International Association for Food Protection WEBINAR

Tech-Enabled Traceability: Get Ready For FSMA 204 With GS1 Standards

Moderator: Norma Crockett, Director, Community Engagement GS1 US

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The Global Language of Business

Tech-Enabled Traceability: Get Ready For FSMA 204 With GS1 Standards

Join Industry Leaders to Discuss What's Needed for Final Rule Compliance

6.15.2023

Norma Crockett, GS1 US
Ryan Peters, Chick-Fil-A
Brando Tijerina, Taco John's
Stacie Sanders, ARCOP (Arby's Supply Chain Cooperative)
Greg Cassens, Dot Foods

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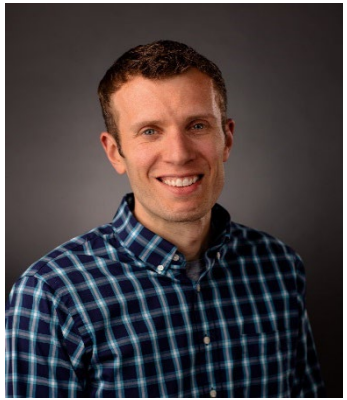
Meet the Speakers

Norma Crockett
Director, Community Engagement
Foodservice



Greg Cassens
Regulatory Counsel

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Meet the Speakers

Ryan Peters
Principal Program Lead,
Supply Chain

Brando Tijerina
Sr. Manager of Food Safety,
QA and Commercialization

Stacie Sanders
Sr. Manager, GS1, Systems Data
Integrity and Re Distribution

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Agenda

- GS1 US- Who We Are
- FSMA 204 Overview
- How GS1 Standards Can Help
- GS1 US Resources
- Speakers Journeys
- Speakers Discussion
- Get Started Checklist

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Who We Are

Speaker: Norma Crockett
GS1 US Director, Community Engagement
Foodservice Track

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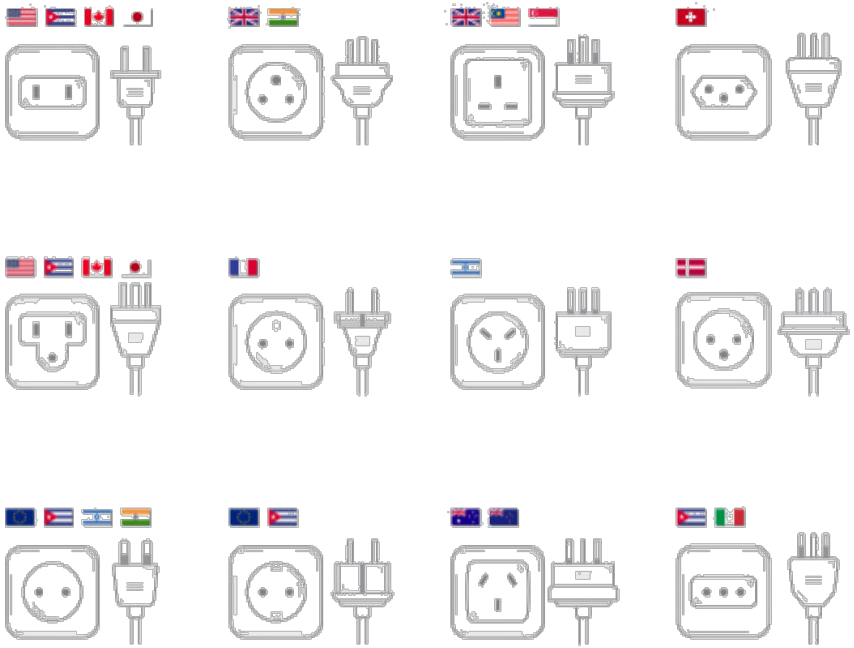
One Common Language



The only way businesses big or small can move forward is to work together. They need to be able to **understand each other** anywhere in the world.

Business requires a common language, and we make that possible.

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More than
6 billion
GS1 barcodes are scanned everyday

GS1 US® serves more than
300,000 businesses
in the United States.

Over
1.5 million
companies around the world use GS1 Standards

GS1 US serves over
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More than
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products are registered by brand owners in the GS1 Global Data Synchronization Network™ (GDSN)

Over
25 million
products are assigned U.P.C.'s in the GS1 US Data Hub Product Tool

GS1 is made up of
110+ member organizations
serving businesses around the world

FSMA 204 Overview

Speaker: Greg Cassens

Regulatory Counsel for Dot Foods

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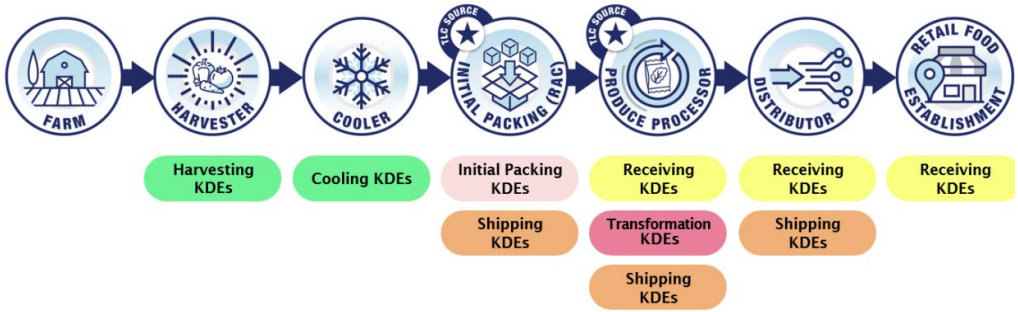
Regulation Overview

- Outlines additional recordkeeping requirements
- Defines foods that are subject to additional traceability requirements (Food Traceability List (FTL)).
- Companies that perform certain supply chain events are required to keep and share traceability records with the FDA within 24 hours of request
- Companies must create and maintain updated records of their general traceability plan.
- Rule effective date: January 2023
- Compliance date: **January 2026**



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Cheeses, other than hard cheeses

Shell Eggs

Nut Butters

Cucumbers (Fresh)

Herbs (Fresh)

Leafy Greens (Fresh)

Leafy Greens (Fresh cut)

Melons (Fresh)

Peppers (Fresh)

Sprouts (Fresh)

Tomatoes (Fresh)

Tropical Tree Fruit (Fresh)

Fruits (Fresh cut)

Vegetables other than Leafy Green (Fresh cut)

Fin fish (Fresh, Frozen, and Smoked)

Ready-to-Eat Deli Salad (Refrigerated)

Molluscan shellfish, bivalves (Fresh & Frozen)

Crustaceans (Fresh & Frozen)

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Share: Critical Tracking Events / Key Data Elements

Critical Tracking Events are activities in the supply chain that must be recorded by the capture of key information about a business step for product movement in the supply chain. Typically, these events involve a product's transformation, shipping, or creation.

Key Data Elements are the attributes to describe/support the critical tracking event; this data answers the What, Where, When, Who and Why of the event.

Link within published rule

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Critical Tracking Events

1. **Harvesting** (Raw agricultural commodities (RACs) not obtained from a fishing vessel)
2. **Cooling** (RACs not obtained from a fishing vessel)
3. **Initial Packing** of RACs (other than a food obtained from a fishing vessel)
4. **First Land-Based Receiver** (food obtained from a fishing vessel)
5. **Shipping** (maintain and provide)
6. **Receiving**
7. **Transformation** FTL food(s) used as ingredient(s) **and** new food produced

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First Land-Based Receiver

Required KDEs

- Traceability lot code you assigned
- Species and/or acceptable market name for unpackaged food, or the product description for packaged food
- Quantity and unit of measure of the food
- Harvest date range and locations for the trip during which the food was caught
- Location description for the first land-based receiver (i.e., traceability lot code source), and (if applicable) traceability lot code source reference
- Date the food was landed
- Reference document type and reference document number

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Receiving

Required KDEs

- Traceability lot code for the food
- Quantity and unit of measure of the food
- Product description for the food
- Location description for the immediate previous source (other than a transporter) for the food
- Location description for where the food was received
- Date you received the food
- Location description for the traceability lot code source or the traceability lot code source reference
- Reference document type and reference document number

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Shipping

Required KDEs

- Traceability lot code for the food
- Quantity and unit of measure of the food
- Product description for the food
- Location description for the immediate subsequent recipient (other than a transporter) of the food
- Location description for the location from which you shipped the food
- Date you shipped the food
- Location description for the traceability lot code source or the traceability lot code source reference
- Reference document type and reference document number (maintain only)

Note: This section does not apply to the shipment of a food that occurs before the food is initially packed (if the food is a raw agricultural commodity not obtained from a fishing vessel)

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Transformation

Required KDEs

FTL food(s) used as ingredient(s)

- Traceability lot code for the food
- Product description for the food to which the traceability lot code applies
- For each traceability lot used, the quantity and unit of measure of the food used from that lot

New food produced

- New traceability lot code for the food
- Location description for where you transformed the food (i.e., the traceability lot code source), and (if applicable) the traceability lot code source reference
- Date transformation was completed
- Product description for the food
- Quantity and unit of measure of the food
- Reference document type and reference document number

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How GS1 Standards Can Help

Speaker: Norma Crockett

GS1 US Director, Community Engagement

Foodservice Track

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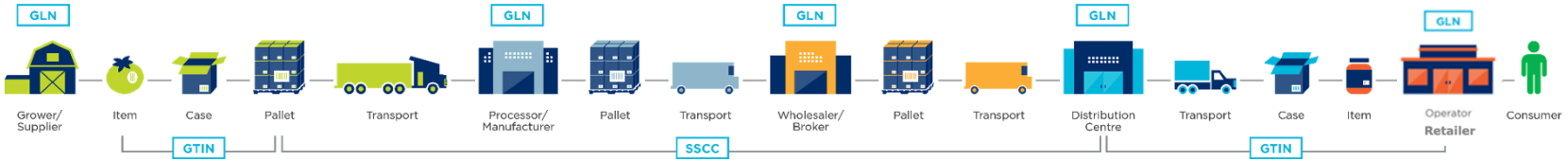
Leverage GS1 Standards for FSMA 204



Identification

- **Product**
  GTIN
- **Pallet**
  SSCC
- **Location**
  GLN

Capture

Data carriers that allow for the addition of lot codes:

- **GS1-128 barcode**
- **2D barcodes**
- **RFID**

Share

- **Product Data Exchange**
  GDSN
- **Location Data Exchange**
  Data Hub Location
- **Event Data Exchange**
  EDI, EPCIS

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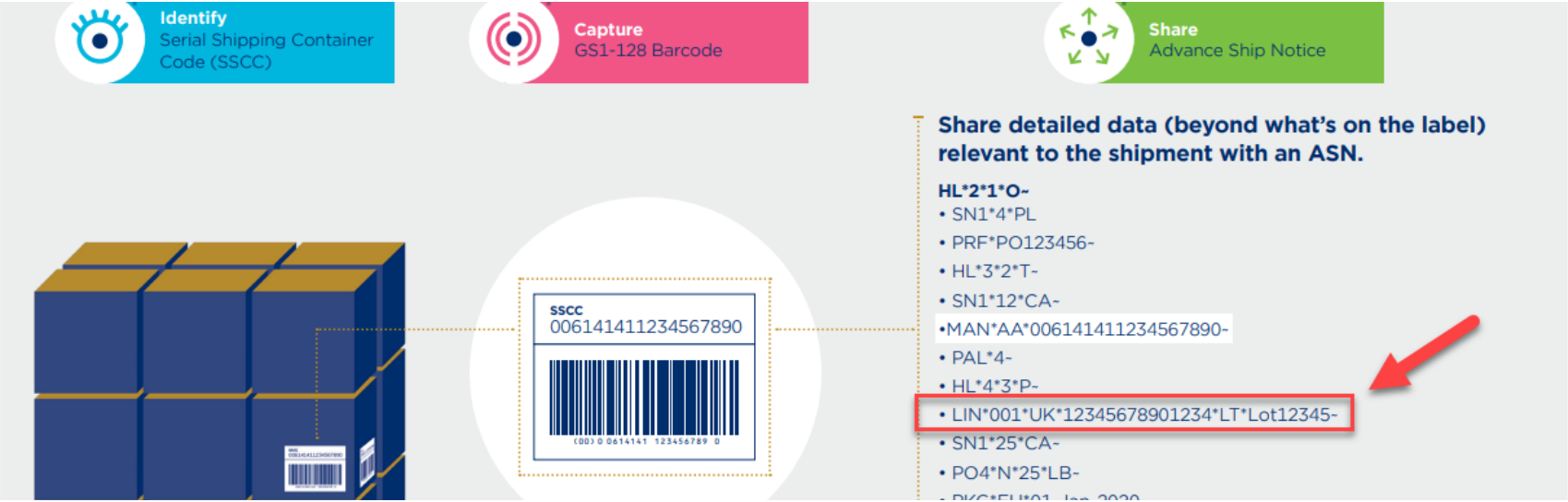
GS1 US Solution: ASNs and SSCCs

GTIN + Date + Lot



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GS1 US Solution: EPCIS 2.0

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GS1 US Resources

Speaker: Norma Crockett
GS1 US Director, Community Engagement
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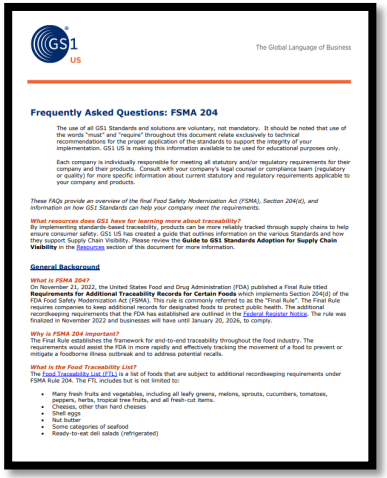
GS1 US FSMA 204 Resources



https://www.gs1us.org/industries-and-insights/by-industry/foodservice/standards-in-use/food-safety#fsma

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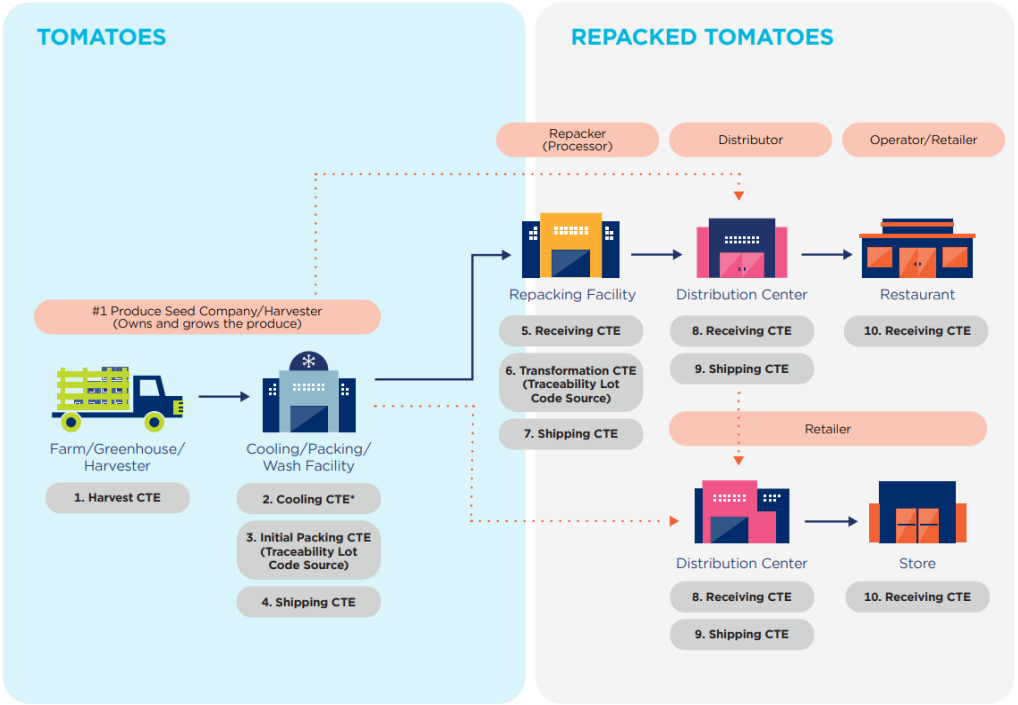
Supply Chain Process Flow Examples



1. Produce is picked in the field of Produce Seed Company/Harvester and placed into totes - Harvest CTE
   a. Produce totes can be comingled with similar items from other farms and lot/batch numbers should be assigned
   b. Produce undergoes sorting/grading and is placed into additional totes
   c. GTIN is assigned to produce
   d. GLN identifies Farm/Greenhouse (harvest location)
   e. Produce totes are taken to a Packing House owned by the farm
   f. GLN identifies Packing House

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Applying GS1 Standards to Support FSMA 204

This implementation guideline was prepared by the GS1 US FSMA 204 Workgroup to assist the United States' food industry with implementing GS1 Standards for traceability and specifically to help meet the requirements outlined in the Final Rule.

Download the Guideline →

FSMA 204 Final Rule has been published and GS1 Standards can help you prepare. Start now to meet the deadline of January 2026.

GS1 US Resources for FSMA 204

GS1 US Initiative Members can participate in the FSMA 204 workgroup to continue developing the next iterations of the Guideline. Contact Lucy Angarita at: langarita@gs1us.org or Manali Pradhan at: mpradhan@gs1us.org

- Case Study: Culinary Collaborations LLC
- GS1 US Application of GS1 System of Standards to Support FSMA 204 Guideline
- FSMA 204 FAQs

FDA Resources

- FSMA Final Rule on Requirements for Additional Traceability Records for Certain Foods on FDA.gov
- FDA Food Safety Modernization Act (FSMA) Food Traceability Rule Supply Chain Example Produce

Additional Traceability Resources

- Register now for the GS1 US Supply Chain Visibility Summit on April 20th
- North American Industry Implementation Guidance for Standard Case Code Labeling

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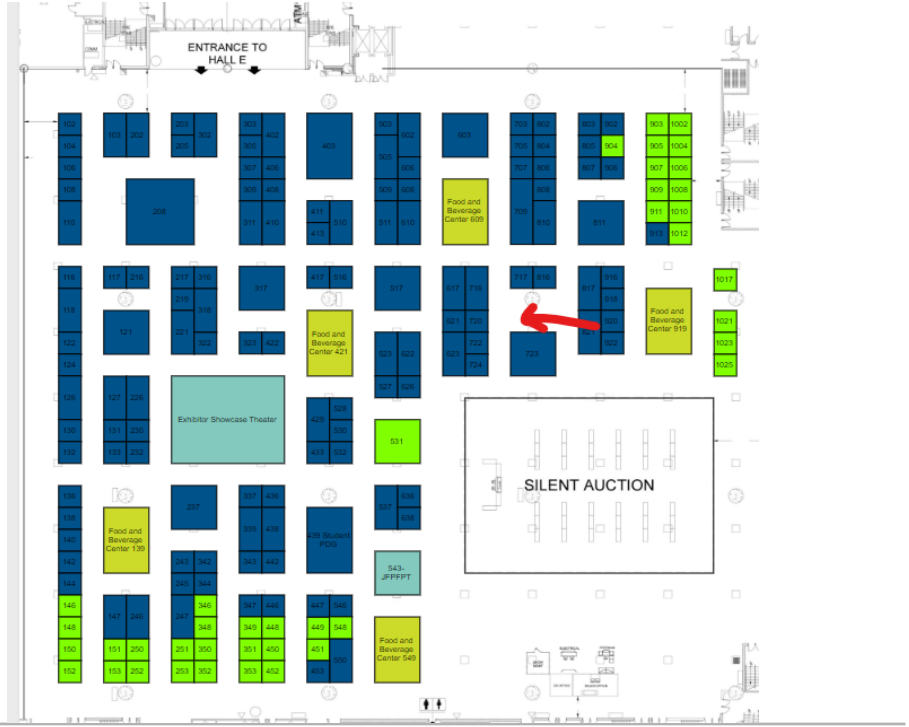
We will be in Toronto!

BOOTH
#722



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Speaker Journey's

Speakers:

Ryan Peters, Chick-Fil-A

Brando Tijerina, Taco Johns

Stacie Sanders, ARCOP

Greg Cassens, Dot Foods

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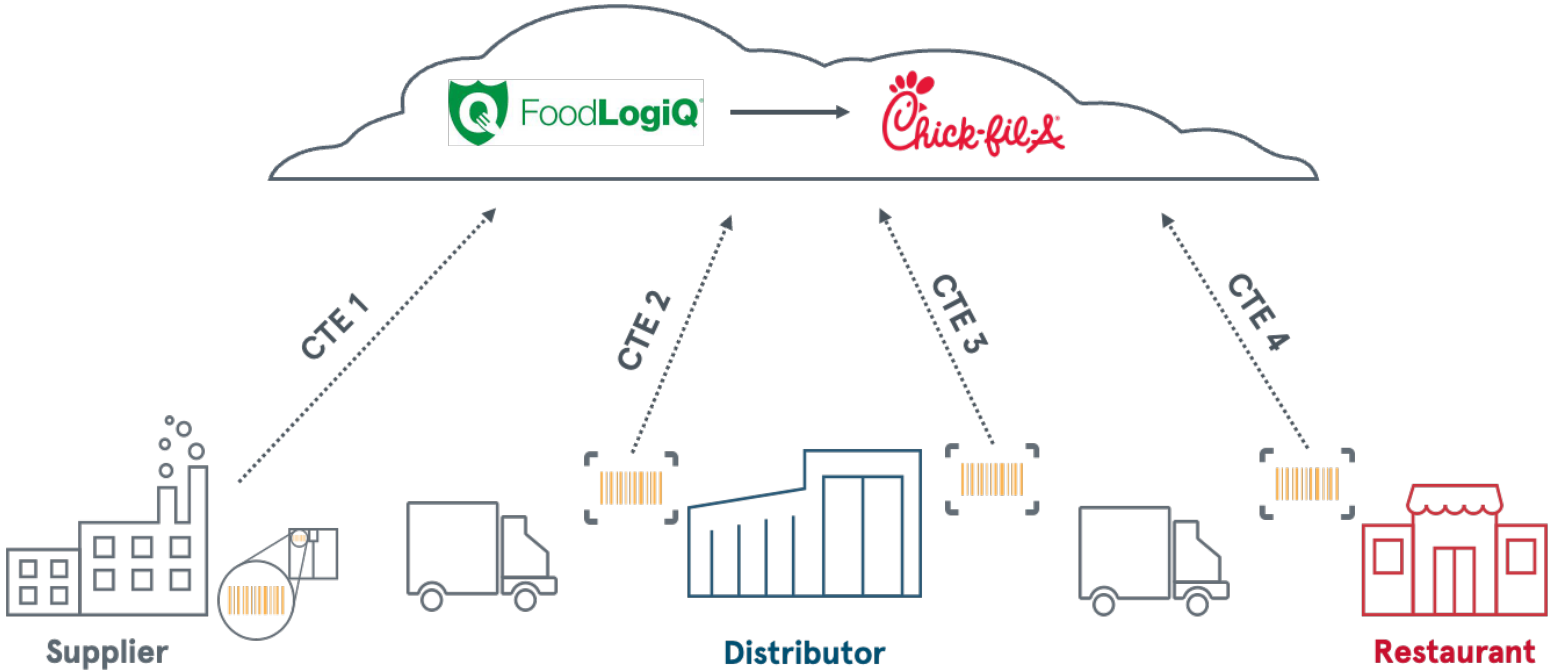
Chick Fil-A



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Chick Fil-A

- ***Key Takeaways:***
  - Start NOW!
  - Think Processes & Systems
  - Leverage your network
  - Partner with your supply chain
  - Standardize!

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Taco John's

Taco John's Journey & Timeline

- 2020 – Identified FSQA needs, including needs to meet FSMA 204 requirements.
  - Software Solution (Reaction time, proper data collection, automation).
- 2022 – Implementation of the software solution.
  - Established standards and requirements for suppliers and distributors.
  - Developed a plan and vision for traceability.
  - Communicated standards and expectations.
  - Onboarding of suppliers following the FTL List.
- 2023 / 2024 – Complete onboarding and test the system.

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Taco John’s

GS1 Standards at Taco John’s

Taco John’s Proprietary Products must have:

- Global Trade Item Numbers (GTIN)
- Case Labels with GS1-128 Barcode

Global Location Numbers (GLN)

- Location of our partners & our restaurants.

Key Takeaways and Learnings

- Executive buying & support
- Cross-functional support
- Clear partner communication
- Understand Resources
- Contracts
- Technology

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ARCOP (Arby's Supply Chain Cooperative)

ARCOP/Arby's Traceability Journey

- Began journey in Jan 2018 with goal of compliance by end of 2019
- Require GS1-128 barcode labels on all products in supply chain

Considerations/Challenges

- Determine current traceability state
- Processes/requirements must be created - labeling requirements, barcode guidelines, category matrix, scanning requirements
- Implementation strategy – rollout in prioritized phases
- Technology varies by supplier and distributor

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ARCOP (Arby's Supply Chain Cooperative)

Key Takeaways/Learnings

- Must have executive level support
- Implement requirements into contracts and processes
- Educate and align internal players
- Engage with the right individuals at both the supplier and distributor level
- Must work together with trading partners
- INDUSTRY COLLABORATION!!!!

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Dot Foods

(Case level traceability challenges for distributors)

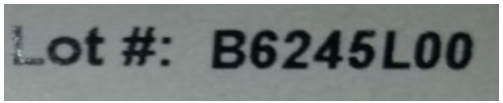
Identifying the lot code

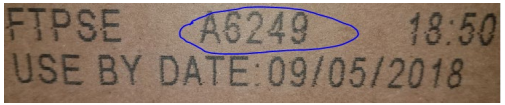
A. Julian date?

B. Expiration date?

C. Born date?

D. Unique lot code?





Manually entering lot codes

- 1-1-17?
- 1-11-17?
- 1-2-17?
- 2-1-17?

DelDate	ItemNu	ShipQ	LotCode	City
1/12/2017	630580	12	Jul 10 2017	OCOEE
2/6/2017	630580	12	7102017	OCOEE
2/1/2017	630580	36	Jul102017e	SELMA
1/30/2017	630580	48	July1017	WILSON
2/6/2017	630580	18	7102017	WILSON

One item – Multiple lot codes

- Per Load?
- Per Pallet?

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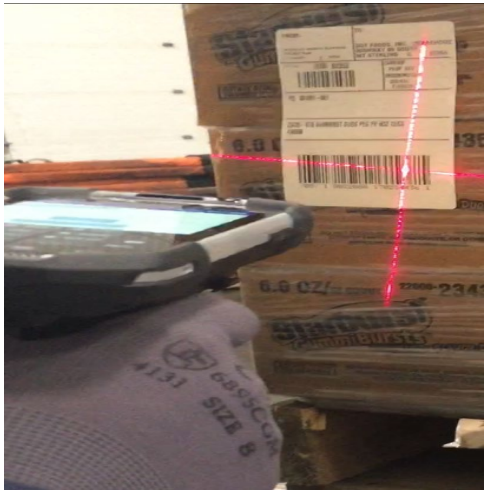
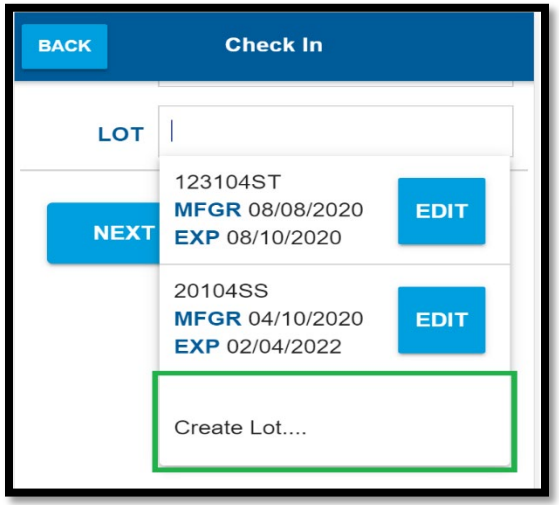
Dot Foods
(Leveraging Technology & ASNs)

SSCC Pallet Label



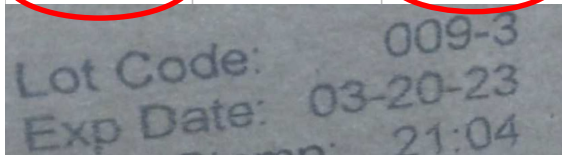
ASN Data Sent Electronically to Dot



But… what if:

- ASN is not sent on-time
- No SSCC Tag or put on the wrong pallet
- ASN does not match the case

Lot Code	Production Date	Expiration Date
00923BDAFA	20230109	20230419



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Speaker Discussion

Moderator:

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Discussion Topics

- How do GS1 standards help with industry alignment? Why is alignment so important?
- What is the difference between implementing a traceability program and meeting the FSMA 204 regulation?
- What discussions are you having with your trading partners to comply with FSMA 204?

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Get Started Checklist

Speaker: Norma Crockett
GS1 US Director, Community Engagement
Foodservice Track

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Action Steps

- Understand the implications of the FSMA 204 proposed rule
- Take an inventory of your products that might appear on the final Food Traceability List (FTL)
- Migrate from internal identifiers to globally unique products (GTINs) and locations (GLNs)
- Assess how your existing traceability data capture and sharing solution may need to evolve
- Talk with your trading partners on data sharing expectations.

Consider both finished products and ingredients

Consider both saleable units and cases

Consider how your traceability program will scale as needed

Start the conversation early

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See you at IAFP! Booth #722

Norma Crockett
Director, Community Engagement
Foodservice

Lucy Angarita
Director, Community Engagement
Retail Grocery

BOOTH #722

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June 27, 2023	Don’t be Shellfish! Use Next Generation Sequencing to Improve Seafood Safety and Quality
September 22, 2023	Modeling Salmonella Growth and Inactivation for Small and Very Small Processors with Limited Data
October 24, 2023	Managing Meat Shelf Life and Spoilage to Ensure Food Security

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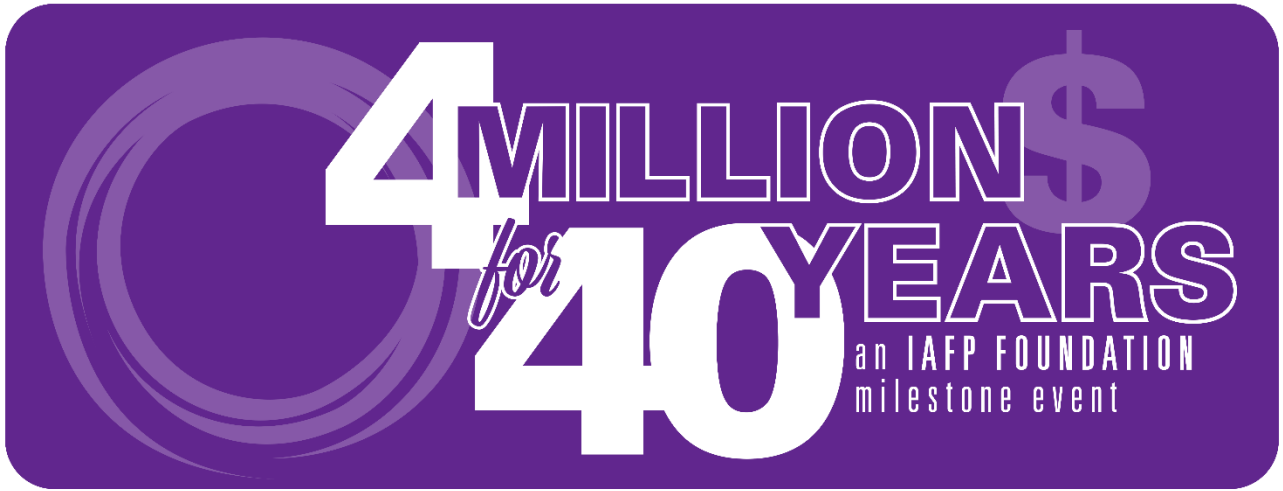

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