Section 1-4: Product Information and Consumer Awareness

Asia-Pacific Economic Cooperation
FSCF Food Safety Cooperation Forum
PTIN Partnership Training Institute Network
THE WORLD BANK
MICHIGAN STATE UNIVERSITY

Product Information and Consumer Awareness: Codex Recommended Practices

Insufficient product information, and/or inadequate knowledge of general food hygiene, can lead to products being mishandled at later stages in the food chain. Such mishandling can result in illness, or products becoming unsuitable for consumption, even where adequate hygiene control measures have been taken earlier in the food chain.

Products should bear appropriate information to ensure that:

- adequate and accessible information is available to the next person in the food chain to enable them to handle, store, process, prepare and display the product safely and correctly;
- the lot or batch can be easily identified and recalled if necessary.

In this section, the following topics will be discussed:

- Lot identification and labeling
- Product tracing systems
- Critical tracking events
- Key data requirements
- Consumer information

Learning Objectives

At the conclusion of this section, the learner will be able to:

- describe the basic requirements for food product lot identification and traceability systems,
- define “critical tracking events” and list examples of critical tracking events in the supply chain,
- define “key data element” and list the key data elements that should be available for each material, ingredient or finished product, and
- explain the importance of consumer information to preventing foodborne illness caused by food product mishandling.

Lot Identification and Labeling

Lot identification is essential in product recall and also helps effective stock rotation. Each container of food should be permanently marked to identify the producer and the lot.

All food products should be accompanied by or bear adequate information to enable the next person in the food chain to handle, display, store and prepare and use the product safely and correctly.

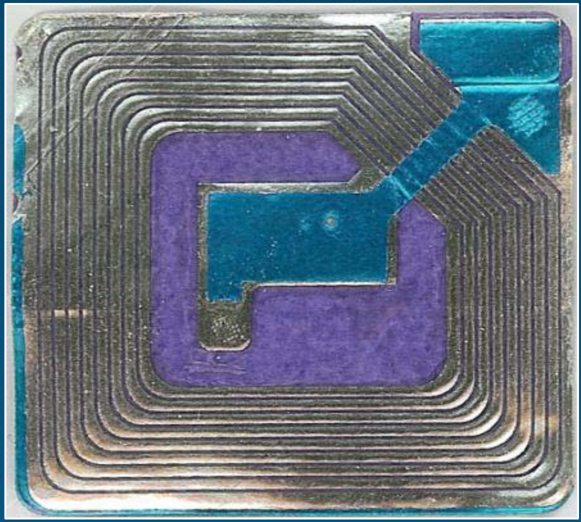
Prepackaged foods should be labeled with clear instructions to enable the next person in the food chain to handle, display, store and use the product safely.

Further general guidance is available in the Codex General Standard for the Labeling of Prepackaged Foods (CODEX STAN 1-1985, Rev. 1(1991)).

Photo: Public Domain

Product Tracing Systems

Product tracing and record keeping systems can range from manual systems (i.e. pen and paper) to sophisticated electronic-based systems. The level of sophistication implemented often is dependent on company size, with the larger companies having more sophisticated systems due to greater availability of resources. Effective systems that rely on manual record-keeping can be designed and effectively implemented, but electronic systems are much more conducive to rapid data sharing in the event of a food safety incident that requires such data communication.



In a recent study conducted by the Institute of Food Technologists in the USA, it was found that the most common types of data capture used for product tracing systems was pen/paper (alphanumeric notes), bar codes, radio frequency identification (RFID), and electronic systems.

Photo: Midnightcomm / Flickr

Product Tracing Requirements

At a minimum, product tracing systems should be implemented in a manner that records on the immediate sources (1-step back) of incoming raw materials and ingredients and subsequent recipients (1-step forward) of finished food products are collected.

As a best practice, the lot number and name of the manufacturing facility should appear on each case of product, and the lot number(s), quantity and shipping location should appear on invoices and bills of lading.

Figures: Institute of Food Technologists

Critical Tracking Events

Considering the entire food supply chain, there are several points in time and locations where data need to be collected to enable full product traceability. These points have been termed to be "Critical Tracking Events." The following is an incomplete list of Critical Tracking Events that may be found in the supply chain:

- Product creation/repacking
  - Origination (create a unique identifier – product enters supply chain)
  - Aggregation (bring discrete items together)
  - Disaggregation
  - Convert (repack or re-label)
  - Commingle
- Product receipt
- Product shipping
- Product consumer sale (retail)
- Product depletion (retail and foodservice)

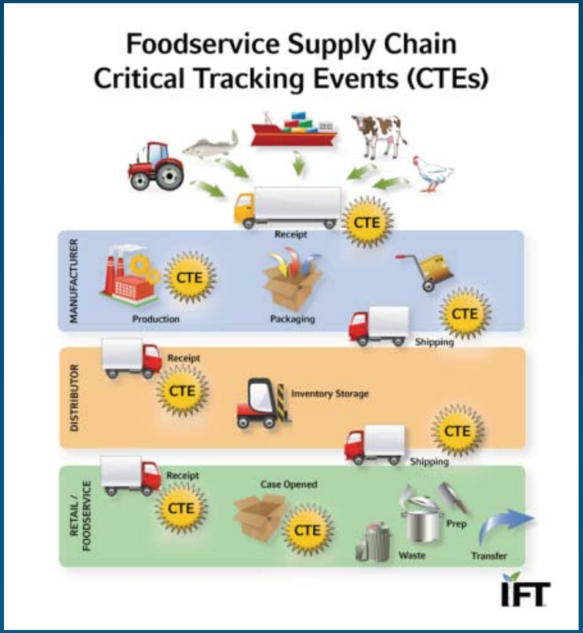


Figure: Institute of Food Technologists; Process depicted was used with permission of UFPC/Yum! Brands, Lexington, KY

Product Tracing Systems

Key Data Elements

Key Data Elements are those data required to successfully trace a product and/or its ingredients through all relevant Critical Tracking Events. Each Critical Tracking Event must be carefully analyzed to ensure that sufficiently granular data are collected to permit traceability. The ability to trace product paths through the supply chain depends on logging Key Data Elements associated with these events.

Image: Public Domain

Key Data Elements

Product records should follow a standardized format where possible. The following are the key data elements that should be available for each material, ingredient or finished product:

- Physical location of the firm that last handled the product, whether the manufacturer or not, and, if applicable, contact information for the broker who handled the transaction
- Incoming lot numbers of product received
- Amount of product manufactured or shipped
- Each physical location where cases were shipped (including individual retail and foodservice locations)
- Lot number(s) shipped to each location
- When (date/time) product was received and/or shipped
- For producers, processors, repackers, and others who transform products:
  - When (date/time) each lot was manufactured (or harvested)
  - All ingredients used in the manufacture of the product, along with their corresponding lot numbers (not item code), the immediate source of the ingredients, and when they were received.

Consumer Information

Provision of accurate and easy-to-understand information for consumers on appropriate handling procedures for food products is important for minimizing the potential for foodborne illnesses cause by mishandling.

Consumers should have enough knowledge of food hygiene to enable them to:

- understand the importance of product information,
- make informed choices appropriate to the individual, and
- prevent contamination and growth or survival of foodborne pathogens by storing, preparing and using it correctly.

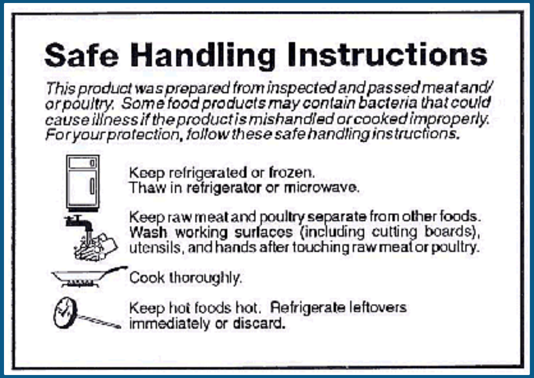
Nutrition Facts

Serving Size 1 cup (228g)
Servings Per Container 2

Amount Per Serving	
Calories 250	Calories from Fat 110
	% Daily Value*
Total Fat 12g	18%
Saturated Fat 3g	15%
Trans Fat 1.5g	
Cholesterol 30mg	10%
Sodium 470mg	20%
Total Carbohydrate 31g	10%
Dietary Fiber 0g	0%
Sugars 5g	
Protein 5g	
Vitamin A	4%
Vitamin C	2%
Calcium	20%
Iron	4%

* Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs:

	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g



Safe Handling Instructions

This product was prepared from inspected and passed meat and/or poultry. Some food products may contain bacteria that could cause illness if the product is mishandled or cooked improperly. For your protection, follow these safe handling instructions.

Keep refrigerated or frozen. Thaw in refrigerator or microwave.

Keep raw meat and poultry separate from other foods. Wash working surfaces (including cutting boards), utensils, and hands after touching raw meat or poultry.

Cook thoroughly.

Keep hot foods hot. Refrigerate leftovers immediately or discard.

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