MedicalXpress

Expert examines main points of new food safety measure

December 23 2010

(PhysOrg.com) -- Congress just passed the first major food safety measure in the United States in more than 60 years. Given the recent and frequent deadly foodborne illness outbreaks, this is welcome news to many Americans. A food safety expert with the W. P. Carey School of Business is breaking down the main points of the measure, explaining how it will affect consumers when it comes to both safety and costs.

“America already has one of the safest food supplies in the world, but 48 million people in the U.S. still get sick and several thousand die each year from foodborne illness,” says Dr. William Nganje, associate professor at the Morrison School of Agribusiness and Management at the W. P. Carey School of Business at Arizona State University. “This new measure addresses some of the main issues that have contributed to the problem.”

Nganje is well-known for his research on food safety and food defense risk management. He was also directly involved in evaluating the cost-effectiveness of different methods for tracing the sources of future foodborne illness outbreaks that may be used as a result of the new measure.

He says the new legislation doesn’t address every type of food, such as spices, but it is progress in the right direction. While the U.S. Department of Agriculture already has had significant authority over reducing hazards involving meat and poultry processing and packaging since a pathogen-reduction rule passed in 2000, Nganje says this new

measure will provide more power for the U.S. Food and Drug Administration (FDA) to better regulate produce. For example, the FDA will be able to issue direct recalls, instead of relying on voluntary recalls from individual producers or firms.

The measure will require importers to be responsible for making sure the food they bring into the country meets U.S. safety standards. It will require food producers and processors to take preventive measures and to undergo more inspections. The legislation also deals with the issue of mass production and centralization that now dominates the food industry, providing new requirements for food testing and tracking.

“Before, small suppliers could really control food quality and safety, but now huge corporations repackage and comingle food from different sources and then distribute it,” explains Nganje. “As part of the legislation, a traceability provision requires the U.S. Department of Health and Human Services to create a rapid response and targeted systems to find tainted food and quickly recall it.”

Nganje helped evaluate the cost-effectiveness of both electronic bar codes and radio frequency identification (RFID) tags that could be used to track food. The bar codes would include not only price information, but also the farm, country of origin and other crucial information about the food. Nganje believes this will work fine for most food products. However, he recommends the RFID tags for products with more complex supply networks, containing ingredients from many sources, and for food coming in from other countries.

“The RFID tags would be more expensive, but active tags have the capability to store and reenter more data at multiple stages of production and distribution,” says Nganje. “This system could also help secure our food from terrorism. If a truck or cargo is tampered with or deviates from the designated route, you’ll know right away.”

While previous outbreaks have taken weeks to trace back to a source, such as a large 2006 spinach E. coli scare that took 47 days to trace, these new systems would allow officials to start recalling tainted food in significantly shorter time, preventing further illness and deaths.

In addition, the new measure will require most firms to wait for pathogen-testing results to come back before food can be distributed (Small firms that don't supply products across state boundaries will be exempted). Until now, food could be delivered before test results were received. While this particular clause is good for safety reasons, Nganje says it's also raising flags about costs in the food industry because products might have to be stored for longer periods of time, increasing logistical expenses. It might also take a toll on the freshness of food being delivered to stores.

Other costs will include the hiring of more FDA inspectors. Estimates show the measure is expected to cost $1.4 billion over the next four years. Nganje confirms there will be a high price associated with the changes, and some of the costs will likely be passed on to consumers buying the food.

"Food prices will probably go up," he says, "but overall, when you look at food safety systems, it ends up saving you money. We're reducing liabilities, lawsuits and recalls, and you can't put a price on people's lives and health. Overall, the costs-benefits tradeoffs are worth implementing the new measure."

Provided by Arizona State University