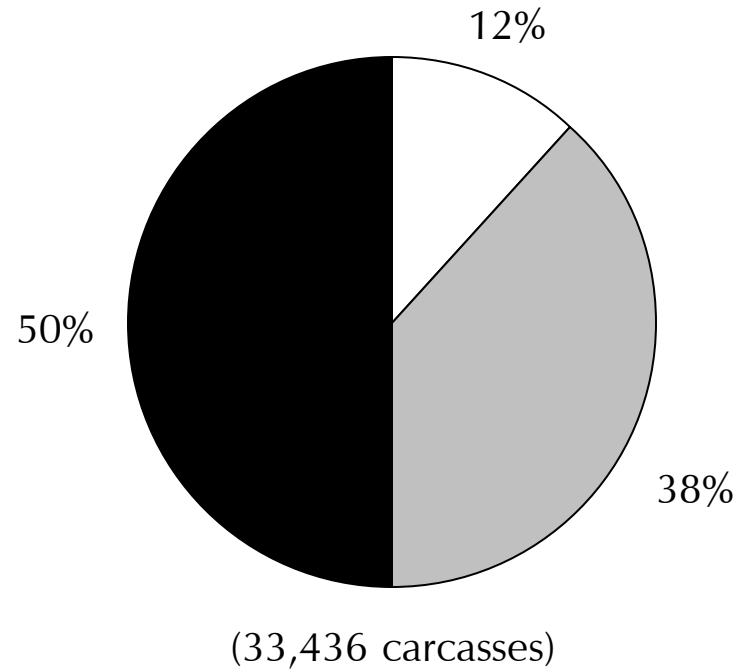
Baseline Organoleptic Results for Passed Sample, OCP Localized Conditions* — Young Chickens (16 plants) (II)

	% of Carcasses (n = 32,075)
Trachea	3.9
Hair	41.8
Long shank	3.5
Breast blister	2.6
Bruises	21.3
Lesions (tumors, synovitis, airsacculitis, IP)	1.3
Fractures	2.4
Sores/scabs	16.0
External mutilation	7.4

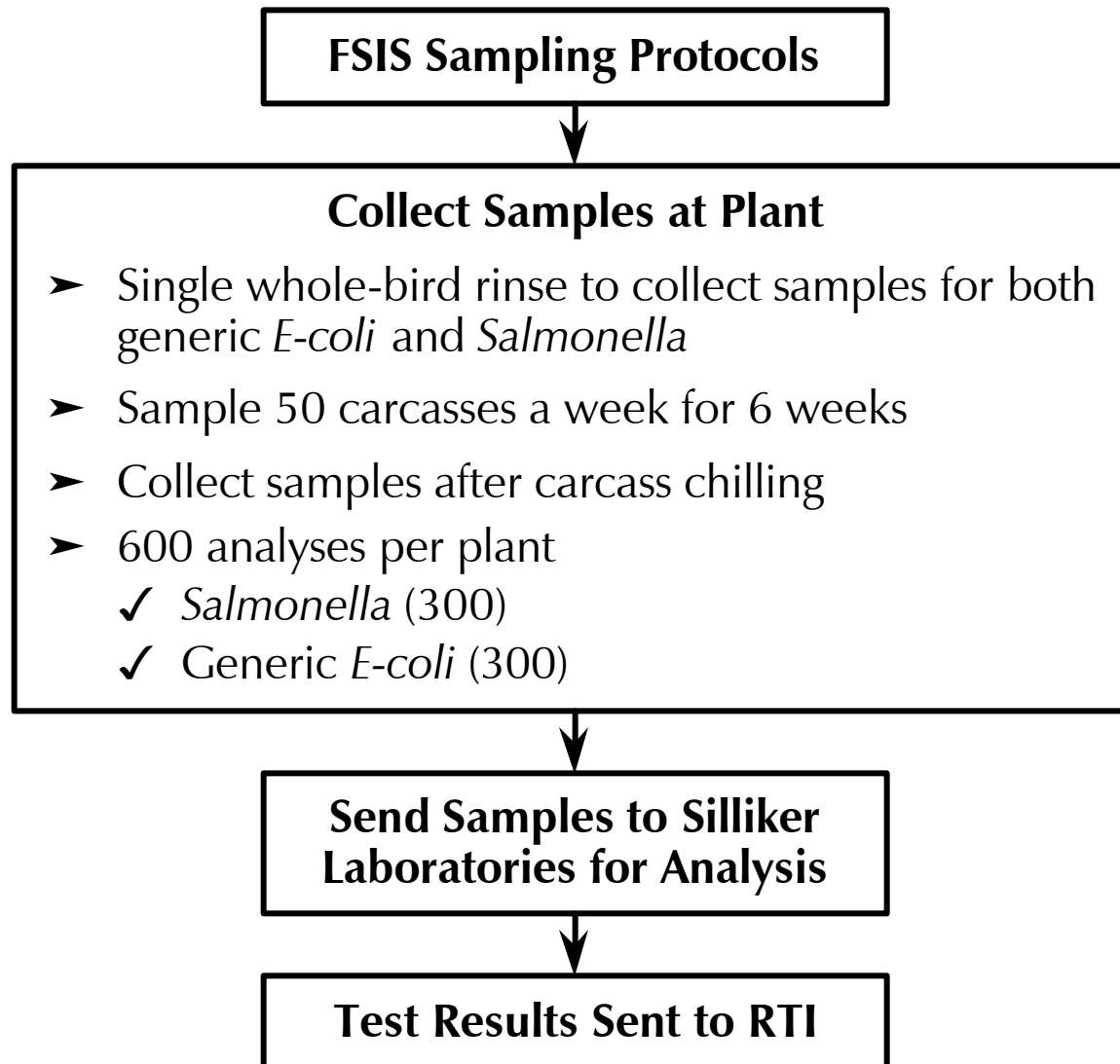
Note: Some carcasses may exhibit multiple conditions.

* Not all localized conditions are finished product standard (FPS) defects.
See pages 6 and 7 for description of localized conditions.

Baseline Organoleptic Results for Condemned Sample — Young Chickens (16 plants)



Baseline Microbial Data Collection — Young Chickens



Baseline Microbial Results for Salmonella — Young Chickens (16 plants)

	Post-chill
Number of Analyses	4,872
% Positive	6.1 (± 0.7)

Note: Detection limit: 1 cfu/25 milliliters (ml). 95% confidence intervals in parentheses.

Baseline Microbial Results for Generic E. Coli — Young Chickens (16 plants)

	Post-chill
Number of Analyses	4,884
Minimum	nd
10th percentile	nd
Lower quartile (25th percentile)	nd
Median	20
Upper quartile (75th percentile)	90
90th percentile	280
Maximum	45,000

Note: Results are reported in cfu/ml. Detection limit: 10 cfu/ml.

nd = not detected