Meeting
Consumers Expectations
February 19, 2008
Savannah, GA
Gale Prince
gale@galeprince.com
Health Benefits
Nutrition

- 64% of us are overweight
- 30% are obese
- 20% are on a diet
- Consumers are making the connection between health and nutrition as judged by their purchase decisions

FMI Trends 2007
Nutrition

- 92% of consumers believe foods eaten at home is more healthful than choices they make when eating out
- 80% take nutrition into consideration when shopping
- About 50% read the Nutrition Facts Panel

FMI Trends 2007
Health Risk Perceived as "Serious"

- Contamination by Bacteria or Germs: 49%
- Product Tampering: 43%
- Avian Influenza: 38%
- Terrorist Tampering: 38%
- Pesticide and Herbicide Residues: 37%
- Antibiotics and Hormones Used on Poultry or Livestock: 25%
- Eating Food Past the Use-By Date: 20%
- Food Handling in Supermarkets: 20%
- Foods Produced by Biotechnology & GMOs: 20%
- Irradiated Foods: 18%
- Eating Food Past the Sell-By Date: 17%
- Additives and Preservatives: 16%
- Eating Food Past the Best-By Date: 14%

FMI Trends 2007
Consumer Confidence in Food Safety

• Major drop in confidence in safety of the food purchased

  – Supermarkets
    • 2005 it was 82%
    • 2006 it was 66%

  – Food Service
    • 2005 it was 66%
    • 2006 it was 42%
Consumer Concerns

• Consumer outrage on product safety
  – Top food story in 2006
  – Top food story in 2007
• Consumer response to Peanut Butter recall was substantial
• Pet food response topped consumer concerns of spinach and peanut butter recalls
• But pet food recall had two lives
  – concern of their pets
  – then shifted to question about human food
Consumer Concerns

“The ConAgra and Menu Foods incidents are as far apart as peanut butter and pet food...together they show how you can never let your guard down on food safety.”

Editorial Food Processing  May 2007
Do Recalls Always Happen Late Friday Afternoon?
Product Recalls Are Costly

• Preliminary costs reported by firms of recent recalls:
  – $56,000,000
  – $35,000,000
  – $60,000,000
  – $30,000,000
  – $37,000,000
  – $103,000,000
  – Firms ceased business

• These costs do not include litigation costs
• Nor does it include the cost in lost sales
Product Recalls Are Becoming More Massive

- 25 million pounds
- 22 million pounds
- 1.8 million pounds
- 143 million pounds
- Over a year’s production of peanut butter
- All production codes of chili sauces
- Multiple and extensive brands of pet food
- Over 600 different food products recalled in Europe
  - all related to one adulterated ingredient
- Millions of toys items recalled in recent weeks
Consumer Reaction
Consumer Reaction

• August 2007 Gallup Poll
  – Over 70% of consumers reported to having been impacted by recent food recalls
  – 62% say they have avoided buying certain brands or types of foods
  – 40% reported to have destroyed or returned recalled products
  – 25% worried by impact on their health

Gallup Poll taken prior to Chili Sauce Recall
Consumer Reaction to Recalls

- Harris Interactive Research-April 2007
  - 79% aware of food recalls for past three years
  - 29% felt recalls were “serious concern”
  - 55% would switch brands temporarily
  - 15% said they would never purchase the recalled product
  - 21% avoid purchasing any brand made by the manufacturer of the recalled product
Consumer Reaction to Recalls

• Harris Interactive Research-April 2007
  – News media 24 hour format
    • Repeated every 15 minutes
  – Proliferation of blogs
    • Consumers have access to more information about a brand’s not-so-shining moments
    • Once on the internet your story is there forever
  – Internet reinvents recalls months and years later
Consumer Reaction to Recalls

- Harris Interactive Research-April 2007
  - Disparity in consumer recognition
  - Oscar Mayer/Louis Rich 2 recalls
    - 14% thought it was Tyson
    - 3% named Perdue
    - 2% identified it as Oscar Mayer
  - Peter Pan
    - 42% identified Peter Pan
    - 8% identified Jif
    - 4% identified Great Value
    - 4% identified Skippy
Consumer Reaction

• Impact of major food safety issues on consumer purchasing decisions

  – 2005 only 6% said they would not purchase the product in the future

  – 2006 it rose to 38% said they would not purchase the product

FMI Trends 2007
Recall Challenges Ahead

- I do not expect recalls to decrease
- Disease investigative expertise has increased
- Can expect more massive recalls
- Media found recall information sells
- Consumers becoming more sensitive
Why the increase in food safety concerns and recalls?
Meeting Consumer Expectations

• It is time you take inventory of how well you address food safety elements in your operation!

• CDC and FDA demonstrated the advances in the science of epidemiology and communications has had in identification of product defects.
Food Net Sites

Represents about 15% of US Population

* Shiga toxin-producing *Escherichia coli.*
Foodnet 2006 data

Declines
- Campylobacter
- Cryptosporidium
- Listeria
- Shigella
- Yersinia

Little change
- Salmonella

Increase
- Vibrio
- E. coli O157

Morbidity & Mortality Weekly Report (MMWR)
Friday, April 13, 2007
CDC Outbreak Response and Surveillance Team
“Preponderance of the Evidence”
Foodborne Outbreak Data

- Epidemiology
- Traceback
- Trace forward
- Microbiology
- Environmental investigations
October 2006*

# Cases of *Salmonella* Tennessee (outbreak type) by month, USA 2004 - 2006

* Preliminary data
November 2006*

11/07/2006: 4 PFGE matches from Alabama Public Health Laboratory

- Public health depts notified of the cluster thru PulseNet

- Clear increase by end of month

* Preliminary information
December 2006*

# Cases of *Salmonella* Tennessee (outbreak profile)
by month, USA 2004 - 2006

* Preliminary data
January 2007*

# Cases of *Salmonella* Tennessee (outbreak profile) by month, USA 2004 – 2006

* Preliminary data
January 2007*
Developing possible explanations (hypotheses)

- 01/05/2007 CDC contacted states with cases for more epidemiologic information, including calls to Missouri, Pennsylvania, & New York.

- 01/10/2007 Conference call with all states;

- No links were identified.

- 01/16/2007 Decision taken to do “shotgun” questionnaire; collect detailed information including food exposures, including >300 foods

* Preliminary information
January 2007*
Developing possible explanations (hypotheses)

Interviews with sample of cases:


- Peanut butter eaten more compared with 2002 FoodNet population survey.

- 01/31/2007 Among, most recent cases: many ate peanut butter, one brand common, no other commonality.

* Preliminary information
February 2007*  Test the hypotheses

- 02/1-5/2007  Launch case-control study

- Requested laboratory testing of product samples from patient homes

- 02/10-13/2007 Results of case-control study
  increased risk from:
  - Peanut butter
  - Brand A peanut butter
  - Brand B peanut butter

No increased risk for other brands

* Preliminary information
February 2007*

- 02/13/2007 Results called to FDA
- 02/14/2007 FDA, CDC, Company conference call
- Brand A manufactured in a single facility X in SE USA.
- Production halted & Brand recalled with code “2111”
- Brand B with code “2111” also manufactured in same plant also recalled.

* Preliminary information
Confirmed cases (N=453)* of *Salmonella* Tennessee infection by state—United States, 2006-2007

*Figure 1*

*Preliminary data*

*Confirmed cases with date of illness onset reported as of 1:00 p.m. EDT on March 14, 2007.*
States with peanut butter positive for *Salmonella* Tennessee 2006-07 (03/14/2007)*

* Preliminary data

State public health lab with culture + product =
What does this tell us?

• The foodborne disease detectives have become very good!
• The science and electronic capabilities of epidemiology will continue to grow rapidly
• Electronic communications links all of this together with instant messaging.
What does this tell us?

• Now little problems in the past can now become major events!
• Failures of basic food safety elements can get your facility in the spotlight.
• What do customer complaints really say?
• Do not take unusual events lightly!
• FOOD SAFETY PROGRAMS ARE A KEY in prevention.
Recall Challenges Ahead

- Congress – GAO Report
- Congressional hearings
- Regulatory agencies have increased attention
- Efforts to centralization of consumer complaints
- Law firms specializing in foodborne illness
What is driving this change?

- E. coli ground beef recalls
- E. coli in spinach
- Listeria in Ready to Eat Foods
- Botulinum toxin in carrot juice
- Botulinum toxin in canned chili
- Salmonella in peanut butter
- Melamine in wheat gluten
- Lead contamination of toys
Meeting Consumer Expectations

Food Safety Does Not Just Happen
Meeting Consumer Expectations

- Consumers expect products they purchase are safe and wholesome
- In recent months their confidence level in food safety has been impacted
  - Outbreaks
    - Illnesses and deaths
  - Massive recalls
    - Millions of pounds of products
    - Millions of pieces of toys
Meeting Consumer Expectations

• Food Safety is a “BASIC ELEMENT”
• It is an essential part of the product design and production process
• It is a process that you must monitor
• It is a process that you must verify the systems in-place are working in delivery of a safe product.
Preventing Food Safety Problems

Protecting your Brand
And
Bottom-line
Preventing Food Safety Problems

• This presentation was designed to help you in fulfilling those consumer expectations by understanding:
  – Your product vulnerability to food safety issues
  – The microbiology of nut products
  – Critical control measures in your process
  – Importance of post process control measures
  – The plant environment
  – The impact of employee practices
Preventing Food Safety Problems

- Historical safety of pecans
  - Salmonella
  - Mycotoxins
- Risk assessment of pecans
  - Microbiological potential
Preventing Food Safety Problems

• Pecan trees
  – Land
  – Animals
  – Harvest
  – Transportation
Preventing Food Safety Problems

– Storage of harvested nuts
  • GMPs
  • Storage conditions to protect from contamination
    – Roof leaks
    – Pest problems
      » Rodents
      » Birds
      » Insects
Preventing Food Safety Problems

• Process controls
  – Decontamination steps
• Has the process been verified as to effectiveness?
• Do you get a uniform penetration?
• What about temperature compensation?
Preventing Food Safety Problems

• Cross contamination
  – Raw segregated from finished products
Preventing Food Safety Problems

• Protecting product after roasting
  – Plant environmental impact
    • Plant layout
    • Cleaning practices
    • Monitoring
Preventing Food Safety Problems

– The impact of people and people practices
  • People movement between raw and ready to eat
  • People practices
  • Maintenance staff
Preventing Food Safety Problems

• Product with added ingredients
  – Source
  – Safety

• Rework
  – Controls
Preventing Food Safety Problems

• Product coding and traceability
  – Code to ID plant
  – Product
  – Production line
  – Date
  – Time (Hour, Minutes, Seconds)
Preventing Food Safety Problems

• Compliance with GMP’s
• Employee Training
• Follow up...
  – Facility Inspections
    • Self
    • Third party
  – Control of Quality Audits
Preventing Food Safety Problems

- Regulatory inspections
- Expect changes in regulatory inspections on future visits
Preventing Food Safety Problems

Today you have an opportunity...
Responsibilities
Our Responsibilities

• **Moral**
  – To do what is right for our customers

• **Legal**
  – To meet regulatory requirements

• Both as a Corporation and Personally
Complacency

Is a self-satisfaction especially when accompanied by unawareness of actual dangers or deficiencies

Merriam-Webster Dictionary
Complacency

• “We have been in business for 67 years and we have never had a problem.”
• “We have always done it like that and it has never been a problem.”
• “The inspector didn’t say anything about that being a problem”
• The firm ceased business 6 days after a recall.
Complacency

• What about your operation?
• Have you as a manager become complacent?
• Are you taking things for granted?
• Are you accepting less than what you should?
Complacency

• As a good leader it is your job to manage an operation to avoid complacency.
• Are there some key things that you need to look at in your operation to address complacency and potential food safety problems?
• Do you have deficiencies that could lead to a major problem?
Complacency

• Unless you know you are RIGHT, it may not be the other guys problem next time!
Complacency

WE Cannot Accept A Complacent Attitude With

FOOD SAFETY
Food Safety is a Journey
Not a Destination!

We must continue to strive for improvements each and every day in protecting the consumer!
Thanks For Your Attention
Thank you for your attention