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Session 4

Testing to Verify Product Safety Systems

Submitted by: Grocery Manufacturers Association



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GMA

Representing the Makers of the World's Favorite Food, Beverage and Consumer Products



Testing to Verify Product Safety Systems

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Agenda

1. Food protection challenges
2. Considerations in verification testing
3. Questions

Quality & Food Safety Challenges

- Diversifying **Portfolio**
- **Business** growing **globally**
- **Demographics** rapidly changing
- **Food Safety Systems** evolving
- **Environmental** landscape changing
- **Food recalls** eroding consumer confidence
- **Regulations** rapidly changing
- **Media reporting** of perceived risks increasing
- **Competition** increasing and improving

Eroding Consumer Confidence

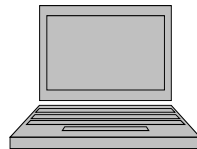
- 83% of North American consumers can name a product recalled due to safety concerns in the last two years
- 76% of consumers report they are more concerned today than five years ago about the food they eat
- 57% of consumers have stopped eating a particular product because it was recalled
- 60% of today's consumers are concerned about the safety of the food they eat, but less than 20% trust food companies to produce and sell safe foods

(Source: Deloitte, IBM 2009)

Crisis Management

The most critical time in a crisis situation is the first day or even the first few hours.

Especially in today's rapid fire, multi-media, digital world



Verification Testing

Verification

Those activities, other than monitoring, that determine the **validity of the HACCP plan** and that the **HACCP system is operating according to the plan.**

(NACMCF)

Limitations of Attribute Testing for “Control” of Product Safety

- Attempting to “**control**” your product safety testing is limited by the logistics of sampling and analysis time
- Often large sample sizes are required to achieve any type of meaningful results

For Example

- To evaluate a group of 40,000 containers
- Actual defect rate = 0.10%
- Sample size = 125 units
- Accept zero defects, reject on one
- Probability of **accepting** the lot =

90% (Mil Std 105 E)

Verification Strategies

- Use testing to verify controls, but not in lieu of controls
 - Testing, in itself, is not a control measure
- Design to detect target organism/analyte and sources
 - “seek and destroy” strategy
- Is flexible and dynamic in response to findings

Considerations in Verification

- Sampling strategies
- Target analyte
 - Microbes (yeast, bacteria, molds, fungi)
 - Chemicals (allergens, phenols, aldehydes)
 - Physical contaminants (glass)
- Validated or official methods
- Data review to enable corrective actions and track trends

Desired Outcomes

- Provides assessment and verifies effectiveness of control measures (receiving programs, supplier management, blending protocols, in-process controls, sanitation, etc.)
- Provides data for use to correct problem areas before they post a risk for finished product

Develop Written Program (SOP) for Verification Plans

- Sample sites
- Sample types
- Sampling frequency
- Sampling procedures
- Test methods

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Finished Product Testing as part of Verification

- Finished product (FP) testing based on risk evaluation
 - May be part of verification program
 - May be part of an event investigation
 - May be part of product release procedure
- Customer requirements
 - May require COA

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Considerations for in process and FP testing

- Develop a policy
 - Whether and when to test
 - Impact of a positive result (finding a problem) on finished product
 - Impact of a lot-positive on adjacent/associated lots
- Use validated or official methods
- Tested lot
 - Should be put on hold and isolated pending results
 - Retesting should not be done to negate the initial test result
 - Retesting can be done for investigational purposes, e.g., to determine contamination level

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Reasons to modify verification testing

- Industry events
 - Recalls, outbreaks, other regulatory activities
- Operational abnormalities
 - Roof leaks
 - Natural disasters – floods, earthquakes, etc
- Increase in adverse consumer comments
- Operational monitoring data indicates loss of control
- Verification testing reveals cause for concern
- Verification of corrective actions
- First time production
- Start up after extended down time
- Construction



¿Preguntas?


• QUESTIONS???

GMA Food Safety Courses

Workshop	Descriptions
HACCP Online course*	This online workshop provides flexible, affordable and effective training for food safety personnel who need to learn and apply the principles of HACCP in plan development and implementation.
GMA Online HACCP Follow-up Workshop	This course complements the online HACCP training by providing hands-on experience with the development of a "mock" HACCP plan to facilitate understanding of the online material. Completion of the online course is prerequisite to this 1-day certificate workshop. The online course plus this 1-day follow-up workshop meet the educational requirements cited in the FDA & USDA HACCP regulations.
Advanced HACCP, Verification & Validation	This workshop, accredited by the International HACCP Alliance, concentrates on verification activities included in the sixth principle of HACCP. It explores activities in-depth and how to implement them in a successful HACCP system.
HACCP Train the trainer	The HACCP Train the Trainer workshop is designed to prepare and qualify candidates as International HACCP Alliance Lead Instructors. In addition to providing a greater understanding of the 7 HACCP principles, the workshop covers adult learning styles and delivery techniques to more effectively present HACCP course material. Hands-on working group exercises facilitate the learning process.
Basic HACCP (Meat, Poultry, Juice, Seafood and Other Products as needed)	This introductory workshop, accredited by the International HACCP Alliance, is composed of lectures and group exercises. Each of the seven HACCP principles is discussed. The workshop focuses on strategies for HACCP plan development and implementation. GMA instructors can accommodate and provide lectures for specific areas of interest based upon the participants' needs.

*http://www.gmatraining.com/HACCP_Purchase_Info.html
All others: Contact Audrey Rubio, arubio@gmaonline.org


www.gmaonline.org

GMA Food Safety Resources

HACCP Materials:

- HACCP: A Systematic Approach to Food Safety - English http://www.fpa-food.org/store_product.asp?inve_id=221
- HACCP: A Systematic Approach to Food Safety - Spanish http://www.fpa-food.org/store_product.asp?inve_id=66
- PowerPoint slide sets to accompany the above HACCP manuals:
 - English: http://www.fpa-food.org/store_product.asp?inve_id=64
 - Spanish: http://www.fpa-food.org/store_product.asp?inve_id=196
- HACCP Verification and Validation: An Advanced HACCP Workshop
 - English: http://www.fpa-food.org/store_product.asp?inve_id=118
 - Spanish: http://www.fpa-food.org/store_product.asp?inve_id=69



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Other Courses Offered by GMA

- **Thermal Process Development**
- **Thermal Process Deviations**
- **Better Process Control School**
- **Aseptic Better Process Control School**
- **Food Labeling**

• Contact Audrey Rubio at: arubio@gmaonline.org