JANUARY 1st, 2020

BEEF HACCP LETTER OF GUARANTEE

Dear Valued Customer,

Edible beef products from the plants listed at the end of this letter meet all USDA requirements for the production, sale and distribution of meat products.

REGULATORY COMPLIANCE

Tyson Fresh Meats plants listed below are federal establishments and operate under the regulatory requirements set forth in Title 9 of the Code of Federal Regulations.

- Carcasses *E. coli* Biotype I Testing (9CFR§310.25)
- HACCP & SSOP (9CFR§416 and 417)
- Salmonella Performance Standard as conducted by USDA-FSIS (9CFR§310.25)
- Documented Annual Reassessment (9CFR§417.4 (a) (3)) effective January of each year. This annual reassessment includes review *E. coli* O157:H7 [EC7] and non-O157 STEC as defined by FSIS Federal Register Notice [Docket No. FSIS -2010-0023].
- Ante-mortem inspection of all cattle intended for slaughter (9 CFR 309).
- Humane handling and slaughter of livestock (9 CFR 313).

HACCP CRITICAL CONTROL POINT (CCP)

Critical Control Points are in place and validated for the control of enteric pathogens (specifically EC7).

- Validated Final Carcass and Offal intended for raw ground use intervention.
- Chilling
- Zero Tolerance for feces, ingesta, and milk (FSIS Directive 6420.2)
- Disposition for EC7 positive product.

INTERVENTIONS

Tyson Fresh Meats beef plants employs multiple hurdle interventions to carcasses, primals, and trimmings after the final slaughter CCP intervention for the purpose of reducing microbial contamination that may be present on the surface of the carcass or cuts.

Treatment of carcasses with these validated interventions can result in surface discoloration of exposed lean tissues. Briskets, inside rounds and tenderloins are among the cuts that are most often exposed to these treatments and affected. Occasionally, trimming of the carcass surfaces may result in other discolored subprimal surfaces as the intervention contacts the expose protein and in turn, results in denaturing of the protein tissues. In addition, some offal products such as kidneys will also be affected by the carcass interventions, affecting the typical color of the product.

Tyson Fresh Meats employs a validated multiple hurdle process within the beef slaughter systems to address Enteric Pathogens, specifically *E. coli* O157:H7 and other non-O157 Shiga Toxin producing E. coli [STEC]. These hurdles include:

- Hide-On Treatment – Animal hides may be treated March through October through a pre-harvest intervention and/ or a hide-on wash immediately after exsanguination.
- Steam Vacuums and/ or Trimming – Strategically placed to address pattern opening areas.
- Pre-Evisceration Cabinet System (PECS) – Eligible carcasses are surface treated with an approved processing aid for purpose of reducing microbial contamination.

- Carcass Interventions – After FSIS final inspection, carcasses are treated with one or more pathogen reduction interventions which are demonstrated effective in reducing microbial contamination, which is considered as a Critical Control Point [CCP] of the slaughter system.
- Carcass Spray Chill- Following carcass interventions, carcasses are treated with a processing aid during the spray chill process.
- Offal Intervention – Offal products intended for raw ground beef are treated with one or more processing aids which are demonstrated effective in reducing surface microbial contamination, which is considered as a Critical Control Point [CCP] of the slaughter system.
- Primal & Trim Treatment – Primals and trimmings are treated with an approved processing aid during the carcass disassembly process and prior to packaging.

Under USDA- FSIS rules, 'processing aids' are considered Generally Recognized As Safe [GRAS] by the FDA, and do not have to be included in the products ingredient statement on the label. Processing Aids fall under approvals listed in FSIS Notice 7120.1 (http://www.fsis.usda.gov/Regulations_&_Policies/7000_Series-Processed_Products/index.asp). Additionally, being listed in FSIS Notice 7120.1 means that there is efficacy data submitted to USDA that supports its' use for pathogen reduction when used as described in the approval.

STEC TESTING & ANALYSIS (FOR ALL PRODUCTS INTENDED FOR RAW GROUND USE)

- Sampling: Tyson N60 Prerequisite Program requires a minimum of 60 pieces per lot collected per the outlined methods [or equivalent] within the August 2014 FSIS *Compliance Guideline for Establishments Sampling Beef Trimmings for Shiga Toxin-Producing Escherichia coli [STEC] Organisms or Virulence Markers*. Tyson Fresh Meats plants employ N60 surface excision or sampling via the IEH N60 Plus™ sampling device or via the Manual Sampling Device (MSD).
- Analysis: The entire sample is analyzed via PCR or equivalent laboratory method. Laboratory methods are validated to meet USDA criteria (≥ 98% Sensitivity and ≥ 90% Specificity).
- Verification of STEC lab methods are routinely performed at each Tyson Fresh Meats Laboratory in conjunction with the American Proficiency Institute Microbiological Performance Evaluation Program.
- Tyson Fresh Meats Laboratories have been audited and certified per ISO 17025 standards.
- Combo: Tested per customer order with an individualized COA to that specific product.
- Boxed Trim & Offal: All tested trim and offal items are labeled with a product code ending in "T". A labeling information sheet is provided on our website (link at bottom of this letter).
- Ground Beef – All ground beef produced by Tyson Fresh Meats [IBP] is derived from trimmings tested negative for *E. coli* O157:H7 under the Tyson N60 [or equivalent] program. A '*Tested Negative*' statement is printed on the Bill of Lading for each order of ground beef.
- Tyson Fresh Meats utilizes a formal risk assessment program that evaluates specific investigatory findings from the 'on-site' investigation immediately following a High Event Period [HEP].
- STEC Verification Testing is conducted at a monthly frequency April through September with a quarterly frequency October through December. This verification sampling includes analysis for *E. coli* O157:H7, O26, O45, O103, O111, O121 and O145.
- External sources of raw material must meet or exceed Tyson Foods, Inc. supplier requirements for STEC sampling and analysis.

3rd PARTY AUDIT

Tyson Fresh Meats is audited on an annual basis by an independent 3rd Party standard. This audit encompasses food safety, regulatory compliance, STEC best practices and good manufacturing practices. GFSI Certifications provided for all processing / grinding plants (link at bottom of this letter). GFSI certification is achieved after successfully completing the certification audit and completion of 100% of corrective actions identified by the independent auditor.

Non-O157 STEC System

Producing the safest food possible is Tyson's primary goal. Tyson Fresh Meats [TFM] has reviewed our existing food safety systems, assessed our HACCP programs, and along with published scientific research, we conclude that our existing pathogen reduction technologies and beef slaughter process controls for *E. coli* O157 are effective in providing the same control to Other-STEC [Top6] in beef trimmings and non-intact beef intended for raw use.

- Interventions currently in place for the reduction of Enteric Pathogens, including *E. coli* O157:H7, are effective in addressing non-O157 STECs.
- Research conducted by Tyson Fresh Meats demonstrates that *E.coli O157:H7* is an appropriate 'indicator' organism for Other-STEC in beef trimmings, therefore, testing for *E.coli O157* is an effective screening program for the Other-STEC. From the currently available data we thus conclude that "**a SYSTEM in control for E. coli O157:H7 is a SYSTEM in control for Other-STEC**."
- Our robust and comprehensive *E. coli* O157:H7 trim testing program will continue on 100% of our beef trim as this program continues to verify our control of *E. coli* O157:H7. This research data tells us that this is the best approach for monitoring and controlling Other-STEC as well. For beef trimmings this will be reflected in our COA's and LOG's as *"Our robust and comprehensive E. coli O157:H7 trim testing program will continue on 100% of our beef trim as this program continues to verify our control of E. coli O157:H7. This research data is telling us that this is the best approach for monitoring and controlling non-O157 STEC as well. Product was lot tested and found Negative for E. coli O157:H7 and was produced from a System that also controls non-O157 STEC."*

Research data will continue to be assessed and scrutinized to ensure that effect non-O157 controls are in place.

Customer Notification

Tyson Fresh Meats plants have a recall plan on file that includes notification to affected customers of any product that may be adulterated or misbranded.

TYSON FRESH MEATS BEEF PLANTS

EST.	Location
Est. 245E	Amarillo, TX
Est. 245C	Dakota City, NE
Est. 245D	Emporia, KS [further processing]
Est. 245J	Joslin, IL

EST.	Location
Est. 278	Holcomb, KS
Est. 245L	Lexington, NE
Est. 9268	Pasco, WA

Send questions or update requests to TFMInquiries@tyson.com

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Tyson Fresh Meats
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Please visit our website for all letters of guarantee provided:
https://www.tysonfoods.com/sustainability/food/certifications-and-programs

Processing Aids

Under USDA rule, 'processing aids' are considered GRAS by the FDA, and do not have to be included in the products ingredient statement on the label. Processing Aids fall under approvals listed in FSIS Notice 7120.1 (http://www.fsis.usda.gov/Regulations_&_Policies/7000_Series-Processed_Products/index.asp). Additionally, being listed in FSIS Notice 7120.1 means that there is efficacy data submitted to USDA that supports its' use for pathogen reduction when used as described in the approval.

Q2: What is the definition of a processing aid?

Answer: According to the Food and Drug Administration's (FDA) regulations (21 CFR 101.100 (a) (3) (ii)), the definition of a processing aid is:
a. Substances that are added to a food during the processing of such food but are removed in some manner from the food before it is packaged in its finished form.
b. Substances that are added to a food during processing, are converted into constituents normally present in the food, and do not significantly increase the amount of the constituents naturally found in food.
c. Substances that are added to a food for their technical or functional effect in the processing but are present in the finished food at insignificant levels and do not have any technical or functional effect in that food.