Food safety is of the highest importance to today’s consumers and to the many industries that provide the food we eat day after day, year after year. The concept of food traceability—being able to follow a product from its origin to its point of consumption—is a critical element of food safety.

At GS1 US™, when we envision the future of the food industry, we see an integrated approach to traceability across all food sectors. This common way of doing business, with the use of GS1 Standards, enhances food safety for consumers in many meaningful ways.

The GS1 System is an integrated suite of global standards that provides supply chain visibility by accurately identifying, capturing, and sharing information regarding products, locations, assets, and services. With the use of this global language of business, whole chain traceability across all food categories isn’t just a concept—it’s an attainable reality.

Recent government regulations and increased consumer pressure for accurate and complete product information continue to drive traceability improvements for food safety. While all segments in the food industry recognize the importance of traceability and food safety, they have been evolving on separate yet parallel paths to define their own traceability plans and guidelines using GS1 Standards.

At GS1 US, we are actively working with companies in the food industry to understand the strengths and weaknesses of today’s product tracing efforts to create solutions for a better approach tomorrow. We have been inspired and are encouraged by the work accomplished in various food industry segments that whole chain traceability across the entire food industry is possible.
MEETING GOVERNMENT REGULATIONS

The FDA's Food Safety Modernization Act (FSMA) focuses on the creation of a new food safety system with broad preventative measures and accountability. It will lead to an increase in domestic food inspections and give the government more power to issue recalls. The Patient Protection and Affordable Care Act (PPACA) focuses on healthcare reform, but also mandates that chain restaurants with more than 20 locations display caloric information on their menus and have other nutritional information readily available. The use of GS1 Standards supports your organization in meeting these new requirements and regulations.

ACHIEVING WHOLE CHAIN TRACEABILITY

To achieve whole chain traceability, trading partners must be able to link products with locations and times through the supply chain. For this purpose, the work led by the Institute of Food Technologists described two foundational concepts: Critical Tracking Events (CTEs) and Key Data Elements (KDEs). With GS1 Standards as a foundation, communicating CTEs and KDEs is achievable.

Learn more by reading How GS1 Standards Support Product Tracing, Critical Tracking Events, and Key Data Elements, available on the Fresh Foods Tools and Resources page at: www.gs1us.org/freshfoods
**PRODUCE**
The Produce Traceability Initiative (PTI)

The PTI is the most wide-reaching voluntary industry initiative—with approximately 125 companies involved—working towards case-level traceability and improved food safety. GS1 US, the Produce Marketing Association (PMA), the United Fresh Produce Association (UFPA), and the Canadian Produce Marketing Association (CPMA) recommend supply chain-wide adoption of electronic traceability for every case of produce using GS1 Standards and barcodes. Uniquely identifying trade items with Global Trade Item Numbers (GTINs) and sharing the Batch/Lot Numbers in GS1-128 barcodes will help the industry maximize the effectiveness of current trace-back procedures, while developing a standardized approach to enhancing the speed and efficiency of traceability systems for the future.

For more information, visit: [www.gs1us.org/produce](http://www.gs1us.org/produce) and [www.producetraceability.org](http://www.producetraceability.org)

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**MEAT AND POULTRY**
Traceability for Meat and Poultry

Within the meat and poultry supply chain, industry coordination of product traceability has been led by the Meat and Poultry B2B Data Standards organization—known as mpXML. Together with industry representatives and GS1 US, mpXML developed the *Traceability for Meat and Poultry U.S. Implementation Guide* in 2010. The guide focuses on adopting common traceability standards throughout an industry. This includes the use of GS1 Standards for product and location identification, encoding key traceability data on package labels for scanning, and creating Electronic Data Interchange (EDI) messages to send traceability data to trading partners. The guide also recommends the use of the X12 EDI Advance Ship Notice and using GS1 barcodes at point of sale with extended data to support product traceability and food safety. The industry is moving toward the GS1 DataBar™ barcode that will provide for expanded data to be captured at point of sale, leading to even more enhanced traceability. The mpXML organization has also developed *A Model for the Adoption of Critical Tracking Events in the Meat and Poultry Supply Chain* based on Institute of Food Technologists (IFT) reports on Critical Tracking Events and Key Data Elements.

For more information, visit: [www.gs1us.org/meat_and_poultry](http://www.gs1us.org/meat_and_poultry)

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**SEAFOOD**
Traceability for Seafood

The *Traceability for Seafood U.S. Implementation Guide* was developed in 2011 by the National Fisheries Institute (NFI), GS1 US, and U.S. seafood industry stakeholders and provides practical guidance for industry-wide seafood traceability. It encourages the adoption of GTINs for product identification and GS1-128 barcodes with extended product data for electronic sharing of product identification information between trading partners by 2014 with a focus on exchanging Critical Tracking Events (CTEs) data by 2015. To support the industry, GS1 US offers a Seafood Traceability Readiness Program to help companies improve traceability processes to meet consumer expectations for safe and authenticated food.

For more information, visit: [www.gs1us.org/seafood](http://www.gs1us.org/seafood) or learn more about the GS1 US Seafood Traceability Readiness Program at: [www.gs1us.org/seafoodreadiness](http://www.gs1us.org/seafoodreadiness)

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**DAIRY, DELI, AND BAKERY**
Traceability for Dairy, Deli, and Bakery

Inspired by the other fresh food industry sectors and also impacted by the Food Safety Modernization Act (FSMA), the International Dairy, Deli, and Bakery Association (IDDBA), the International Dairy Foods Association (IDFA), and GS1 US have developed a traceability guide for the dairy, deli, and bakery industries. This guide addresses traceability practices from the processing facility to the point-of-sale or service, and applies to all levels of product, which include shipping logistics unit information, lots, pallets, cases, consumer items, ingredients with data elements, and more. To support the industry, GS1 US offers a Dairy, Deli, and Bakery Traceability Readiness Program to help companies improve traceability processes to meet consumer expectations for safe food.

For more information, visit: [www.gs1us.org/dairy_deli_bakery](http://www.gs1us.org/dairy_deli_bakery) or learn more about the GS1 US Dairy, Deli, and Bakery Traceability Readiness Program at: [www.gs1us.org/ddbreadiness](http://www.gs1us.org/ddbreadiness)

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**CONSUMER PACKAGED GOODS**

Consumer packaged goods companies and grocery retailers have been utilizing standards and technology to improve business processes for decades, and they continue to find new ways to leverage the power of GS1 Standards and the supply chain visibility they provide. To improve data quality and traceability processes, these organizations are now focused on sharing complete and accurate product information for ever-evolving B2B and B2C applications.

For more information, visit: [www.gs1us.org/cpg_grocery](http://www.gs1us.org/cpg_grocery)
FOODSERVICE
Foodservice GS1 US Standards Initiative

GS1 US launched the Foodservice GS1 US Standards Initiative in October 2009 in partnership with the International Foodservice Distributors Association (IFDA), the International Foodservice Manufacturers Association (IFMA), and the National Restaurant Association (NRA), along with 55 leading manufacturers, distributors, and operators. The goal of the Initiative is to have 75 percent* of the foodservice industry using GS1 Standards by 2015 to accurately identify and share complete product data, such as nutritional and allergen information. Today, more than 120 foodservice manufacturers, distributors, operators, and associations lead the Initiative, and over 2,300 trading partners subscribe to the Global Data Synchronization Network™ (GDSN™) to share product data.

Widespread adoption of GS1 Standards in the foodservice industry will greatly improve product information, efficiency, and food safety by using:

• Global Location Numbers (GLNs) for location identification
• Global Trade Item Numbers (GTINs) for product identification
• The Global Data Synchronization Network (GDSN) for product data sharing

For more information, visit: www.gs1us.org/foodservice

*measured by revenue

“Traceability is critical for food safety. If we don’t know where a product came from, it is very difficult to ensure quality control, let alone recall products in the case of a foodborne illness outbreak.”

Ann Oka
Senior Vice President
Supply Chain Management
Sodexo

GET INVOLVED
Now is the time to get involved with GS1 US and the work the industry is engaged in around traceability and food safety. To find out how you can participate in these discussions, programs, and initiatives and help move the food supply chain into an integrated, unified future, visit www.gs1us.org.

For more information about how companies are using GS1 Standards in the food industry, visit the tools and resources page at www.gs1us.org/freshfoods and read our case studies.