

UNITED STATES DEPARTMENT OF AGRICULTURE  
FOOD SAFETY AND INSPECTION SERVICE  
WASHINGTON, DC

# FSIS NOTICE

44-22

8/11/22

## REVISED YOUNG CHICKEN CARCASS EXPLORATORY SAMPLING PROGRAM

### I. PURPOSE

A. FSIS is cancelling Notice 21-22, *Young Chicken Carcass Exploratory Sampling Program* and reissuing its content to instruct inspection program personnel (IPP) to collect the post-chill rinsate (project HC\_CH\_CARC01) in two specimen jars. Under this notice, IPP will continue to collect the rehang sample rinsate (project code EX\_CHCAR\_RH1) in one specimen jar. Because FSIS co-analyzes the post-chill sample for *Salmonella* and *Campylobacter*, additional rinsate volume is needed to perform a new test, *Salmonella* enumeration. FSIS will make data available to establishments through the agency's Public Health Information System (PHIS) and will share data in a public dataset release. There are no other changes to the instructions in FSIS Notice 21-22.

B. This notice provides instructions to IPP for FSIS' Exploratory Young Chicken Carcass Sampling Program and related instructions for associated National Antibiotic Resistance Monitoring System (NARMS) sampling. A new sampling point has been added for the duration of this Exploratory Sampling Program, (i.e., IPP began to sample chicken carcasses at the rehang step from the same flock that is sampled at the post-chill step to verify the *Salmonella* young chicken carcass performance standard). Furthermore, when the PHIS assigns a NARMS sample to these establishments, IPP collect the NARMS cecal sample from the same flock. Rinsates collected at the post-chill step are verification samples and will be referred to as such throughout this document.

### II. BACKGROUND

A. FSIS is initiating several key activities to gather the data and information necessary to determine future action and move closer to the national target of a 25% reduction in *Salmonella* illnesses (for further information see [FSIS Web page](#)). This exploratory sampling program will support this effort by generating microbial data from young chicken cecal samples (i.e., NARMS samples), pre-intervention carcass rinsate samples collected at rehang, and post-intervention data collected through the current verification sampling program. There are no changes to verification sampling program frequency, collection method, or regulatory results.

B. All samples collected for this exploratory sampling program are shipped to FSIS Field Services Laboratories and tested for the presence of *Salmonella* and aerobic plate count (APC) using FSIS Microbiology Laboratory Guidebook (MLG) methods. If confirmed *Salmonella* positive, *Salmonella* enumeration, and whole genome sequencing will be performed. Beginning August 8, 2022, FSIS will also enumerate *Salmonella* positive rehang and post-chill carcass results. *Salmonella* presence and enumeration results will be reported through PHIS and in a public dataset release. There are no changes to the laboratory methods or result reporting.

C. For this exploratory sampling program, IPP collect young chicken carcass rinsate samples at rehang from federal establishments subject to the young chicken carcass performance standard sampling at post-chill using separate sampling tasks assigned through the PHIS. These sampling locations are defined

**DISTRIBUTION:** Electronic

**NOTICE EXPIRES:** 9/1/23

**OPI:** OPPD

below:

1. Rehang refers to the location in the process after the hock cutter and prior to evisceration (new PHIS Sample Task project code EX\_CHCAR\_RH1).
2. Post-chill refers to the point in the process where the young chicken carcasses exit the chiller after all slaughter interventions have taken place but before entering coolers or proceeding to further processing (existing PHIS Sample Task project code HC\_CH\_CARC01).

D. IPP samples and ships young chicken ceca using the method described in [FSIS Directive 10.100.1 FSIS Cecal Sampling Under the National Antimicrobial Resistance Monitoring System \(NARMS\) Surveillance Program](#).

E. FSIS continues to publish establishment *Salmonella* Categories for each eligible product using the *Salmonella* result from the post-chill verification sample. FSIS will not categorize establishments based on rehang results and will advise the public if it intends to post establishment-specific exploratory sample results.

### III. ELIGIBILITY AND SAMPLE ASSIGNMENT

A. Establishments receiving sampling assignments for project HC\_CH\_CARC01 (HACCP verification samples of chicken carcasses at post-chill) are eligible for this exploratory sampling program.

B. IPP will receive sampling assignments for project EX\_CHCAR\_RH1 (exploratory sampling project for chickens, rehang sample) through PHIS. Establishments will receive the same number of sample assignments for EX\_CHCAR\_RH1 as they currently do for HC\_CH\_CARC01, either two or five sample assignments per month.

C. IPP are to follow [FSIS Directive 10.250.1, Salmonella and Campylobacter Verification for Raw Poultry](#) Chapter II Sections I - IV regarding general sampling instructions, ordering sampling supplies, IPP responsibilities, selecting the sample, and sample eligibility for both rehang and post-chill samples.

D. IPP are to coordinate sample collection using the task calendar and follow the same procedures for selecting the sampling date, line, and time described in [FSIS Directive 10.250.1](#) chapter III section III. A. IPP are to collect the cecal (NARMS), rehang (Exploratory), and post-chill (Verification) samples from the same flock, and the ceca and rehang samples are to be collected before the post-chill sample, as described in section V of this notice. IPP are to ensure the NARMS sample is collected from the same flock when a NARMS sample is assigned.

**NOTE:** No additional NARMS young chicken cecal samples will be assigned for this project. Therefore, many flocks with a rehang and post-chill sample will not have a corresponding NARMS task.

### IV. AWARENESS MEETING WITH ESTABLISHMENT MANAGEMENT

A. If the establishment has not been previously sampled under project EX\_CHCAR\_RH1, the inspector in charge (IIC) is to schedule an awareness meeting with establishment management to inform them that the establishment will be part of the exploratory sampling program.

B. The IIC is to make establishment management aware of this notice (by providing a web link or printed copy) and review the following points during the awareness meeting:

1. The purpose of this program is to collect data about selected foodborne pathogens and microorganisms that serve as indicators of process control. IPP will also be completing a questionnaire ([Attachment 2](#)) during each sampling event. FSIS intends to use the results for policy development;

2. These new sampling results will not be used to take regulatory actions. There is no change to the FSIS verification sampling and FSIS will continue to categorize establishments using results from the post-chill samples;
3. Establishments do not need to hold product pending sample results;
4. For each sampling event, FSIS will select carcasses from the same flock for sampling ceca (through the NARMS program), and at the rehang and post-chill locations; IPP will continue to randomly select when to collect the post-chill sample;
5. FSIS would appreciate the establishment's assistance to locate a safe position from which to select a bird at rehang;
6. IPP will only sample young chicken carcasses for this program;
7. IPP will continue to randomly collect post-chill samples from all production shifts and thus will also collect ceca and rehang samples from all shifts;
8. The sampling program will continue for a minimum of six months;
9. Rehang and post-chill samples will be tested for the presence and levels of *Salmonella* and aerobic plate count (APC) levels. Post-chill samples will continue to be tested for the presence of *Campylobacter* and ceca samples will be tested as described in [FSIS Directive 10,100.1](#);
10. There are no changes to reporting cecal or post-chill sample results. *Salmonella* presence (not enumeration) results from the rehang sample will also be reported to the establishment; and
11. Once FSIS has completed the exploratory sampling program, the Agency will publish a summary of exploratory sampling program findings.

C. IPP are to document the awareness meeting in a memorandum of interview (MOI) as described in [FSIS Directive 5010.1](#) section IV.

## V. SAMPLING

A. To collect the rehang sample, IPP are first to review [Directive 10,250.1](#) chapter II section I, which provides general sampling policies, and [Attachment 1](#) to this Notice, which illustrates the carcass rinsate sampling procedures applicable to young chicken carcasses sampled at rehang and post-chill.

B. IPP are to identify a safe location to collect the rehang sample using the definition of rehang in [Section 10.1](#) of this notice and information from the establishment.

C. To sample a young chicken carcass from the same flock at rehang and post-chill, IPP are to use knowledge of slaughter operations to estimate the approximate time for a young chicken carcass to move from the rehang sample location to the post-chill sample location and use this estimate to determine the sample collection time at the rehang location. IPP are not to sample the same carcass at both points.

**EXAMPLE:** IPP use a random method to determine that a young chicken carcass post-chill sample is to be collected from line 1 on Tuesday, May 15th at 7 am. IPP determine that it takes approximately 120 minutes (2 hours) for a carcass to move from rehang to post-chill, so they collect the rehang sample at 5 am and the post-chill sample at 7 am.

D. If possible, immediately after collecting the rehang rinsates, IPP are to place the rehang rinsate sample in an ice bath before packing the sample for shipment or refrigeration overnight. To make the ice bath, IPP are to use a small container (pail or small plastic tub) and place about 4 inches of ice in the bottom of the container. If there is no way of creating an ice bath, IPP are to place the samples under refrigeration, or

similar method, within 5 minutes of collecting the sample.

**NOTE:** An ice bath is the preferred method for rehang samples collected for this exploratory sampling program. Carcasses sampled at rehang have not been eviscerated and are still hot. An ice bath reduces the temperature of the rehang rinsates quickly to minimize the outgrowth of microorganisms.

- E. IPP are to complete the sampling task questionnaire within each rehang and post-chill sample task:
1. There are no changes to the questions currently asked for the HC\_CH\_CARCO1 post-chill sample;
  2. The exploratory EX\_CHCAR\_RH1 rehang sample task questions are included in [Attachment 2](#);
  3. To aid in data pairing of the ceca, rehang, and post-chill sampling results, IPP are to use a USDA retain tag number to identify the flock sampled at the rehang and post-chill locations. The retain tag number is obtained from the manila or blue USDA tag forms. One tag number is used for each group of samples obtained from a single flock. This number containing an “MDP” prefix is added to the sample collection data tab in PHIS, as the tag number (highlighted in example below); and

**Sample Management - Sample Collection**

[Print Form](#)  
[Preview Form](#)

Generate a Sample | **Sample Collection Data** | Additional Info

Sample Form: [ ]  
Project: HC\_CH\_CARCO1  
Analysis: Salmonella & Campylobacter  
Tissue: [ ]

Collection Range: [ ] Start Date: 12/21/2021  
End Date: 1/27/2022  
Establishment: [ ]  
Sample Status: Sent To Lab

**Collection Information**

Date Collected\*: 1/5/2022  
Parcel Pickup Date\*: 1/5/2022  
Schedule Sample  
Phone #: [ ]  
Select Sample: Animal-Chicken-Broiler / Young Chicken Carcass Rinse  
Laboratory: Western Laboratory  
800 Buchanan Street,  
Albany, CA 94710

**Animal Information**

Slaughter Date\*: [ ]  
Tag #: [ ]  
Animal Status\*:  
 Retained (by USDA)  
 Condemned (by USDA)  
 Passed and Held (by establishment)  
 Passed and Discarded (by establishment)  
 Passed and Shipped (by establishment)  
 Retained (USDA) and Discarded (by establishment)  
RVIS Case #: [ ]  
In-Plant Test #: N/A

Herd/Flock Owner\*: [ ]  
 Foreign Address  
Address\*: [ ]  
City\*: [ ] State\*: [ ] Postal Code\*: [ ]

**Remarks**

\* = Required

Save & Continue | Submit to Lab | Go Back | Close

4. IPP are not to add the retain tag to the sampled chicken carcasses. The retain tag number will be simply assigned to the corresponding samples. To prevent reusing the number, IPP are to discard the tag after the sample group is identified and added to the questionnaire.

F. IPP are to follow the procedures for sampling young chicken ceca (project code NARMS\_YC) described in [FSIS Directive 10,100.1](#) sections VIII through IX. IPP are to sample the same flock and use the same retain tag number described in section V.E.3 of this notice.

## VI. SAMPLE HANDLING AND SHIPPING

- A. After sampling, IPP are to maintain samples in a secure location under refrigeration (at or below 40° F), but not freezing.
- B. IPP are to follow [FSIS Directive 10,250.1](#) chapter VI sections I (packaging the sample) and II (shipping the sample).
- C. IPP are to ship chicken rinsate samples from the rehang and post-chill locations together in the M20 box labelled with, "HC\_CH\_CAR01 / EX\_CHCAR\_RH1" shipper labels, that arrived with your supplies. See [Attachment 1](#) for more detail.
- D. IPP are to generate one PHIS form and one FSIS Laboratory Sample Container Seal for each rehang and post-chill sample.
1. For each sample, IPP are to affix a single sample identification label (Form 7355-2B) to the zipper lock bag containing the sample and submission form; and
  2. For the shipping container containing the rehang and post-chill samples, IPP are to affix a single laboratory sample container seal (Form 7355-2A) to the shipping container.
  3. The post-chill sample will include two specimen jars each with a sample identification label, packed in a single zipper lock bag affixed with a single laboratory sample container seal.
- E. IPP are to follow the procedures for sampling young chicken ceca described in [FSIS Directive 10,100.1](#) Sections X. and XI. IPP are not to add cecal samples to the shipping container that contains the rehang and post-chill samples.

## VII. QUESTIONS




Refer questions regarding this notice to your supervisor or as needed or to the Office of Policy and Program Development through [askFSIS](#) or by telephone at 1-800-233-3935. When submitting a question, complete the [web form](#) and select Sampling as the Inquiry Type.

**NOTE:** Refer to [FSIS Directive 5620.1](#), *Using askFSIS*, for additional information on submitting questions







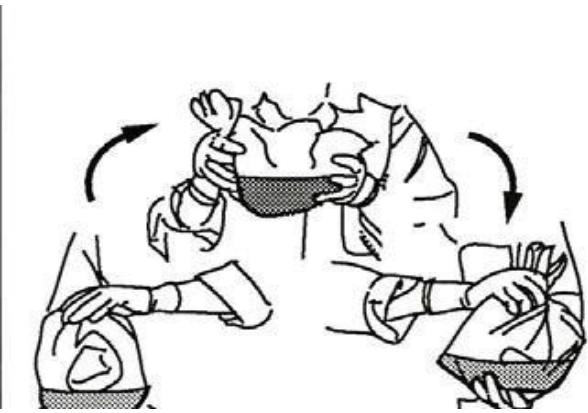


Assistant Administrator  
Office of Policy, Program, and Employee Development

## Attachment 1 Rehang and post-chill sampling instructions

1.	<p><b>Prepare for sampling.</b></p> <ul style="list-style-type: none"><li>&gt; Notify the establishment in advance of sampling.</li><li>&gt; Confirm you have all necessary supplies.</li><li>&gt; Verify that the sampling broth is not expired.</li><li>&gt; Label the sampling container.</li><li>&gt; Chill the sampling broth upon arrival.</li><li>&gt; Freeze the gel packs.</li><li>&gt; Obtain the correct PHIS Sample Analysis Request Form.</li><li>&gt; Sanitize the staging area.</li><li>&gt; Wash and dry your hands.</li></ul>	
2.	<p><b>Randomly select a carcass</b> from the rehang or post-chill area.</p>	
3.	<p><b>Put on gloves.</b></p>	
4.	<p><b>Bag and rinse the carcass:</b></p> <ul style="list-style-type: none"><li>&gt; Holding the carcass by the legs, place it in the bag.</li><li>&gt; Use the loose neck skin to cushion the sharp ends of the neck bones so they don't puncture the bag.</li><li>&gt; Place the bag with the carcass on the sanitized staging area.</li><li>&gt; For rehang carcasses with head and feet, secure the beak and feet to prevent them from puncturing the bag, but not so tightly that the rinsate can't coat all surfaces of the carcass.</li><li>&gt; Gently invert the sampling broth container three (3) times</li></ul>	



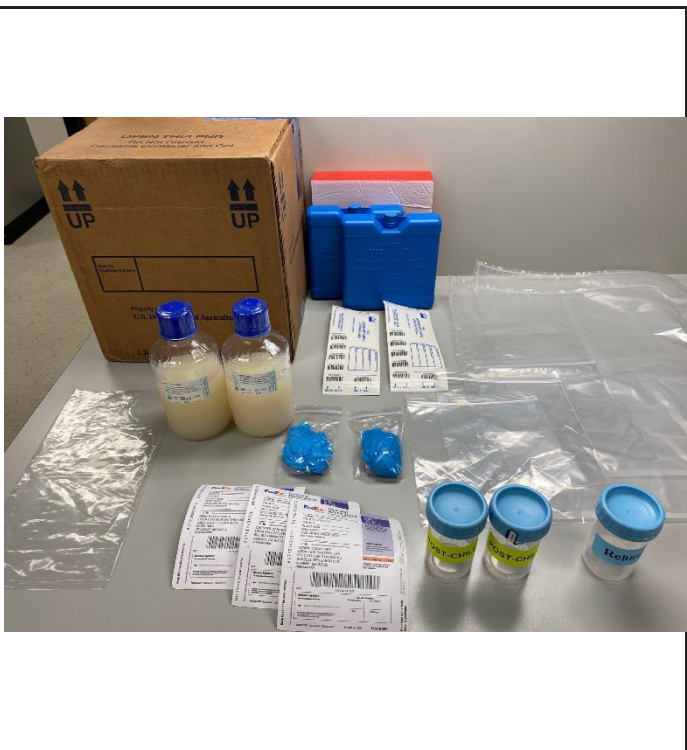
<p>5. <b>Pour the chilled sampling broth into the bag or carcass cavity.</b></p>		
<p>6. &gt; Close the bag. &gt; Expel excess air from the bag. &gt; Twist and fold the top of the bag closed. &gt; Support the carcass in the bag with one hand on the bottom of the bag and the other hand on the top.</p>		
<p>7. <b>Rinse the carcass</b> in the sampling broth:</p> <p>Keeping a secure hold, mix the broth through the carcass cavity and outside of the carcass for one minute.</p>		

<p>(cont'd)</p> <ul style="list-style-type: none"> <li>&gt; As you invert the bagged carcass, let the rinsate trickle down the full length of the carcass before you invert the bag.</li> <li>&gt; Let nothing spill or leak from the bag.</li> </ul>	
<p>8. <b>Pour sampling fluid into the specimen jar:</b></p> <ul style="list-style-type: none"> <li>&gt; After the entire carcass is rinsed, unfold and open the bag.</li> <li>&gt; Grasp the bag on one edge, about halfway up the side seam. With your other hand, support the carcass on the opposite side of the bag so the carcass doesn't fall out when you tilt the bag to pour the fluid.</li> <li>&gt; Angle the bag so the sampling broth can pour out slowly along one edge of the bag.</li> <li>&gt; Pour approximately 100 mL to 120 mL of the rinsate into the sterile specimen jar.</li> <li>&gt; For the post-chill rinsate, pour into two specimen jars. For the rehang rinsate, pour into a single specimen jar.</li> </ul> <p><b><u>Important:</u> Prevent anything from touching the inside of the bag, the rinsate, and the jar and its lid.</b></p> <ul style="list-style-type: none"> <li>&gt; Properly close and securely cap the specimen jar.</li> </ul>	
<p>9.</p> <ul style="list-style-type: none"> <li>&gt; Place the capped jar(s) in a zipper lock bag.</li> <li>&gt; Expel excess air and seal the bag.</li> <li>&gt; Immediately place the rehang sample in an ice bath if available. Refrigerate samples within 5 minutes and keep chilled until shipped.</li> </ul>	



10. **Prepare the sample for shipping:**

- > Complete the sample form.
- > Place the specimen jar(s) and completed sample form in its plastic sleeve into a zipper lock bag.
- > Expel the air from the zipper lock bag and seal it.
- > Follow the instructions in [FSIS Directive 7355.1](#), *Use of Sample Seals for Laboratory Samples and Other Application*, to maintain the sample's security and identification.
- > Complete the mailing label and apply it to the shipping container.



11. **Place items into the container in this order for shipping to an FSIS laboratory:**

1. Absorbent pad
2. Gel coolant pack
3. Cardboard separator
4. Zipper lock bags containing 3 specimen jars, securely closed
5. Zipper lock bag containing the completed sample forms in plastic sleeves
6. Cardboard Separator
7. Gel Coolant Pack
8. Foam plug



**Attachment 2.** Rehang sample questionnaire

**Q.LS.35252 (YesNo) Was the flock representing this sample tested before slaughter?**

- Yes - If selected, answer the following question(s): Q.LS.35253
- No

**Q.LS.35253 The flock was tested for (select all that apply)**

- Aerobic Plate Count (APC)
- Enterobacteriaceae (EB)
- Generic E. coli
- *Salmonella*
- Campylobacter
- Residues (including antimicrobial)
- Other (please specify)

**Q.LS.35254 (Single Choice) Does the HACCP system (HACCP plan, prerequisite, or other programs) incorporate one or more pre-harvest controls?**

- No
- Yes - If selected, answer the following question(s): Q.LS.35255

**Q.LS.35255 Select all pre-harvest control(s) the flock met.**

- Flock Management (Biosecurity, litter reuse management, free range pasture rotation)
- Feed withdrawal
- Competitive exclusion and probiotics (direct-fed microbials)
- Prebiotics
- Organic acids
- Flock vaccination
- National Poultry Improvement Plan (NPIP) certification
- Other (please specify)

**Q.LS.35263 (Single Choice) Does the HACCP system (HACCP plan, prerequisite, or other programs) include one or more interventions after slaughter and before this sample was collected?**

- No
- Yes - If selected, answer the following question(s): Q.LS.35264,Q.LS.35265

**Q.LS.35264 The HACCP system incorporates interventions at the following locations (select all that apply):**

- Receiving through Stunning steps
- Scalding step(s)
- Picking step(s)
- Re-hang/Evisceration transfer points
- Other (please specify)

**Q.LS.35265 Select the last antimicrobial agent in the HACCP system (HACCP plan, prerequisite, or other program) before this sample is collected. If the plant uses more than one intervention, select the last one before the sample location**

- DBDMH (1,3-dibromo-5,5-dimethylhydantoin) (i.e. AVIBROM, etc.)
- Hypobromous acid
- Acidified sodium chlorite (i.e. ECOLAB SANOVA, etc.)
- Calcium hypochlorite
- Chlorine (i.e. ACCUTAB Chlorination, etc.)
- Chlorine gas
- Chlorine dioxide (i.e. Ashland PATHGUARD, etc.)
- Hypochlorous acid (electrolytically generated) (i.e. ChloroSan, etc.)
- Sodium hypochlorite
- Lactic acid
- Citric acid
- Acetic acid
- Citric and Hydrochlorous acids (pH 1-2) (aqueous solution) (i.e. SYNTRX 3200, Precure/CitriLow, etc.)
- Blend of Citric acid, Phosphoric acid, and Hydrochloric acid (i.e. Fresh FX C-12, FreshFX L-12, etc.)

- Peroxyacetic acid (PAA) mixtures (i.e. ECOLAB Inspexx 100, ECOLAB Inspexx 150, FMC SPECTRUM,
- FCN323, Perasan MP-2, MICROTOX SP, SteriFX PROTECTFX, etc.)
- Cetylpyridinium chloride (i.e. CECURE, etc.)
- Trisodium phosphate
- Sodium Metasilicate (i.e. AVGuard XP, etc.)
- Other (please specify)

**Q.LS.35259 (Single Choice) Does the HACCP system (HACCP plan, prerequisite, or other programs) include intervention(s) after this sampling location?**

- No
- Yes - If selected, answer the following question(s): Q.LS.35261

**Q.LS.35261 The following antimicrobial interventions are included (select all that apply)**

- DBDMH (1,3-dibromo-5,5-dimethylhydantoin) (i.e. AVIBROM, etc.)
- Hypobromous acid
- Acidified sodium chlorite (i.e. ECOLAB SANOVA, etc.)
- Calcium hypochlorite
- Chlorine (i.e. ACCUTAB Chlorination, etc.)
- Chlorine gas
- Chlorine dioxide (i.e. Ashland PATHGUARD, etc.)
- Hypochlorous acid (electrolytically generated) (i.e. ChloroSan, etc.)
- Sodium hypochlorite
- Lactic acid
- Citric acid
- Acetic acid
- Citric and Hydrochlorous acids (pH 1-2) (aqueous solution) (i.e. SYNTRX 3200, Precure/Citrilow, etc.)
- Blend of Citric acid, Phosphoric acid, and Hydrochloric acid (i.e. Fresh FX C-12, FreshFX L-12, etc.)
- Peroxyacetic acid (PAA) mixtures (i.e. ECOLAB Inspexx 100, ECOLAB Inspexx 150, FMC SPECTRUM,
- FCN323, Perasan MP-2, MICROTOX SP, SteriFX PROTECTFX, etc.)
- Cetylpyridinium chloride (i.e. CECURE, etc.)
- Trisodium phosphate
- Sodium Metasilicate (i.e. AVGuard XP, etc.)
- Other (please specify)

**Q.LS.35266 (YesNo) Will carcasses from this specific flock/lot sampled be shipped from the slaughtering establishment as raw products?**

- No
- Yes - If selected, answer the following question(s): Q.LS.35267

**Q.LS.35267 The following raw products from this flock/lot will be shipped from this establishment (select all that apply)**

- Whole Carcasses
- Halves and Quarters
- Legs, Breast, Wings
- Raw Intact Trim

- Raw comminuted
- Mechanically separated
- Frames