What’s New?
Food Safety Education Resources

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Mission

Increase awareness, visibility, and impact of food safety on USDA nutrition assistance programs and represent FNS programs in the wider Federal and State food safety community.
NEW! Resources

- Produce Safety
- Norovirus
- Food Allergies
- Employee Health and Hygiene
Fresh produce offerings in schools are expanding
  • Salad bars
  • Farm-to-school
  • School gardens

Increase in foodborne illness outbreaks associated with produce
  • Leafy greens, tomatoes, melons ...
Produce Safety Workshop

- FNS and the Joint Institute for Food Safety and Applied Nutrition (JIFSAN), October 2009
- Experts from industry, state agencies, school districts, universities, and others
- Goal: Identify produce safety issues in schools and develop an action plan to guide food safety education activities
- Proceedings available at: www.jifsan.umd.edu/events/event_record.php?id=40
Produce Safety Fact Sheet

- Available at: www.fns.usda.gov/fns/food_safety.htm or www.nfsmi.org
- Hard copies may be ordered from NFSMI
Best Practices for Handling Produce

- Purchasing and Receiving
- Washing and Preparation
- Hand Hygiene
- Serving
- Storage
- Training
- General Food Safety Practices
Recommendations for Specific Types of Produce

**MELONS**
- Avoid using whole melons that have visible signs of decay or damaged rinds (such as mechanical damage or cracking) due to increased risk that harmful bacteria may have contaminated the melons.
- Wash the outer surface of the melon thoroughly under running cool tap water to remove surface dirt. Scrub melons with a clean produce brush before cutting. Cut away any bruised or damaged areas before serving.
- Discard cut melons after 4 hours if maintained at 41°F or above. If possible, display cut melons in a refrigerated case, not just on top of ice.
- Display cut melons for a maximum of 4 hours without being kept cool with refrigeration or ice and discard uncut melons at the end of 4 hours.
- Mark the date on refrigerated cut melons to indicate that they must be consumed or discarded within 7 days.

**TOMATOES**
- Do not wash tomatoes in cold water. Use wash water temperatures that are at least 10°F warmer than the internal tomato temperature to prevent exterior bacteria from entering the interior of the tomato during washing.
- Ensure whole tomatoes are free from obvious signs of soil and skin damage, such as punctures, prior to cutting, slicing, or dicing. Either cut away any bruised or damaged areas, or do not use the tomatoes.
- Hold tomatoes at 41°F or below after cutting, including during display on serving lines and salad bars.
- Ensure the temperature of tomatoes purchased as fresh-cut (e.g., sliced, diced, or chopped) is 41°F or lower upon delivery and the tomatoes were kept cool continuously during transport. Reject fresh-cut tomatoes delivered at a temperature higher than 41°F.
- Mark the date on refrigerated cut tomatoes to indicate that they must be consumed or discarded within 7 days.
- Do not store cut tomatoes in direct contact with ice or water.

**LEAFY GREENS**
- Do not use leafy greens with visible signs of decay or damage because there is an increased risk of the presence of harmful bacteria. When in doubt about the use of decayed or damaged product, either remove the unsalable portions or do not use the leafy greens.
- Do not rewash packaged produce labeled "ready-to-eat," "washed," or "triple washed."

**SPROUTS**
Due to the increasing number of illnesses associated with eating raw sprouts, the Food and Drug Administration has advised all consumers—especially children, pregnant women, the elderly, and persons with weakened immune systems—to not eat raw sprouts as a way to reduce the risk of foodborne illness. All sprouts should be cooked thoroughly before eating to reduce the risk of illness.

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Should pre-washed produce be washed again?

Produce labeled “ready-to-eat,” “washed,” or “triple washed” should not be rewashed.
Does the water temperature matter for washing tomatoes?

Yes! Do not wash tomatoes in cold water. Use wash water temperatures that are at least 10°F warmer than the internal tomato temperature to prevent exterior bacteria from entering the interior of the tomato during washing.
When should produce be washed?

Wash produce just before preparation, not before storage.
Produce Safety University

- Collaboration between FNS and AMS
- 1-week in Fredericksburg, VA
- Focus on food safety farm-to-fork
- Resources will be available on FNS website in fall 2010
Norovirus—Leading Cause of Foodborne Outbreaks in Schools

Source: Venuto et al., 2010
Norovirus


Margaret Venuto, MA, MPH,
Brenda Halbrook, MS, RD,
Marion Hinners, MS,
Audrina Lange, and
Stephanie Mickelson, MHS

Food Safety Tab at www.fns.usda.gov

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The Stomach Bug Book

• The Stomach Bug Book: What School Employees Need to Know

• Developed with the National Education Association- Health Information Network
The Stomach Bug Book


• Hardcopies available from NEA www.neahin.org/HINPrograms/order.html
Recommendations for Decreasing the Spread of Illness

• Treat any vomiting episode as if it is norovirus and follow special cleanup procedures.
• Handwashing works and should be done frequently
Addresses Various Staff Roles and Settings

- Classroom Teachers
- Paraeducators and Teacher’s Assistants
- Bus Drivers
- School Nurse
- School Secretary
- Custodians
- Foodservice Staff
Cleaning and Sanitation Protocols

- Properly use and dispose of personal protective equipment
  - Gowns, face Masks, safety goggles, gloves

- Designate non-disposable equipment and supplies
  - Garbage bags, brooms, mops, buckets, disposable cloths and towels, bleach or other disinfectants
  - Do not use for routine cleaning
Norovirus Education Projects Underway

• NFSMI developing additional materials
  • Video on cleaning to prevent a norovirus outbreak
  • Employee Health and Personal Hygiene materials
  • Standard Operating Procedures
  • PowerPoint presentation and other training materials
• *The Stomach Bug Book* will be printed in Spanish
Food Allergies

- A hot topic for schools
- 18% increase in prevalence of food allergy in the past decade
- 4 of every 100 children have a food allergy

Recent Food Allergy Education

- Hosted a work group and expert panel on food allergies with CDC in January 2009
- Hosted 8 hour pre-conference session at SNA’s 2009 Annual National Conference in Las Vegas
- Presentations at conferences and meetings
Partnership with SNF on Managing Food Allergies in Schools

• 3-part webinar series hosted offered in 2009
• Archives available at www.schoolnutrition.org/foodallergies
• 4 15-minute Podcasts available in fall 2010
Upcoming Food Allergy Resources
Under development with NFSMI
• Fact Sheets
  • 8 Major Food Allergens
  • Reading Labels
  • Cross Contamination
  • Staff Training
• Video materials
Employee Health and Hygiene

- Based on FDA’s *Employee Health and Personal Hygiene Handbook*
- Guidance for Directors and Managers
  - Restricting or Excluding Ill Employees
- Guidance for Employees
  - Symptoms and Conditions that Should be Reported
Other Resources

- Food Safe Schools Action Guide
- Food Defense
Food Safe Schools Action Guide

www.foodsafeschools.org
Be Food Safe in ALL Environments
Update to Action Guide

• Incorporating user feedback
• Planned additions to include:
  • Food Allergies
  • Norovirus
  • Food Defense
Food Defense and Emergency Preparedness Materials

Emergency Readiness Plan: Guide and Forms for the School Foodservice Operation

A Biosecurity Checklist for School Foodservice Programs
Developing a Biosecurity Management Plan

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What Is Food Defense?

- **FOOD DEFENSE** is the protection of food products from intentional adulteration by biological, chemical, physical or radiological agents.

- **FOOD SAFETY** is the protection of food products from unintentional contamination by agents.
Why Target the NSLP?

NSLP offers:

• Vulnerable population
• Major emotional impact of harming children who are assumed to be safe at school
• Very large numbers of servings per day
• Very large batches of single food dispensed in any given day
• Transportation of foods
**Food Safety, Food Defense, and Emergency Management**

- Stand-alone food defense plan not necessary
- Is a component of the Emergency Management Plan, which could include the following:
  - Foodborne illness
  - Food recalls
  - Natural disasters
  - Pandemic
  - Civil unrest
Planning

Components of a food defense plan:

- Coordination with state/county/district plan
- Communication of a surveillance plan
- Identification of a chain of command
- Contact directory of key staff
- Clear identification of roles and responsibilities
- Includes drills or tabletop exercises
A turn-key TTX package that States or districts can use to conduct a TTX concerning food contamination in schools

Projected roll out in 2011

- Self-guided DVD
- Instructions and templates for meetings and reports
- Resource links
How the Tabletop Exercise Works

- **Scenario**: Contamination of a food product in the school lunch program with a focus on response
- One day (5 hours) facilitated discussion and feedback organized into functional tables:
  - Public Health
  - Medical Community
  - Emergency Management
  - School District
Coming Soon!

- Cooling Resources
- Inventory Tracking and Management Reference Guide and Training Resources
- Food Safety in Emergencies
Safe Cooling of Food

• Improper cooling practices lead to foodborne illness outbreaks
  • ~8% of foodborne illness outbreaks due to improper cooling

• In 5 of 8 elementary schools, cooling practices did not meet Food Code standards

• Schools questioned proper cooling techniques when developing food safety plans

Cooling Research

- Multiyear project, collaborating with
  - Food and Drug Administration, National Center for Food Safety and Technology
  - Moffett Center at Illinois Institute of Technology
- Provide
  - Effectiveness of various practices
  - Best practice recommendations
  - Pathogen growth models for varying conditions
Cooling Methods Studied

- Freezer
- Blast Chiller
- Ice Water Bath
- Chill Stick with Refrigerator

No Covering
- Aluminum Foil
- Plastic Wrap
Foods Studied

- Chili
- Marinara Sauce
- Macaroni and Cheese
- Taco Meat
- Rice
- Turkey or Pork Roast
Cooling Education

- Graphic depiction of cooling
NFSMI to develop educational resources:

• Video on cooling best practices
• Lesson plans
• Fact sheets
• Teaching activities
Inventory Tracking

- *Inventory Tracking and Management Reference Guide*
- Training materials
Food Safety in Emergencies

- Fact Sheet
- Topics include:
  - Power Outages
  - Flooding
  - Cleaning and Sanitation
  - Water Safety
  - Salvaging
  - Removing Odors
Questions?

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