

*Food Safety Institute of
the Americas*

Integrating Food Safety Education, Information, Communication,
and Outreach in the Americas

Concept Paper

Goals and Benefits

Today people can consume new products from different climates and enjoy traditional seasonal favorites year round. But the explosive growth of the international food marketplace also brings the possibility for unsafe food to reach much larger populations. Countries are now more dependent on each other's safeguards to guarantee their citizens a wholesome food supply and protect the public health of citizens throughout the Americas.

The nations of the Americas make up a regional community ever more closely entwined in the challenge of ensuring food safety and security. An open and effective exchange of information and education on food safety risks and on how to control those risks can play a critical role in improving the food safety and public health of the region.

To address these concerns, USDA has established a Food Safety Institute of the Americas (FSIA) to bring together the multifaceted food safety resources within the Western Hemisphere in order to address critical issues in regional research and development, information and education, and policy harmonization. The institute will coordinate programs that focus on food safety related to practices that create the opportunity for increased microbiological and unsanitary conditions to occur in food products from the farm to the table.

We plan in this project to enlist the resources of the international regulatory, academic, public health, industrial, and consumer communities at all levels to set food safety goals and priorities, to harmonize and better distribute our existing assets, and to eradicate the weaknesses we find within our current food protection systems. We envision the FSIA not as a traditional educational facility, but rather as an institution that can harness and draw on the immense expertise, scholarship, and experience of the region's food specialists. This proposal envisions a collaborative, multi-organizational effort involving partnerships with Western Hemisphere governments' animal health and public health institutions, industry, international organizations, and academic institutions.

The FSIA can be an innovative mechanism to drive the coordination of the planning, prioritizing, and delivery of food safety education, information, and communication in our regional marketplace. Such a

mechanism could multiply effective leveraging of resources, minimize duplication, provide greater access, and provide for more efficient delivery of food safety information and education at lower costs.

The partnership and collaboration among FSIA member institutions and organizations will significantly contribute to a reasoned dialogue about food safety and security issues of concern. Such an organization can also promote the development of science-based international food safety standards. The common language of science will serve to enhance understanding of the policies and procedures within the activities of the Codex Alimentarius Commission. The development of the FSIA and the outreach activities of Codex can synergize the improvement of public health in all communities in the Americas.

The FSIA will direct its attention to the development of educational and informational programs needed to meet the unique needs of countries within the region. However, the FSIA can also provide an important element of technical assistance beyond educational efforts by helping countries look at their complete farm-to-table food safety systems. By helping FSIA member countries and institutions conduct comprehensive self-analysis of their systems, the technical expertise of the FSIA can be brought to their priority food safety issues.

Participants need to work together to ensure that all governments understand the importance of cooperation in ensuring food safety and that all countries are able to fully participate in international policy making.

In the Americas today, the adequacy of national agricultural health and food safety assessment services varies significantly with regard to regulatory mechanisms, technical capacity, and overall institutional sustainability. A 2001 Inter-American Institute for Cooperation on Agriculture (IICA) analysis of 31 developing countries in the Americas pointed up a substantial difference in the level of advancement with regard to these three components. The lack of institutional sustainability was the most notable—and largest limiting factor—in forging national food safety services that can address emerging threats and opportunities.

The goal of this effort will be the establishment of a viable, self-sustaining organization that will harmonize and seed food safety education, information, and communication efforts throughout the Americas. FSIA will provide major outreach activities to identify,

develop, and coordinate educational programs and promote the development of international food safety standards.

Overall, the FSIA will help to:

- Identify the region's existing food safety programs
- Provide the region with greater access to food safety information and the technical assistance necessary to ensure the safety of meat, poultry, and egg products
- Meld food safety information, communications, and educational efforts into a coordinated activity that will minimize duplication and distribute resources among FSIA partners
- Promote the activities of the Codex Alimentarius Commission to bring about standardization of food safety requirements
- Act as a forum for scientific discussion relevant to food safety and international standards in the Americas
- Provide more efficient delivery of information and education at lower costs
- Encourage and support development of science-based agreements that strengthen national and local economies
- Meet the critical needs in the region for basic management, leadership, and communication skills.

FSIA Colleges

The FSIA is considering establishing major food safety areas of interest into "colleges" or subject matter areas and entrust their stewardship to centers of academic and professional expertise. While a single university might, for example, be selected to assume primary responsibility for oversight of a specific field, FSIS will encourage the establishment of consortiums and partnerships to nurture each area. The FSIA will seek to tap into existing networks of universities and organizations within North, South, and Central America and the Caribbean.

In our present planning, the FSIA is considering nine colleges when fully operational. These would address the most pressing needs of the region. At present, we envision these colleges to be: (1) the Codex Alimentarius Commission, (2) Regulatory Foundation Studies, (3) Food Security, (4) Manufactured Foods, (5) Public Health Studies, (6) Animal and Food Production Studies, (7) Retail Programs, (8) Laboratory Studies, and (9) Consumer Education and Information

Programs. A brief description of each of these subject matter areas follows:

- Codex: This college would offer programs and materials to address the unique needs of individuals and governments involved in Codex activities or those who desire to have a greater understanding of international standards and guidelines, their development, and related materials.
- Regulatory Foundation Studies: This college would offer basic training and education programs for government inspection and compliance officials. Topics could include import program equivalency, microbiology, Hazard Analysis and Critical Control Point (HACCP) system principles, sanitation, prerequisite programs, corrective actions, and verification.
- Public Health Studies: Public health professionals inside and outside governments would be the main target audience for this college. Programs would serve to enhance the understanding of risk assessment, risk management, and risk communication; epidemiology; surveillance; traceback; and foodborne disease training.
- Food Security: This college would address concerns about food security and would be designed for a wide audience of government and private and public health personnel. Programs and information would include detecting and preventing threats to the safety of the food supply.
- Manufactured Foods: Programs in this college would address the needs of government regulators and private sector food manufacturing personnel including small production facilities. The focus would be on enhancing safe food production practices and practical programs in areas such as HACCP plan development, hazard analysis and critical control point identification, validation, sanitation, and recordkeeping.
- Animal and Food Production Studies: This college would focus on topics of interest to the producer community as well as practicing veterinarians and governments. Topics could include on-farm production, quality assurance programs, farm bio-security, sanitation, and the role producers have in improving the safety of food.

- *Retail Programs*: This college would focus on the food safety concerns of retail sector personnel. Topics could include personnel hygiene, cross-contamination, time and temperature controls, FDA Food Code standards, and other retail issues.
- *Laboratory Studies*: This college would enhance the expertise of governmental and nongovernmental laboratory personnel and provide food safety courses and information on basic laboratory skills, safety, analytical methods, and quality assurance.
- *Consumer Education and Information Programs*: This college would address the food safety issues and concerns of the average consumer. Topics would concentrate on food safety in the home and how governments and the private sector can deliver that information in a useful and effective manner. The college would involve educational programs already in place, such as Fight BAC![®] and Thermy[™].

Potential Participating Organizations and Institutions

There are many organizations—academic, governmental, and nongovernmental—with wide-ranging expertise that would make them potential partners in the development and implementation of the FSIA. The region has a number of scientific food safety and academic organizations that represent established networks that can do much to enhance the program. Such organizations have missions and visions that provide solid foundations for the FSIA to build upon.

Program Development

FSIA partners will develop programs, materials, and courses with an emphasis on filling gaps in existing food safety knowledge rather than duplicating information that already exists. It will, therefore, be incumbent on the Institute and its partners to survey what programs and courses already exist, incorporate these existing programs into the curriculum to the extent possible, and devote the greatest share of resources to where the information need is the greatest.

Further, this survey can become a component of a broader and more comprehensive self-analysis of a country's farm-to-table food safety system. Therefore, a program of technical assistance can be developed that will address critical food safety infrastructure while also enhancing the expertise of the people within that system.

Because academic institutions throughout the region will serve as key participants, the FSIA intends to go beyond offering individual educational courses and information programs. Courses and materials can be organized into curricula for continuing education and certification as well as for creation of formal undergraduate and graduate degree programs in the area of food safety. Although these programs cannot be developed immediately, they can be designed and built incrementally as the FSIA begins to mature. It is important to identify such existing courses and programs before beginning to develop new ones within the FSIA.

For example, the Pan American Health Organization (PAHO) is in the process of developing a Master's Program in Food Safety expected to be launched in 8 months. This could become an important part of the FSIA program and serve as a model for additional course offerings. PAHO has indicated an interest and willingness to collaborate with FSIA as the two efforts develop.

Funding

The creation of the FSIA needs the support of many individuals and organizations to deliver an effective, efficient, and successful outreach program. Human efforts, however, require a substantial investment of funds if long-term growth of the FSIA is to be sustained. U.S. Federal agencies such as the Food Safety and Inspection Service and the Food and Drug Administration are restricted to the degree to which they can provide monetary support for projects such as FSIA. Therefore, the program cannot rely solely on Federal dollars to survive. Similarly, academic institutions may be significantly restricted in the support they can provide despite their enthusiasm and recognition of the program's merits.

Therefore, the FSIA must focus on becoming a self-sustaining outreach program. Long-term, the nongovernmental organizations and institutions collaborating on the creation of the FSIA must be prepared to provide a share of the monetary support.

Planning

There should be a long-term, 3- to 5-year plan including goals, objectives, and action items for creating an effective and self-sustaining Food Safety Institute of the Americas.

Evaluation

No program can flourish without constant attention to the strengths and weaknesses that appear as it begins to evolve. Clearly, program evaluation must play a critical role in the long-term success and sustainability of the FSIA proposal.

Such continuing evaluations must be built into the structure of the FSIA to ensure that the program is constantly assessed, that there is a clear opportunity to demonstrate the effectiveness of the outreach effort, and that there is continuing improvement in the products and services that the FSIA provides.

Summary

The FSIA is an ambitious program, and its development will be challenging. A successful FSIA will contribute to improving food safety in the Americas by serving as a forum and resource for scientific information on food safety. It will provide access to information necessary to ensure the safety of meat, poultry, and egg products and the possible transport of diseases of concern. It will provide to its participants:

1. Technical assistance to address critical problems within the overall food safety system and methods to help solve those problems;
2. Public health information on foodborne outbreaks and emerging diseases in humans;
3. Current disease status affecting human health in different areas;
4. Information on new human illness outbreaks, including new and emerging diseases; and
5. Current research being done on food safety, food security, and public health.

Moreover, the FSIA will help establish important networks and working relationships among the collaborating countries through regular interaction of food safety and regulatory officials; researchers; public health officials; meat, poultry, and egg processors and producers; consumers; and animal producers. Enhancing and fostering these communication networks are critically important in managing food safety concerns region-wide and improving understanding about requirements for imported and exported products.

Finally, the FSIA will serve to integrate dissimilar food safety information, communication, and educational efforts into a coordinated and unified activity. Under this program, an educational offering in food safety at one institution would be available to the entire FSIA community and be linked to other programs in other institutions. Such collaboration will minimize duplication and leverage resources collectively among the FSIA partners in a way that will go beyond what their individual personnel and funding sources can achieve alone.

The FSIA will blend the important technical assistance with building the expertise of the people within each country's food safety chain. Participants need to work together to ensure that all governments understand the importance of cooperation in assuring food safety and that all countries are able to fully participate in international policy making.

Appendix

FSIA Development Activities and Measures

Goal

The goal of the FSIA is to improve public health in the Americas by expanding the dissemination of science-based food safety knowledge throughout the region.

Outcome

The outcome of this effort will be the establishment of a viable, self-sustaining Food Safety Institute of the Americas that brings together disparate food safety resources in an active partnership focused on:

1. Institutionalizing, coordinating, and harmonizing food safety education, information, and communication in the region, and
2. Promoting the development of science-based food safety standards throughout the Americas.

Activity 1: Establish the Institute FY 2005

Measures

- Identify and invite member institutions.
- Conduct a needs assessment and course survey.
- Complete a draft strategic plan and develop a final strategic plan of vision, goals, objectives, action items, and priorities.
- Determine funding needs and sources based on the plan.

Activity 2: Build the FSIA Infrastructure FY 2005

Measures

- Begin planning/discussions among colleges of programs, modules, information, and curriculum to be offered within their subject area.
- Identify food safety information programs that exist among the FSIA partners and identify gaps where materials do not exist.
- Designate a partner to create and maintain a web presence that reflects decisions of the FSIA and illustrates the FSIA structure.
- Identify/develop plans for technology components needed.
- Establish permanent funding for the FSIA.

Activity 3: Program Evaluation/Growth FY 2006 and beyond
Measures

- Establish high-priority FSIA colleges as well as the lead organizations or universities for each FSIA college.
- Extend topical areas to food safety beyond meat, poultry, and eggs.
- Offer programs under the FSIA colleges.
- Create a multi-level evaluation program to ensure that programs meet needs, change behavior, and provide a return on investment.
- Expand partnerships to enhance the diverse nature of the FSIA by incorporating additional programs and links to food safety programs.
- Maintain and enhance the self-sustaining nature of the FSIA.