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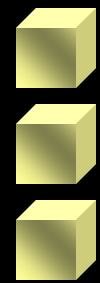
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Continuous Food Safety Innovation as a Management  
Strategy: How to Start One / How to Maintain One

David M. THENO

American Agricultural Economics Association - 2006  
Pre-Conference Workshop: New Food Safety  
Incentives and Regulatory, Technological, and  
Organizational Innovations  
July 22, 2006, Long Beach, CA



# *Continuous Food Safety Innovation as a Management Strategy*



*How to Start One / How to Maintain One*

David M. Theno, Ph.D.

Senior Vice President, Quality & Logistics

July 22, 2006



Jack in the Box Inc.

American Agricultural  
Economics Association



## *Why Food Safety Instead of Topic X*

❖ Simply Put:

It is the one thing you bet your business on every day.

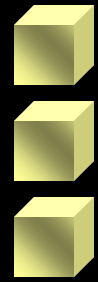




## *How to Start*

- ❖ Simply Put: Don't ask why not, ask why can't we?
- ❖ Keep in mind: Maxims stated numerous times do not become truths
  - Just because it hasn't been done doesn't mean it can't
  - It doesn't have to cost more just because someone said it did
  - You won't go to jail for trying to do better





# *Almost All Issues/Situations Have Someone Who is Doing Appreciably Better Than Everyone Else*

- ❖ What are they doing differently?
- ❖ How are they doing it?
- ❖ Why are they doing it?
- ❖ What do they think has made the difference?

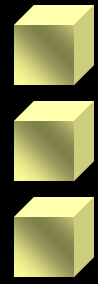




## *Some Real World Examples*

- ❖ Foster Farms
  - HACCP System
- ❖ Hormel's
  - HPP Process
- ❖ National Cattlemen's Beef Association
  - NCBA Summit on E.Coli
- ❖ Jack in the Box
  - O157:H7 Program
  - Restaurant Based HACCP





*Foster Farms*  
*Poultry Processing Facility*  
*1985 – Dr. Don Houston*

- ❖ First slaughter plant HACCP System
- ❖ Salmonella reduction efforts – chiller operation
  - Counterflow Chillers
  - Zones
  - Chilling Protocols
- ❖ Results discussion – Salmonella/Campy





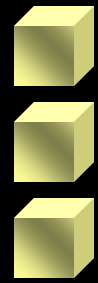


# *Hormel's HPP System*

## *Listeria Control*

- ❖ Shelf Life Extension
- ❖ Ingredient Simplification





## *NCBA – Summit on E.Coli O157:H7*

- ❖ Best Practices Forum
- ❖ Industry / Category Leaders
- ❖ Plans / Commitments
- ❖ Pledge
- ❖ Dissemination of Information
- ❖ Off Shoot Projects – CFS Coalition





## *Jack in the Box, Inc.*

- ❖ E.Coli O157:H7 Finished Product Testing Programs
- ❖ Restaurant Based HACCP Programs
- ❖ Industry Sharing

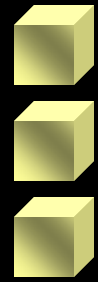




## *Where is Industry Today?*

- ❖ Leaders / Innovators
- ❖ Close Followers / Adopters
- ❖ Hell No We Won't Go!!

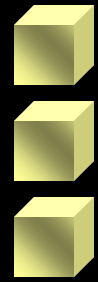




# *Business Model for Continuous Improvement in Food Safety*

- ❖ Business Requirements / Regulatory Incentives
- ❖ Customer Expectations
- ❖ Industry Consolidations – Free Market Incentives





## *Personal Model for Continuous Improvement in Food Safety*

- ❖ It's all about peoples health – not money
- ❖ You bet your business every day on one fundamental element
- ❖ The six year old mandate





**Dr. David M. Theno** is Senior Vice President, Quality and Logistics at Jack in the Box Inc. He is responsible for the company's product safety and regulatory compliance, as well as Menu Innovation, Research and Development, Operations, Purchasing, Distribution, Guest Service Systems and Guest Relations for all the restaurants. Prior to joining Jack in the Box in 1993, he was the Managing Director and Chief Executive Officer of Theno & Associates, Inc., an agribusiness-consulting firm located in Modesto, California. He has also directed food safety, quality and technical operations for Armour Food Company, Kellogg's, Inc. and Foster Farms.

Dr. Theno served as a peer reviewer for the U.S. Department of Agriculture/Food Safety Inspection Service's HACCP (Hazard Analysis Critical Control Points) study and is currently serving in his 5th term as a member of the USDA National Advisory Committee on Microbiological Criteria for Foods. He also served on the National Advisory Committee on Meat & Poultry Inspection in 1998. Dave is a member of the National Cattlemen's Beef Association Beef Industry Food Safety Council (BIFSCo) and on the Blue Ribbon Task Force for Solving the E-Coli O157:H7 Problem sponsored by the National Livestock & Meat Board. Dr. Theno is also the author of numerous scientific and trade publications on food safety and HACCP applications.

Dr. Theno was named the Nation's Restaurant News' 2000 Innovator of the Year and one of NRN's Top 50 Players for 1997, chosen for his leadership role in defining the new standard for foodservice safety procedures. He was also the 1997 recipient of the California Environmental Health Association's Mark Nottingham Award.

He received his bachelor's degree in zoology and science journalism from Iowa State University. He earned both his master's degree and his doctorate in food science and animal science from the University of Illinois.

[www.jackinthebox.com](http://www.jackinthebox.com)









**“New Food Safety Incentives & Regulatory, Technological & Organizational Innovations” - 7/22/2006, Long Beach, CA**

AAEA section cosponsors: FSN, AEM, FAMPS, INT

***Industry perspectives on incentives for food safety innovation***

Continuous food safety innovation as a management strategy

Dave Theno, Jack in the Box, US

Economic incentives for food safety in their supply chain

Susan Ajeska, Fresh Express, US

Innovative food safety training systems

Gary Fread, Guelph Food Technology Centre, Canada

***Organizational and technological food safety innovations***

Is co-regulation more efficient and effective in supplying safer food?

Marian Garcia, Dept. of Agricultural Sciences, Imperial College London

Andrew Fearne, Centre for Supply Chain Research, University of Kent, UK

Chain level dairy innovation and changes in expected recall costs

Annet Velthuis, Cyriel van Erve, Miranda Meuwissen, & Ruud Huirne

Business Economics & Institute for Risk Management in Agriculture,

Wageningen University, the Netherlands





**“New Food Safety Incentives & Regulatory, Technological & Organizational Innovations”** - 7/22/2006, Long Beach, CA (con’t)

***Regulatory food safety innovations***

Prioritization of foodborne pathogens

Marie-Josée Mangen, J. Kemmeren, Y. van Duynhoven, A.H. and Havelaar, National Institute for Public Health & Environment (RIVM), the Netherlands

Risk-based inspection: US Hazard Coefficients for meat and poultry

Don Anderson, Food Safety and Inspection Service, USDA

UK HAS scores and impact on economic incentives

Wenjing Shang and Neal H. Hooker, Department of Agricultural, Environmental & Development Economics, Ohio State University

***Private market mechanisms and food safety insurance***

Sweden’s decade of success with private insurance for *Salmonella* in broilers

Tanya Roberts, ERS, USDA and Hans Andersson, SLU, Sweden

Are product recalls insurable in the Netherlands dairy supply chain?

Miranda Meuwissen, Natasha Valeeva, Annet Velthuis & Ruud Huirne, Institute for Risk Management in Agriculture; Business Economics & Animal Sciences Group, Wageningen University, the Netherlands

Recapturing value from food safety certification: incentives and firm strategy

Suzanne Thornsburry, Mollie Woods and Kellie Raper

Department of Agricultural Economics, Michigan State University





**“New Food Safety Incentives & Regulatory, Technological  
& Organizational Innovations” - 7/22/2006, Long Beach, CA (con’t)**



***Applications evaluating innovation and incentives for food safety***

Impact of new US food safety standards on produce exporters in northern Mexico

Belem Avendaño, Department of Economics, Universidad Autónoma de Baja California, Mexico and Linda Calvin, ERS, USDA

EU food safety standards and impact on Kenyan exports of green beans and fish

Julius Okello, University of Nairobi, Kenya

Danish *Salmonella* control: benefits, costs, and distributional impacts

Lill Andersen, Food and Resource Economics Institute, and Tove

Christensen, Royal Danish Veterinary and Agricultural University, Denmark

***Wrap up panel discussion of conference***

FSN section rep. – Tanya Roberts, ERS, USDA

AEM section rep. – Randy Westgren, University of Illinois

INT section rep. – Julie Caswell, University of Massachusetts

FAMPS section rep. – Jean Kinsey, University of Minnesota

Discussion of everyone attending conference

Note: speaker is either the 1st person named or the person underlined.

**Thanks to RTI International for co-sponsoring the workshop.**





## ***“New Food Safety Incentives & Regulatory, Technological & Organizational Innovations” - 7/22/2006, Long Beach, CA (con’t)***

### ***Workshop objectives***

- Analyze how new public policies and private strategies are changing economic incentives for food safety,
- Showcase frontier research and the array of new analytical tools and methods that economists are applying to food safety research questions,
- Evaluate the economic impact of new food safety public policies and private strategies on the national and international marketplace,
- Demonstrate how new public policies and private strategies in one country can force technological change and influence markets and regulations in other countries, and
- Encourage cross-fertilization of ideas between the four sponsoring sections.

### ***Workshop organizing committee***

Tanya Roberts, ERS/USDA, Washington, DC - Chair

Julie Caswell, University of Massachusetts, MA

Helen Jensen, Iowa State University, IA

Drew Starbird, Santa Clara University, CA

Ruud Huirne, Wageningen University, the Netherlands

Andrew Fearne, University of Kent, UK

Mogens Lund, FOI, Denmark

Mary Muth, Research Triangle Institute Foundation, NC

Jayson Lusk, Oklahoma State University, OK

Randy Westgren, University of Illinois, IL

Darren Hudson, Mississippi State University, MI

