



CONTRACTOR ANALYSIS OF FAT CONTENT

August 2001



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Contractor Analysis of Fat Content - Poultry Programs
August 2001

This instruction establishes procedures to permit the use of contractor results to determine compliance with fat content requirements on selected poultry items for use in United States Department of Agriculture Purchase Programs. Contractors may participate in this program or continue to use USDA, Agricultural Marketing Service (AMS), Science and Technology (ST), laboratories for fat content analysis.

I. GENERAL

The Contractor Analysis of Fat Content (CAFC) procedures have been developed to expedite fat testing and shipment of federally purchased meat and poultry commodities. The CAFC Program will be available for selected products only. Poultry Programs commodity specifications will specify which purchase programs are included in the program.

Samples of product will be taken by a USDA grader and provided to the contractor and to a USDA, AMS, SD laboratory. Fat results from the ST laboratory and from the contractor will be provided to the USDA grader. The USDA grader will use the data to determine the appropriate sampling procedures under one of the following.

- Phase I - ST laboratory results are used to determine compliance with specified fat content requirements. Samples will be submitted to both the ST laboratory and the contractor.
- Phases II and III - The contractor results are used to determine compliance with specified fat content requirements. Samples from consecutive lots will be provided to the contractor. Samples on a skip lot basis will be submitted to the ST laboratory to monitor contractor's test results.

II. START-UP REQUEST

Contractors interested in participating in the CAFC Program must notify the USDA Federal-State Supervisor in writing. A separate application for each Announcement must be submitted for each production establishment desiring to participate in the CAFC Program. Request must include the names and signatures of those persons authorized to sign official contractor results.

The CAFC Program is totally voluntary and a contractor participating in the CAFC Program may withdraw from the program at any time by notifying the USDA grader in writing.

If production stops for more than 120 consecutive calendar days, the contractor must provide another written request to the USDA grader to participate in the CAFC Program. Sampling will begin under Phase I procedures.

III. LABORATORY COSTS

All costs for sample preparation, shipping, and laboratory analyses will be paid by the contractor.

IV. SAMPLING FOR LABORATORY ANALYSES

A. Number of Samples

After packaging, the USDA grader will draw random samples for fat content analyses. The number of samples to be drawn from each lot (processing shift) will be as follows:

1. Ground Turkey Products

<u>Number of Shipping Containers in Lot</u>	<u>Number of Packages/Containers</u>
250 or less	8
251 - 500	12
501 - 1,000	16
1,001 - 2,000	24
Over 2,000	36

- If the contractor uses sublots, as provided for in the specification, a minimum of four packages will be drawn from each subplot. The total number of packages drawn from each subplot must be a multiple of four. The total number of packages drawn from all sublots in a lot must equal or exceed those specified for the appropriate size lot described in the paragraph above.

2. Canned Boned Poultry

<u>Size of Cans in Lot</u>	<u>Number of Cans</u>
29 oz (822-g)	10
50 oz (1.42-kg)	6

- If the contractor uses sublots, as provided for in the specification, the total number of cans drawn from all sublots in a lot must be equal to or greater than those specified for a lot.

USDA may select additional commodity for laboratory analyses or may select additional commodity for further examination.

B. Sample Sizes

- Ground Turkey – The USDA grader will randomly remove an 8-ounce (226.8 g) sample and separate into four approximately equal sample portions.
- Turkey Burgers - The USDA grader will draw three turkey burgers at random from each package of chilled or frozen turkey burgers.

- Turkey Sausage in Casings – The USDA grader will randomly remove a 2-inch (5.08 cm) cross-section from each filled casing selected.
- Canned Boned Poultry – The USDA grader will randomly select one 29-ounce or 50-ounce (822-g or 1.42-kg) can of commodity or its equivalent.

Each ground turkey product sample must be placed in a separate moisture-proof sample bag and consecutively numbered. Samples will be kept under the USDA grader's control until all samples are drawn and prepared for the lot or subplot. Once all samples for a lot or subplot are drawn and prepared, they must be submitted for analysis to determine the appropriate phase under this program.

Each canned boned poultry sample must be drawn after thermal processing.

Samples which are not used by USDA will be returned to the contractor and reworked according to the Rework/Reprocessing section in the specification.

C. Compositing Samples

1. Ground Turkey Products

Contractors are responsible for preparing composites for laboratory testing under the direct supervision of a USDA grader. Samples will be composited by the contractor as follows:

- The contractor will combine the consecutively numbered samples drawn from a lot or a subplot into four composite samples.

For example, if the production lot for ground turkey requires eight samples, samples (cross-sections) 1-2, 3-4, 5-6, and 7-8 will be mixed separately to produce four composites.

- Each composite sample will be mixed by the contractor into a homogenous mixture.

2. Canned Boned Poultry

The sample cans submitted for a lot or subplot will be combined by the USDA laboratory/contractor's laboratory into a composite sample and analyzed in duplicate.

D. Distribution of Composite Samples

1. Ground Turkey Products

Under the direct supervision of a USDA grader, the contractor will separate each homogenous composite into four approximately equal portions and place each in a separate moisture-proof sample bag. Each portion will be used as follows:

- One original sample for fat analysis at the ST laboratory.
- One vendor sample for fat analysis by the contractor.
- Two reserve samples.

The reserve samples will be retained in a freezer under the control of the USDA grader. Reserve samples will be used for laboratory analyses when (1) the original or vendor samples are lost; (2) the original or vendor samples are received in a condition that does not permit accurate analyses; or (3) requested by the Grading Branch, Poultry Programs, Washington, D.C.

- The contractor will retain the vendor sample, and all other samples will be provided to the USDA grader for appropriate distribution.

2. Canned Boned Poultry

Each sample will be used as follows:

- One original sample (IV.A.2.) for fat analysis at the SD laboratory.
- One vendor sample (IV.A.2.) for fat analysis by the contractor.
- Two reserve samples.

The reserve samples will be retained under the control of the USDA grader. Reserve samples will be used for laboratory analyses when (1) the original or vendor samples are lost; (2) the original or vendor samples are received in a condition that does not permit accurate analyses; or (3) requested by the Grading Branch, Poultry Programs, Washington, D.C.

- The contractor will retain the vendor sample, and all other samples will be retained by the USDA grader for appropriate distribution.

V. LABORATORY ANALYSES

A. Timing

The contractor must present the ground turkey product/thermal processed canned boned poultry to USDA so the product may be sampled, the samples sent to the ST laboratory and the contractor, and the laboratory analyses performed in time for the laboratory results to be available for the contractor to meet the shipment or delivery requirements of the contract.

B. USDA- ST Methods for Chemical Analyses

The USDA, ST laboratory will perform the chemical analyses according to the following methods found in the "Official Methods of Analysis," of the Association of Official Analytical Chemists International, Seventeenth Edition, 2000, Chapter 39: "Meat and Meat Products," Subchapter 1, Sections 39.1.05, 39.1.06, and 39.1.07.

<u>Finished Product</u>	<u>Test Method</u>
Fat	Petroleum ether method or Rapid microwave-solvent extraction method

C. Results to be Reported

- Each composite will be analyzed in duplicate for fat.
- Test results will be reported for each duplicate to the nearest 100th of a percent and the average for each composite to the nearest 10th of a percent.
- In addition, the laboratories will average the results of the composite averages and report the average for the lot or subplot to the nearest 10th of a percent. If the contractors sample by sublots, the grader will use the average of all sublots in a lot to determine the average for the lot.
- Test results from the contractor must be submitted in writing, dated, and bear the signature of the official specified on the original request. The following information must be included with all test results: contractor name, plant number, commodity type, production date, lot or subplot number, and number of cases in the lot or subplot. Contractors may use the attached form to submit results to the USDA grader.

VI. PHASE I

During Phase I, the USDA grader will use the ST laboratory results to determine product compliance.

A. Procedures

The following CAFC procedures shall be implemented after the USDA grader receives the contractor's request to participate in the CAFC Program.

- The USDA grader will draw and supervise preparation of samples according to Section IV, Sampling for Laboratory Analyses.
- The contractor will retain the vendor sample, and all other samples will be provided to the USDA grader for appropriate distribution.

- The USDA grader will submit original samples to the ST laboratory.
- The ST laboratory will submit fat analysis results to the USDA grader.
- The contractor will submit the contractor results to the USDA grader.
- ST laboratory results will not be given to the contractor until after the USDA grader receives the contractor results.
- The results from both the contractor and the ST laboratory will be utilized and evaluated by the USDA grader to determine eligibility.
- Test results from the ST laboratory will be used to determine compliance with specified fat content requirements.

Results must be reported according to Section V.C. If any composite average or lot or subplot average results (from either the contractor or the ST laboratory) do not meet the fat content requirements or are within the discount range, samples will continue to be taken and analyzed until laboratory results from five consecutive production lots (amount of packaged commodity produced during a processing shift) satisfy these requirements. Once laboratory results from the five consecutive lots have been evaluated and meet fat content requirements (with no discount), samples will be taken according to Phase II procedures.

B. Delayed Laboratory Results

If ST laboratory results are used to determine compliance with fat content requirements (during Phase I) and are received by the contractor later than 7 calendar days, excluding Sundays and Federal holidays, from the receipt of the samples by the USDA laboratory, the number of days delay will be added to the shipment or delivery period before liquidated damages for late shipment or delivery will be assessed.

VII. PHASE II

During Phase II, the contractor's results will be used to determine product compliance. The USDA grader will use the ST laboratory results on selected lots or sublots to monitor the contractor's results.

After the contractor qualifies for Phase II, samples will be selected and utilized as follows:

- The USDA grader will draw and supervise preparation of samples according to Section IV., Sampling for Laboratory Analyses.

- The contractor will retain the vendor sample.
- The USDA grader will maintain control of the original and reserves. All remaining samples (originals and reserves) will be kept under the USDA grader's control until results of the fat analysis of the lot or subplot have been determined.
- The USDA grader will utilize the skip lot system of sampling (described below) to select laboratory monitoring samples.

One of Five (1 of 5) Skip Lot Sampling - The USDA grader will submit to the SD laboratory, samples from one lot or subplot randomly selected from one of every five production lots or sublots produced after completion of Phase I.

- The contractor will submit results to the USDA grader.
- The ST laboratory will submit fat analysis results to the USDA grader.
- If the contractor requests ST laboratory results, the USDA grader will provide them after receipt of contractor results.
- The results from both the contractor and the ST laboratory will be utilized and evaluated by the USDA grader to determine eligibility.

Results must be reported according to Section V.C. If any composite average or lot or subplot average results (from either the contractor or the ST laboratory) exceed maximum fat content, samples will be taken according to Phase I procedures. If ST laboratory results indicate acceptable product within the discount range, while the contractor results indicate acceptable product without discount, product will be accepted based on contractor results. However, if this occurs three times, sampling will be taken according to Phase I procedures. If any of the lot or subplot average results (from either the contractor or the ST laboratory) are in the discount range, samples must continue to be taken according to Phase II procedures until results from 10 consecutive lots satisfy these requirements. Then, samples will be taken according to Phase III procedures.

VIII. PHASE III

- The USDA grader will draw and supervise preparation of samples according to Section V., Sampling for Laboratory Analyses
- The contractor will retain the vendor sample.
- The USDA grader will maintain control of the original and reserves. All remaining samples (originals and reserves) will be kept under the USDA grader's control until results of the fat analysis of the lot or subplot have been determined.
- The USDA grader will utilize the skip lot system of sampling (described below) to select laboratory monitoring samples.

1 of 10 Skip Lot Sampling - The USDA grader will submit to the ST laboratory, samples from 1 lot or subplot randomly selected from 1 of every 10 production lots or sublots produced after completion of Phase II.

- The contractor will submit results to the USDA grader.
- The ST laboratory will submit fat analysis results to the USDA grader.
- If the contractor requests ST laboratory results, the USDA grader will provide them after receipt of contractor results.
- The results from the contractor and the ST laboratory will be utilized and evaluated by the USDA grader to determine eligibility.

Results must be reported according to Section V.C. If any composite average or lot or subplot average results (from either the contractor or the ST laboratory) exceed the maximum fat content, samples will be taken according to Phase I procedures. If any of the lot or subplot average results (from either the contractor or the ST laboratory) are in the discount range, samples will be taken according to Phase II procedures.

IV. CERTIFICATE COMPLETION

If the contractor is operating in Phases II or III, and the contractor results are acceptable or in a penalty range, the USDA grader will enter the contractors analytical results on the USDA Poultry Products Grading Certificate (PY-210) issued at time of shipment for each delivery unit. For contractors in Phase I, the ST laboratory results will be entered on the USDA Poultry Products Grading Certificate.

X. APPEALS

Appeals may be authorized only when the ST laboratory results are used to determine compliance with fat content requirements--during Phase I. These appeals may be made according to the Appeal of Laboratory Analyses section of the specification.

Howard M. Magwire
Acting Deputy Administrator

Attachment

FAT ANALYSIS CONTRACTOR RESULTS

Lot/Sublot Number	Production Date	No. of Cases per Lot/Sublot	Marked Weight of Lot/Sublot

Results:

	Duplicate A ¹	Duplicate B ¹	Composite Average ²
Composite 1	_____	_____	_____
Composite 2	_____	_____	_____
Composite 3	_____	_____	_____
Composite 4	_____	_____	_____

Average for Lot/Sublot²

1/ Test results for each duplicate reported to the nearest 100th of a percent

2/ Test results for the average for each composite and for lot/sublot reported to the nearest 10th of a percent.

Name (please print)

Date

Signature

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