

---

# Product Tracing in Food Systems

## *An IFT Report Recommendation Summary*



THE Society for Food Science & Technology

The safety of the food supply and the protection of the public health require a comprehensive and coordinated effort among all stakeholders. Effective product tracing throughout the supply chain, and from farm to fork, is of key importance. Best practices in product tracing would improve the speed and efficiency of response following a food safety triggering event, shorten duration of food borne outbreaks, and contribute to the maintenance of consumer confidence.

The **Institute of Food Technologists (IFT)**, under contract with the **US Food and Drug Administration (FDA) Center for Food Safety and Applied Nutrition (CFSAN)**, convened a panel of experts to examine available technologies and current product tracing practices in the food and other industries. IFT has provided recommendations for improved product tracing.

---

### **Core Recommendations**

1. Standardized expressions of key data elements should be agreed upon.
  2. Education on Critical Tracking Events (CTE) and key data elements should be developed.
  3. Evidence of appropriate implementation should be part of standard audits.
  4. Each supply chain partner must:
    - Identify CTE in order to trace product.
    - Record standardized key data elements for each CTE that link incoming with outgoing product, whether product is transformed (internal tracing) or changes location (external tracing).
    - Provide FDA with relevant key data elements for each CTE, in an electronic format and within 24 hours of any request.
- 

### **Best Practice Recommendations**

Specifically, IFT recommends the following as best practices for effective product tracing:

#### **1. Required Key Data Elements**

The following data elements should be made available upon request to the FDA by pertinent supply chain partners. Record of these elements allows product linkages to be maintained throughout the supply chain.

- Physical location at which the product was last handled, whether the manufacturer or not;
- Incoming lot numbers of product received;
- Amount of product manufactured or shipped;
- All physical locations to which cases were shipped;
- Lot number(s) shipped to each location;
- Date/s and time/s product was received and/or shipped to all locations;
- Date/s and time/s each lot was manufactured or harvested;
- All ingredients used in product, with lot numbers, facility at which they were manufactured, and date/s and time/s they were received;
- In addition, lot number and manufacturing facility should appear on each case of product, and lot number/s, quantity, and shipping location should appear on invoices and bills of lading.

#### **2. Record Keeping**

Each facility handling a product must record key data elements as specified above, for each Critical Tracking Event (CTE). CTEs are those instances where-in product is moved between premises, is transformed, or is determined to be a point where data capture is necessary for effective tracing. Accurate internal product tracing must be maintained. For products that do not undergo further processing or transformation (e.g., the case is not opened) a one-to-one relationship between incoming and outgoing lots

must be maintained, even when repacking occurs. Each entity must provide this information to FDA upon request, in an electronic format, and within 24 hours. However, the way in which each firm captures and records data internally is not prescribed.

### **3. Approved Standardized Formats**

For each key data element, a limited, select set of standard nomenclature must be identified.

### **4. Data in Electronic Format**

Timely communication of requested information is best facilitated by data in an electronic format.

The transfer of data to an electronic format should be required for all operations that are currently paper-based. Data transfer may be done by third parties, but must be done regularly and kept current.

### **5. Required Audit**

The ability to trace product should be part of any standard third party audit. Appropriate identification of CTEs, adherence to one-to-one internal product tracing, and correct capture of key data elements should be included as part of audit procedures.

### **6. Training**

Guidance should be developed to detail the identification of CTEs and define relevant terms such as “lot”. Educational modules on product tracing compliance should be developed, and all segments of the food industry and regulatory community should be trained in their use.

### **Conclusions**

The report also concludes that setting clear objectives for those in the food supply chain, and leveraging existing industry systems to meet those objectives, is the most appropriate approach to effective product tracing. The product tracing system should be simple, user friendly, and globally accepted.

To view the full report, visit [www.ift.org/traceability](http://www.ift.org/traceability).

---

### **About IFT**

The Institute of Food Technologists (IFT) exists to advance the science of food. Our long-range vision is to ensure a safe and abundant food supply contributing to healthier people everywhere. Founded in 1939, IFT is a nonprofit scientific society with 20,000 individual members working in food science, food technology, and related professions in industry, academia, and government. IFT champions the use of sound science across the food value chain through knowledge sharing, education, and advocacy, encouraging the exchange of information, providing both formal and informal educational opportunities, and furthering the advancement of the profession. IFT has offices in Chicago, Illinois, and Washington, D.C. For additional information, please visit [ift.org](http://ift.org).

---