



An interview with
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How U.S. traceability legislation impacts food supply chain

FDA Food Safety Modernization Act ushers in new requirements and responsibilities

In December 2010, the United States Senate passed the Food Safety Modernization Act (FSMA) in response to a growing public concern about the integrity of both local and imported food supplies and the inability of officials to trace the sources of many tainted foods. As those involved in the food chain begin to examine the impact of the new legislation, one requirement in particular is striking:

“The Secretary [is required] to establish a product tracing system to track and trace food that is in the United States or offered for import into the United States.” (FSMA § 204 (c))

The regulations contained in the Act target both local suppliers and importers,

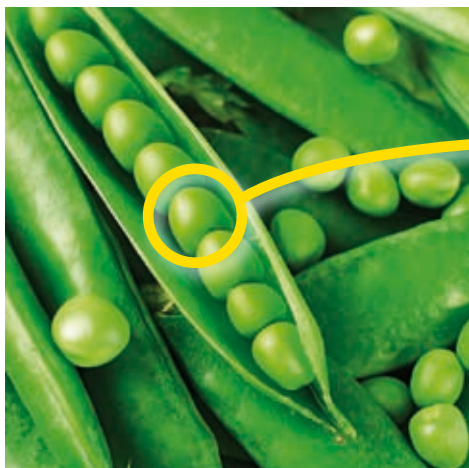
and consequences for non-compliance are severe. According to Dr. **Don Ratliff**, Regents and UPS Professor and Research Director – Georgia Tech Integrated Food Chain Center, any organization involved in the importation, manufacturing, production, storage, transportation and sale of food needs to understand the consequences, requirements and cost of compliance of the bill.

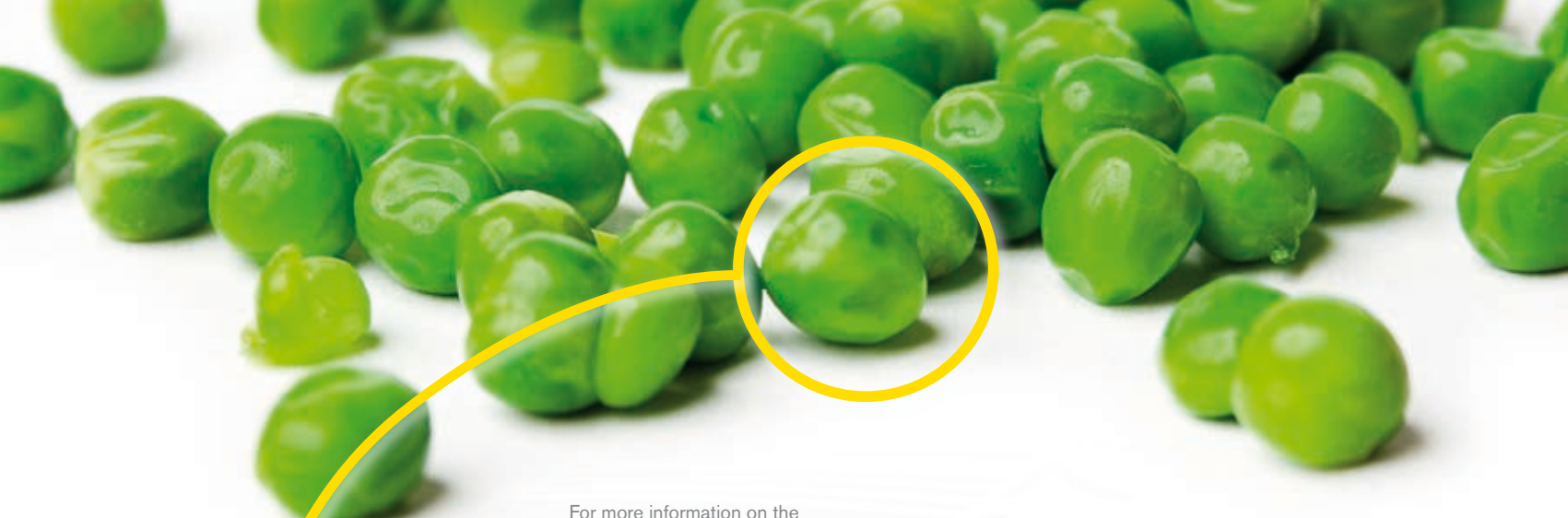
Defining traceability in black and white

The new Act will most likely mean an increased burden on the bar code. Every shipment will likely carry a bar code label that tracks at the case level where a product is produced and who produced it, as well as a unique lot number and content description.

Ratliff believes that a logistically viable solution is a dynamic tracking scenario. When product is received, information regarding product type, lot number and the

name of the companies shipping and transporting the case can be captured with a bar code scanner. Similarly, upon shipment, information regarding product type, lot number, dispatch details and the name of the transportation supplier must be captured and recorded. This information is vital, Ratliff says, for meeting the new requirement of





For more information on the Food Safety Modernization Act, visit www.gop.gov/bill/111/2/hr2571/senateamendment

Global standards

From bread to strawberries, to cans of soup to bottled fruit drinks, every food product is different in terms of origin, ingredients, storage, transport and shelf life. Moreover, these products are referenced differently as they pass language, culture and brand barriers. The success of a track and trace system, however, relies on a standardization of these diverse product descriptions that can be translated into associated database codes. Now is the time to confront and find a solution to standardize product labeling, says Ratliff. Without a global set of standards, the challenge of developing and maintaining a centralized traceability database may well become insurmountable.

Real-time data capture and automation

The most practical way to handle the required volume of transactions is to automate the capture and upload of tracking data to an online database. A web-based system would allow FDA officials to manage recalls more efficiently while storing data securely. However, such a database does not currently exist, and there are many issues regarding who would be responsible for storage and management of the data, pricing, etc. that need to be resolved.

A silver lining

Ratliff predicts that, while there may be a significant cost burden on the food chain in order to ensure compliance with the new Act, there are some potential benefits to both consumers as well as suppliers. For consumers, the visibility and accountability in the food chain should result in enhanced food quality and freshness with less risk of contamination. Supermarkets, food retailers and food suppliers can all benefit from increased *sell* life of products, better order management, fewer rejected loads, less waste because of better handling and a quicker and more efficient way to identify where failure points occur. He emphasizes that, in order to receive the advantages of increased visibility, it is essential that the tracking data be standardized at the case level and that it be shared across the entire supply chain.

While many procedures are yet to be specified, the law provides for pilot studies to be undertaken by industry groups and organizations, like Georgia Tech's Integrated Food Chain Center, to evaluate potential tracking systems and make recommendations. Ratliff advises that food suppliers around the world should become proactive in determining how to get ahead of the regulations by meeting best practices rather than waiting for mandates. Together, automation and standardization will make it easier for food and beverage suppliers worldwide to comply with the Food Safety Modernization Act and benefit from all that comes from tighter control of inventory. ■

tracing the product *one forward and one back* in each point of the supply chain.

In addition, manufacturers, distributors and importers will need to record processing, handling, storage and transportation details for internal record keeping. Fresh produce will only require straightforward traceback methods because the supply chain is reasonably linear, but food processors and cold chain operations will need more complex traceback methods.

