Protecting America's Food Supply: Insights from Alfred Almanza, Deputy Under Secretary for Food Safety, U.S. Department of Agriculture

By Michael J. Keegan



The food supply in the United States is constantly evolving. U.S. consumers want convenience, choice, and diversity in the foods they eat. The U.S. is importing more food than ever before to meet these demands.

Food production has become more globalized and the route it takes from farm to table is more complex. Much of our food now takes a longer and more complicated path from the farm to our table. And yet, most Americans purchase food for their family's dinner table with a high level of assurance that the food is safe. Much of the effort for securing the U.S. food supply rests on the work of the Food Safety and Inspection Service (FSIS) within the U.S. Department of Agriculture (USDA). FSIS is the public health regulatory agency responsible for the safety of the U.S. meat, poultry, and processed egg products supply. For over a century, the agency has worked to ensure that America's food is safe from contamination. The vital services of FSIS have touched the lives of almost every citizen, every day in America. FSIS is accountable for protecting food for over 300 million American people and millions more around the world.

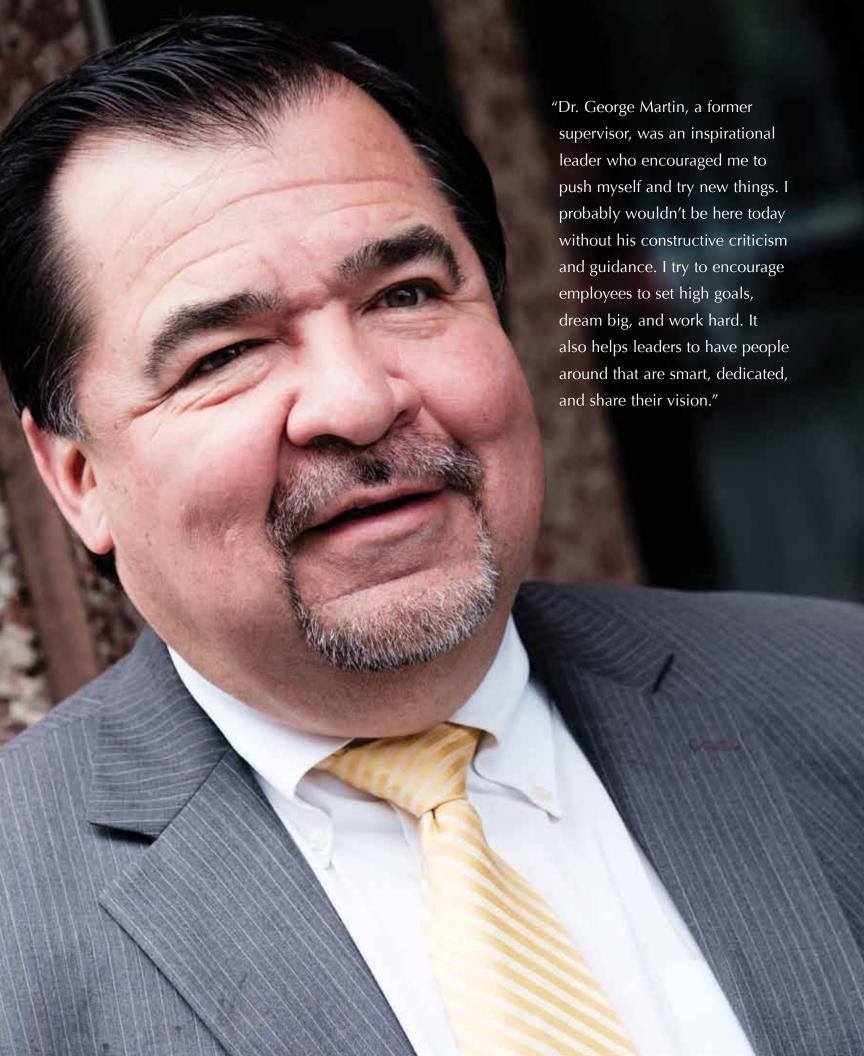
What are the strategic priorities of the USDA's Food and Inspection Service? How is FSIS ensuring this country's food is safe and uncontaminated? Alfred Almanza, Deputy Under Secretary for Food Safety, U.S. Department of Agriculture joined me on *The Business of Government Hour* to share his insights on these topics and more. The following is an edited excerpt of our discussion complemented with additional research.

Would you tell us more about the USDA's Food Safety and Inspection Service (FSIS)?

Alfred Almanza: FSIS is the public health agency in the U.S. Department of Agriculture responsible for ensuring that the nation's commercial supply of meat, poultry, and processed egg products—whether domestic or imported—is safe, wholesome, and correctly labeled and packaged. FSIS applies the mark of inspection to meat and poultry products before they are allowed to enter commerce.

FSIS enforces the Federal Meat Inspection Act, the Poultry Products Inspection Act, and the Egg Products Inspection Act, which require federal inspection and regulation of meat, poultry, and processed egg products. FSIS also enforces the Humane Methods of Slaughter Act for livestock, which requires that livestock be handled and slaughtered in a humane way. The USDA mark of inspection gives American consumers confidence in the safety of our food supply.

FSIS employs approximately 9,000 permanent full-time employees (including 622 in the Washington, DC area and 8,429 in the field). We have ten district offices (Alameda, CA; Atlanta, GA; Chicago, IL; Dallas, TX; Denver, CO; Des Moines, IA; Jackson, MS;, Philadelphia, PA; Raleigh, NC; and Springdale, AR). These employees work in approximately 6,389 federally regulated establishments, three FSIS laboratories, 127 ports-of-entry, and 150,000 in-commerce facilities nationwide. The agency ensures that the public health requirements are met for over 145.2 million head of livestock and 9.17 billion poultry carcasses. The Fiscal Year (FY) 2017 budget request for FSIS is \$1.030 billion. This includes an \$8.5 million increase to modernize scientific approaches to food safety.



I'd like to understand your responsibilities as the leader of USDA's food safety effort and the unique challenges you face in this role. Would you elaborate?

Alfred Almanza: As deputy under secretary and acting administrator, I am responsible for making sure the agency functions effectively and that it implements the best new food safety inspection approaches. In the deputy under secretary role, I am responsible for ensuring that USDA is effectively carrying out its food safety mission. That means testifying in front of Congress each year for our agency's annual budget request and traveling around the world to meet with government leaders responsible for food safety.

Modernization is one key challenge that I'm dealing with today. This effort entails making the inspection more automated and science-based. When I arrived, the inspection process was completely paper-based. I want to have inspection tools that capitalize on the latest technology and can capture the date, store it, and share it. Today, we have approximately 3,000 employees that work in slaughter plants doing slaughter inspection every day that don't have this ability and can't communicate with us from the field.

Along with modernization, I also started i-Impact, a new FSIS employee initiative to help our employees reconnect to the mission of our agency and demonstrate how every single employee has an impact on food safety and public health. i-Impact will assist each employee with drawing a line of sight from their daily work activities to the mission of FSIS. i-Impact will also help staff become familiar with the agency's statutes, strategic plan, and annual performance plan.

The third challenge is improving our efficiency. One key investment that we have been able to make thanks to congressional support is in the Public Health Information System (PHIS). PHIS captures data in automated and useful formats. The availability of this data provides for more timely and efficient analysis of food safety inspection related trends that drive our ability to take actions that enhance our ability to protect the public health.

What brought you to your current leadership role? Perhaps you could tell me who has inspired your leadership approach?

Alfred Almanza: My dad was a food inspector. He suggested I take the civil service test to be a food inspector, and this was right after my junior year in college. You would get a card in the mail letting you know if you passed or failed, with locations to which you were being offered a

position. I get this card in the mail. My dad says don't worry about it. I'll fill it out for you. Three days later I get this frantic call from this woman. I will never forget her name. She worked in the FSIS Dallas Regional Office back then. She asked: "Do you really want to go to Dalhart, Texas?" I said I suppose, why? She says because we can't get anybody to go there. I asked my dad why he signed me up for Dalhart, Texas? He said: "Well if you can survive there for a year you can survive anywhere."

Dr. George Martin, a former supervisor, was an inspirational leader who encouraged me to push myself and try new things. I probably wouldn't be here today without his constructive criticism and guidance. I try to encourage employees to set high goals, dream big, and work hard. It also helps leaders to have people around that are smart, dedicated, and share their vision.

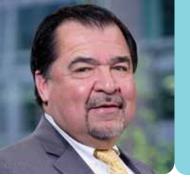
I'd like to set some context on a system most seem to take for granted. Most Americans purchase food for their family's dinner table with a high level of assurance that the food is safe. To that end, would you describe for us the current landscape of food safety? How does the farm-to-table continuum factor into the current state of the food safety lifecycle?

Alfred Almanza: Effective food safety strategy must address the entire farm-to-table continuum, not just what goes on within inspected plants. We must address pathogens at every level of the farm-to-table continuum, beginning from animal production. This is a challenge because we don't have jurisdiction over animal production, but we rely on partnerships and relationships with a common goal of food safety to work on this. We have worked closely with other food safety agencies to encourage adoption of HACCP (Hazard Analysis and Critical Control Point) systems all along the farm-to-table continuum. We place emphasis on time and temperature control, along with sanitation, as a means of preventing and reducing threads posed by pathogens.

Currently, the landscape of food safety in the United States is working well. We continue to modernize our inspection methods and to ensure that we are collecting data and using the most advanced science and technology available.

Would you outline for us your strategic vision for USDA's food safety agency and your key priorities?

Alfred Almanza: We are actually just about to release our new Strategic Plan for Fiscal Year 2017-2021.



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The goals for our next five-year plan will include: (1) preventing foodborne illness and protecting public health; (2) modernizing inspection systems, policies, and the use of scientific approaches; and (3) achieving operational excellence.

Strategic planning has contributed significantly to FSIS's increased efficiency and productivity. These outcomes have been a result of the hard work of our employees and adherence to the FSIS mission and goals. We have increased access to technology in the field, and over the next five years, we aim to build employee engagement and empowerment across the agency.

The first defense against a food contamination event is prevention. One of the most widely used tools for avoiding food contamination during production and processing is the systematic risk assessment system known as Hazard Analysis and Critical Control Points (HACCP). Would you tell us more about this system?

Alfred Almanza: Inspection changed from a sight, smell, and touch approach to a more science-based method when FSIS implemented its Hazard Analysis and Critical Control Points (HACCP) regulations between January 1997 and January 2000.

Our inspection activities include sampling ready-to-eat meat and poultry products for *Listeria monocytogenes* testing, sampling raw product for *Salmonella* and *Campylobacter* testing, and sampling raw beef products for testing certain strains of pathogenic *E. coli* (including *E. coli* O157:H7). In FY 2015, FSIS laid the groundwork for fully enforcing all HACCP validation requirements—those related to necessary in-plant data as well as those related to scientific support. The agency informed plants that they would need to analyze their validation methods to ensure that the scientific support matches their in-plant processes, and that they needed to have at least 90 days' worth of data to show that their plants met the critical operational parameters in their processes. The new validation verification procedures, which have been implemented

in large plants as well as in very small plants, will help to ensure that establishments' HACCP plans work as intended to address food safety hazards. To assist with this process, FSIS has provided plants with training, webinars, and the FSIS Compliance Guideline: HACCP Systems Validation, a document designed to help small and very small meat and poultry plants meet the validation requirements.

How is FSIS using advanced analytics to improve its ability to analyze current and future data and help analysts in turning it into useful information?

Alfred Almanza: To bolster its modernization efforts, the agency is focusing on a theme of investment so that we can build on our ability to utilize the results of our analyses, enhance the value of our data, and improve our sampling methods. Today, FSIS relies on scientific analysis when making decisions. All decisions and policy changes need to be supported by sound science. Using scientific risk assessment, our agency policies are focused on mitigating foodborne risks for consumers.

Our key area is testing gaps for product classes and pathogens that need to be addressed. Using an interactive approach, FSIS will begin testing to fill in these gaps, and the agency will learn more about contamination and pathogen prevalence for these products and pathogens. This knowledge will potentially allow FSIS to establish new standards and rules and to help better direct future efforts at determining better ways to improve food safety.

Scientific advances in whole genome sequencing and lab analysis will further increase the quality and quantity of data that we can use to reduce foodborne illnesses. FSIS's Advanced Analytics initiative is improving FSIS's ability to analyze current and future data and helping our analysts in turning it into useful information.

When combined, whole genome sequencing and Advanced Analytics should help us to greatly decrease illnesses by informing our enforcement activities.

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Would you tell us more about FSIS's efforts to enhance the inspection of exports and imports?

Alfred Almanza: Before FSIS-regulated products can enter this country, the agency determines whether the food safety regulatory system of any country that wishes to export to the United States is equivalent to that of the United States. Once FSIS finds a foreign country's food safety system for meat, poultry, or processed egg products to be equivalent, FSIS inspects eligible products from that country at U.S. points-of-entry. With respect to international stakeholders, the FSIS Office of International Coordination (OIC) within the Office of the Administrator serves as the agency's point of contact to coordinate and address international issues. OIC represents FSIS in contacts with foreign governments on all FSIS regulatory matters, working in concert with other USDA and federal agencies with international responsibilities to ensure the safe import and export of FSIS-regulated products.

In recent years, FSIS has also improved and streamlined our Self-Reporting Tool (SRT), an equivalence questionnaire used by foreign countries to obtain or to maintain eligibility to export FSIS-inspected products to the United States. The SRT is the means by which foreign countries collect key information on their food safety systems for consideration by FSIS. In FY 2015, a total of 32 countries uploaded their responses to the core questions into PHIS. Based on its review of the SRT information, the agency decides whether there is a prima facie basis to conclude that the country has an equivalent system. If FSIS finds that there is, it will schedule an on-site audit of the country's food safety system.

To keep the public safe, FSIS also conducts outreach and educational awareness. Would you elaborate on your key consumer and stakeholder outreach efforts?

alfred Almanza: To keep the public safe, we conduct outreach and educational awareness efforts to small and very small plants and to the millions of Americans who consume our products every single day. With more than 90 percent of the 6,389 FSIS inspected plants considered small or very small operations, FSIS has a Small Plant Help Desk that serves to assist plant owners and operators with questions. During FY 2015, the Small Plant Help Desk received and

responded to 2,031 inquiries in person, over the phone, and via e-mail. In addition, FSIS publishes compliance guides and hosts webinars that help small plants comply with new or modified FSIS regulations.

For 30 years, the USDA's Meat and Poultry Hotline has enabled consumers to ask questions or report incidents of foodborne illness. The hotline receives more than 80,000 calls each year and helps prevent foodborne illness by answering questions about the safe storage, handling, and preparation of meat, poultry, and processed egg products. The hotline also answers calls in English and Spanish, through an online chat, and a virtual Q&A system.

In conjunction to updating its standards and implementing measures, FSIS has been using multiple avenues to promote food safety awareness. The Food Safe Families campaign began in 2010 as a unique collaboration between FSIS, FDA (Food and Drug Administration), and CDC (Centers for Disease Control and Prevention) to educate consumers about the dangers of foodborne illnesses and how to make safer choices at home. A key element of this multimedia campaign is public service advertising developed in coordination with the Ad Council. The FoodKeeper app, launched in April 2015, offers mobile users valuable storage advice about more than 400 food and beverage items, including various types of baby food, dairy products, eggs, meat, poultry, produce, seafood, and more. To date, the app has been downloaded more than 100,000 times.

To learn more about the USDA's Food Safety and Inspection Service, go to http://www.fsis.usda.gov/wps/portal/fsis/home



To hear *The Business of Government Hour* interview with Alfred Almanza, go to the Center's website at www.businessofgovernment.org.



To download the show as a podcast on your computer or MP3 player, from the Center's website at www.businessofgovernment.org, right click on an audio segment, select Save Target As, and save the file.



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