

M04

Meat Microbiology 2 Program

E.coli O157:H7

6-03-19 (Shipment Date)

7-18-19 (Report Date)



Proficiency Testing Provider
Certificate 1782.01

AOAC INTERNATIONAL
Arlene Fox, Senior Director
2275 Research Blvd. ste 300
Rockville, MD 20850
+1-301-924-7077 LPTP@AOAC.org

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Report Authorization

This report has been authorized by Arlene Fox, Senior Director of the AOAC laboratory Proficiency Testing Program.

A handwritten signature in black ink that reads "Arlene Fox". The signature is written in a cursive, flowing style.

**REPORT TO PARTICIPANTS IN
THE AOAC® LABORATORY PROFICIENCY TESTING PROGRAM**

**MEAT MICROBIOLOGY 2 PROGRAM
E. coli O157:H7**

1.0 Introduction

Test materials for the Meat Microbiology 2 Program (*E. coli* O157:H7) were shipped to participants on June 3, 2019. Each laboratory was given a site identification number in order to maintain confidentiality. Participants were encouraged to analyze the samples on June 4, 2019 and urged to initiate analyses by no later than Monday, June 10, 2019. The instruction packet on how to use the confidential online data submission system was posted online. The participants were to submit an electronic response online to verify the condition of the test materials upon receipt and confirm the safe handling of the test materials containing *E. coli* O157:H7 by participants. Participants were also instructed to report results electronically. Participants were instructed to analyze the test materials according to procedures routinely used in their laboratories. Instructions were provided for all dilutions. The results were recorded and were to be submitted to AOAC by June 18, 2019.

2.0 Preparation of Test Materials

Each set of test materials included ten samples, each containing approximately 25 grams of frozen ground meat. All of the samples were for qualitative testing. The matrix was screened prior to spiking. Each sample was individually inoculated. Some samples were inoculated with high levels (10 - 100 cells/gram) of organisms and some samples were inoculated with low levels of organisms (1 -10 cells/gram). Four controls were uninoculated. Ten samples were analyzed to verify the presence or absence of *E. coli* O157:H7 in the qualitative samples. Each sample was individually inoculated. Three samples were analyzed to verify the presence or absence of *E. coli* O157:H7. The inoculation scheme is in Appendix D.

Samples were prepared by the following laboratory:

Silliker Solution Center
3600 Eagles Nest Drive, Bldg. A
Crete, IL 60417

3.0 Analyses Requested

Samples 1-10	<i>E. coli</i> O157:H7	Indicate Positive/Negative
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The participants had the option of not testing for H7 if the laboratory does not routinely do that test as part of the analysis. Information on the method used for each analyses was requested.

4.0 Results

Confidentiality of results will be maintained by issuing site identification codes to the participants. Results in reports will only be identified by the site identification code. Results of participants were compared to the expected results. The results table specifies whether the participant tested for serotype. There was inadequate information about the methodology used to group the results according to method for this shipment.

If a participant would like to appeal against the assessment of their performance in this proficiency testing scheme please contact staff at LPTP@AOAC.org

Individual laboratory results are in Appendix A

Results for (M04) Meat Microbiology 2*E. coli* O157:H7 species

Shipment on June 3, 2019

Site identification: xxxxx

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Sample Number	<i>E. coli</i> O157:H7 Expected Results	Result for Site ID xxxxx Presence or Absence of <i>E. coli</i> O157:H7 species	Comments from Site ID xxxxx
E1	<i>E. coli</i> O157:H7 Present	<i>E. coli</i> O157:H7 Present	
E2	<i>E. coli</i> O157:H7 Present	<i>E. coli</i> O157:H7 Present	
E3	<i>E. coli</i> O157:H7 Present	<i>E. coli</i> O157:H7 Present	
E4	Uninoculated N/A Absent	<i>E. coli</i> O157:H7 Absent	
E5	Uninoculated N/A Absent	<i>E. coli</i> O157:H7 Absent	
E6	<i>E. coli</i> O157:H7 Present	<i>E. coli</i> O157:H7 Present	
E7	Uninoculated N/A Absent	<i>E. coli</i> O157:H7 Absent	
E8	<i>E. coli</i> O157:H7 Present	<i>E. coli</i> O157:H7 Present	
E9	<i>E. coli</i> O157:H7 Present	<i>E. coli</i> O157:H7 Present	
E10	Uninoculated N/A Absent	<i>E. coli</i> O157:H7 Absent	



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AOAC® Laboratory Proficiency Testing Program Meat Microbiology 2 (M04) Instructions

Enclosed are 10 samples, each containing 25 grams of ground meat. Shelf-life studies performed on samples stored frozen demonstrated that the samples remained stable for a period of at least 7 days if stored frozen.

Please make every effort to analyze samples as soon as possible. Results are due within 2 weeks of the shipment date.

Store samples frozen (-20 °C) until analysis date. Thaw when ready to analyze by placing the samples into a plastic bag in cold water for 1 -2 hours. Do **not** refreeze the samples.

Analyze samples numbered 1 through 10 for the following:

***E. coli* O157:H7** - Specify the method. Report as POSITIVE or NEGATIVE. Use the comment section to provide additional information.

Appendix C
Homogeneity Results - Qualitative Meat
Microbiology - M04
Ship Date June 3, 2019

Results of Homogeneity Testing - *E. coli* O157:H7 25g Sample

		Results		Serotype	
	Inoculation Scheme	Replicate 1	Replicate 2		
E-6	<i>E. coli</i> O157:H7 - LOW	positive	positive	O157:H7	Passed
E-7	Uninoculated	negative	negative	N/A	Passed
E-8	<i>E. coli</i> O157:H7 - HIGH	positive	positive	O157:H7	Passed

Appendix D
Inoculation Scheme
Meat Microbiology - M04
Ship Date June 3, 2019

E-1	E. coli O157:H7 - LOW
E-2	E. coli O157:H7 - HIGH
E-3	E. coli O157:H7 - HIGH
E-4	Uninoculated
E-5	Uninoculated
E-6	<i>E. coli</i> O157:H7 - LOW
E-7	Uninoculated
E-8	E. coli O157:H7 - HIGH
E-9	E. coli O157:H7 - LOW
E-10	Uninoculated