

Food Safety Education

OBJECTIVE

At the end of this module, you will be able to:

1. explain the goal of the FSIS food safety education program.
2. identify the highest risk populations for foodborne illnesses

INTRODUCTION

This module will introduce you to the FSIS food safety education program.

FSIS public educational programs have considerable science-based planning strategies to:

- reach the “general public;”
- utilize marketing principles to “sell” food safety behaviors; and
- target those most at-risk for foodborne illness.

The success of food safety education has been recently documented in studies. For example, consumer’s knowledge and use of food safety practices is increasing. Consumers are demonstrating a greater awareness of foodborne pathogens and risks.

Recent consumer research has proven that consumers report making changes in how they handle and prepare food. These behavior changes have been attributed to food safety education information provided by the media

Consumers are confident in themselves and the food supply. However, many do not follow some recommended safe handling practices. Because of the last point, FSIS has partnered with many organizations and agencies to improve safe handling practices.

FOOD SAFETY EDUCATION PROGRAMS

FSIS has 5 key education programs to reach the general public. They include the following:

1. The USDA Food Safety Mobile
2. The Meat and Poultry Hotline
3. The Fight BAC!TM Campaign
4. Cooking for Groups
5. Science and Food Supply Program for High School

The USDA Food Safety Mobile:

This is the newest addition to the successful FSIS consumer educational campaign.

The USDA Food Safety Mobile, a bus, travels all over the country. FSIS personnel who are staffing the bus attend a variety of local events and use those events as opportunities to educate the public about the practices for safe food handling. The schedule of the Food Safety Mobile is posted in an Outlook public folder, and on the FSIS website. If the bus is in your area, work with your supervisor to make sure those at work; and, in your community are aware of it. You can also let the Food Safety Education staff know of an event planned in your area and it may be possible to have the bus there if planned well enough in advance.

The Meat and Poultry Hotline:

The Meat and Poultry Hotline is one of the most important public service outreach activities. It is staffed by food safety experts who can answer a variety of questions from all types of callers. The Hotline receives over 100,000 calls annually. Most callers want to know basic food safety information. Any information that callers share about food safety complaints is entered into the FSIS Consumer Complaint Monitoring System so that emerging or on-going problems can be investigated.

The Fight BAC!™ Campaign:

The Fight BAC!™ Campaign is an example of FSIS partnership in action. This has been a successful public service campaign for several years now with all aspects of the food industry including retail stores, restaurants, consumer groups, states and other government agencies. All of these groups distribute the brochures of the campaign. You may have seen the public service announcements on television or heard them on the radio. Your children may have brought some of the campaign materials home from school.

The Fight BAC message is simple:

- Clean off BAC.
- Separate - don't cross contaminate and spread BAC.
- Cook to the right temperature to kill BAC.
- Chill foods properly- don't let BAC grow!

This is a simplified version of basic food safety principles. The Fight BAC caricature is very popular with kids!

Cooking for Groups:

Cooking for Groups has been another key public service campaign. FSIS has produced a Volunteer's Guide to food safety. Currently over 370,000 brochures have been distributed in English and 70,000 have been distributed in Spanish. This guide reached over 60 million people when it was released through newspaper articles.

Science and Food Supply Program for High School:

FSIS has joined a national coalition with the CDC to deliver science-based food safety information to schools. This coalition information is being provided throughout the US educational system.

Go to the website www.FoodSafeSchool.org for more information on the latest materials and activities.

One of the most successful Food Safety in Schools program is the supplementary curriculum for Middle Level and High School Classrooms called “Science and Our Food Supply”, including food safety from A to Z - or everything from acidification to zoonoses/zoonosis. This curriculum was co-funded by the Food and Drug Administration and the National Science Teachers Association. The video “Dr. X and the Quest for Food Safety,” received an Emmy award from the National Academy of Television Arts and Sciences, Mid Atlantic Region for its creative and entertaining approach to teaching food safety.

The modules are:

1. Understanding bacteria
2. Farm
3. Processing and Transportation
4. Retail and Home
5. Outbreak and Future Technology

To keep up with the latest information on Science and Our Food Supply, you can log onto to FDA’s website: FoodSafety.gov.

FSIS has partnered with [Health Schools, Healthy People Program SNAP](#) – School Network for Absenteeism Prevention, a hands-on initiative for middle schools that’s designed to help keep students in school and learning by improving overall health through promoting clean hands. The Centers for Disease Control and Prevention reports that hand washing is the most important thing you can do to keep from getting sick ([CDC - Handwashing: Clean Hands Save Lives](#)). Schools can use the SNAP program to increase student and staff hand cleaning and help them stay healthy. SNAP offers a free educational poster-toolkit that makes it easy to incorporate clean hands education into middle school curricula. The SNAP Toolkit has been piloted in schools in more than 40 states and Canada. You can get a school in your local area involved too - by downloading the SNAP Toolkit from the FSIS web site.

FOOD SAFETY EDUCATION MESSAGES

The following are some key food safety facts shared with the public in the public awareness campaigns:

THERMY

Cooking studies have shown that color is not a reliable indicator of food safety. Since E. coli O157:H7 is a major pathogen of concern for products FSIS regulates, the Agency worked closely with USDA Agriculture Research Service (ARS) to determine if consumers could really tell if a hamburger was cooked to a safe level by using the traditional method of looking at the color of the meat and juices. The study showed that cooking for food safety by color can be misleading. One out of 4 hamburgers turns brown before it reaches a safe temperature. The ARS concluded that using a food

thermometer is the only reliable way to determine if food is safely cooked. In 1994 Hotline survey, less than 50% of the callers reported that they owned a food thermometer. Most of those who had a thermometer used it only for the Thanksgiving turkey, if at all. Very few reported that they used it for all types of meat and poultry products.

Consumer attitudes about using a food thermometer included:

- Inconvenience -- "It's a hassle."
- Added expense to purchase a thermometer.
- Experience – they feel it is not necessary to use a thermometer – "they know when food is done".
- They have been cooking for years without experiencing any ill effects.

After receiving the results of this study, FSIS conducted scientific focus group studies to see what would cause people to change their behaviors to begin using thermometers to help them determine when food had been cooked to a safe temperature. The key finding of these studies was that behavior change is possible under the following circumstances.

Parents of young children are most likely to change behavior -but for their children only. Upscale cooks interested in quality foods might consider use of a thermometer to avoid overcooking.

After much development, FSIS launched the national campaign character "THERMY" who teaches: It's safe to bite when the temperature is right!



The Multi-Faceted Campaign included life-sized Thermy's visiting public relations and education events, brochures in several languages with specific temperature guidelines for all meat and poultry products, promotions using the T-stick in hamburgers and food thermometers for all cooked meat and poultry products.

Question: What temperature should ground hamburger reach to kill all pathogens?
Answer: 160 degrees F (71 degrees C) internal middle temperature, or when the T Stick turns black after 5 seconds inside the hamburger. If ground beef is still pink inside, don't eat it. This is critically important especially for the young, elderly or immuno-compromised.

FSIS believes the Thermometer campaign has been successful. A 2001 national survey shows:

1. 60% own a food thermometer, up from 46% in 1998;
2. 6% use a thermometer when cooking hamburgers; up from 3% in 1998;
3. Industry sales data show an increase in sales of thermometers.

Listeria

Another key educational campaign concerns *Listeria*. It targets persons who are most at risk from the effects of listeriosis. Listeriosis primarily affects pregnant women (the fetus) and infants, senior citizens, and persons with weakened immune systems and chronic illnesses.

FSIS conducted focus groups with pregnant women. We found that they were confident in their ability to handle food safely, but did not always follow safe practices. They were also unfamiliar with *Listeria monocytogenes* and the dangers of listeriosis; and, they were not aware that they are at risk. The study also found that these women did not get any type of food safety information from their doctors. They did not know to cook hot dogs and luncheon meats and did not know to avoid certain cheeses and other foods that have been implicated in outbreaks of listeriosis. They had not made any food handling changes since becoming pregnant. However, they were very willing to change when provided the information.

The focus group analysis findings were that:

- The best way to educate pregnant women on steps they must take to prevent listeriosis is through their doctor or caregiver.
- Obstetricians, nurses and other care providers must be made aware to inform patients.
- Information should be widely disseminated through books, magazines, and web sites.

The Agency also published *Listeria Facts* with the CDC and distributed them throughout the public health and medical communities. Currently a low-literacy brochure is also under development.

Education package for senior citizens

Another key public service educational campaign for high risk consumers is the educational package for senior citizens entitled, "To your health! Food Safety for Seniors." It includes a video and a brochure. It is distributed to senior centers and educators.

FSIS is working on reaching immuno-compromised audiences. There is research underway at Ohio State University through a CSREES grant on the following:

- HIV/AIDS populations

- Bone marrow transplant patients
- Solid organ transplant patients
- Senior citizens
- Solid organ cancer patients

One of the most successful public service partnerships is the one that produced the Physicians Primer. The American Medical Association, CDC, FDA Center for Food Safety and Applied Nutrition and FSIS partnered to produce, "Diagnosis and Management of Foodborne Illnesses: A Primer for Physicians".

In summary, our public health educational, and regulatory goal, is to eliminate BAC.

DIRECTIVES

There are two Directives related to communicating and interacting with groups outside of FSIS that you should be familiar with. One is Directive 1050.1. It covers the guidance on requesting participation at meetings and events, such as the ones we have been talking about, like fairs or other public events where we can promote the food safety message, including recruiting events. The other is Directive 1240.1. It covers communicating with external entities, such as the media, Congressional staff, and others. Please review both of these directives and be aware that you are responsible for following this guidance.

Additionally, the new web-based Meetings Attendance System was added to the meeting request references on April 26, 2005. This system allows FSIS staff to enter information about outside meetings into the automated system, where that information is available for immediate review by the Assistant Administrators and the Administrator. Once you have entered your information in the system, you will receive an email message acknowledging that your request has been entered. Once reviewed, you will receive another email once your request has been acted on. This system does not replace the other steps as discussed in the Directives, but does help with the coordination of speaking engagements.

It's important that the message we deliver is accurate and consistent with Agency policy.