

# The challenge of consumer perception

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# The Question?

- We have the most productive agriculture and the safest food in the history of mankind
- We have more food safety accident reports today around the world, and the consumers have the perception that our foods are not safely produced.
- Why? (i.e., GMO)

# Agricultural Production



# Agricultural Production Trends

- **Production technology has advanced (QA replace QC, process control monitoring (HACCP), product inspection etc.)**
- **Strong government regulations.**
- **Consumer awareness and demand of safe food have increased.**

# Safe Foods

- Life expectancy in US is now 78 years and 2 month (females at 80 and ½, males at 75 and ½). The longest in history
- Unsafe food is not in the top 10 of the cause of death. (suicide, car accident and overdose are top 3.)

# Factors

- Technology has out paced social awareness
- World trade has increased potential problems
- Microbial mutation has speeded up
- Negative media reporting
- Zero risk concept

# Technology

- **Analytical capacity is way up. One can detect one microbial cell, when 1,000,000 or more cells are needed to cause food safety problem. Same to chemicals. Few people pay attention to the concentration factor, especially the non-scientists, thinks one cell is problem.**

# World Trade

- More foods are crossed the borders of many countries. Culture differences often cause conceptual food safety practices.
- Inspection techniques are improving but risk takers are increasing.
- Foreign foods do increases chances of mutation.



# Microbial Mutation

- **New host: Salmonella in spinach, Listeria in melons.**
- **Avian flu transferable to human**
- **New threat: Prion**

# Media Nature

- **Negative news sells paper. Food safety issues are perfect sensational topics.**
- **Few media reporters are trained in science reporting.**
- **Internet is the real concerns for the future.**

# Zero risk

- Not sure who started the marketing concept of zero risk? It is used throughout the food processing industry.
- People thinks they can control the food they eat better than most daily activities.

# Potential Solutions

- Education, education, education.
- Educate the government personnel, the industry staff (food safety culture), academicians, media, food handlers, and consumers.
- Repeat often the concentration factor and no zero risk factor in life to change consumer perception.