



# The Future of a Safer Global Food Supply

Frank Yiannas  
Vice President – Food safety

Saving  
people  
money  
so they  
can live  
better

**In order to prepare for  
the future, we must  
understand and learn  
from the past.**

# The History of Food Processing

- **2000 B.C.** - Here, eat this food quickly before it spoils.
- **500 B.C.** - That food spoils fast. Here, salt it.
- **1845 A.D.** - That salt tastes bad. Here, place that food on ice.
- **1850 A.D.** - That ice melts fast. Here, place that food in a refrigerator.
- **1864 A.D.** - That food still spoils. Here, pasteurize it.
- **1980 A.D.** - That pasteurized food doesn't last long enough. Here, irradiate it.
- **1997 A.D.** - That irradiated food is bad for you. Here, eat this "all natural fresh" stuff.
- **2000 A.D.** - That "all natural fresh" stuff goes bad. Here, eat this food quickly before it spoils.

# In the News

## Source of tainted spinach finally pinpointed

Calif. ranch likely responsible for E. coli outbreak that killed 3 people

## China's food safety woes now a global concern

Pet food crisis focuses attention on frightening potential health hazards

## Food safety a big problem worldwide: WHO officials

Tue Jul 17, 2007 1:09PM EDT

## Jalapeños Probed in Outbreak

*Tomatoes No Longer Seen As Prime Suspect for Salmonella*

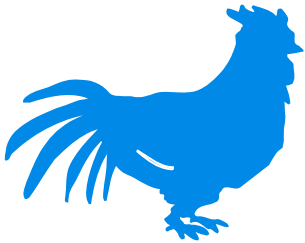
## Tainted-Baby-Milk Scandal in China

By AUSTIN RAMZY AND LIN YANG Tuesday, Sep. 16, 2008

## Peanut butter food poisoning cases top 500

List of recalled cookies, cakes and other treats continues to expand

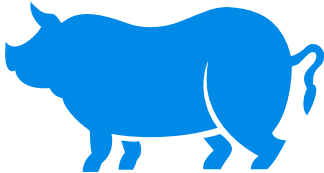
# Food Consumed in a Lifetime



550 Chickens



> 75,000 Meals



36 Pigs



10,000 Eggs



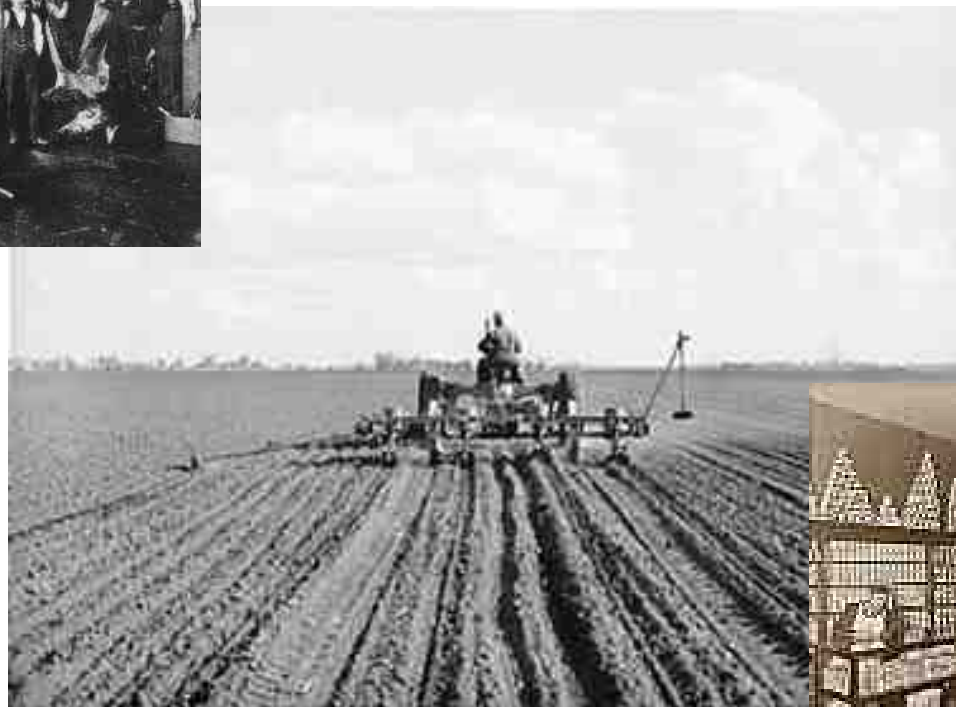
8 Cows

Source: On the Nature of Food Allergy

# Hunter and Gatherer



# 1900s



# Today's Supermarket





# Global Food Supply

Cocoa Powder-  
**Switzerland**

Roasted Espresso Beans-  
**Columbia**

Mascarpone Cheese and Ladyfingers-  
**Italy**

Vanilla Beans-  
**Madagascar**



Chocolate-  
**Belgium**

Kahlua-  
**Mexico**

Mint Leaf –  
**United States**

Cream-  
**United States**

# 32,970 Food Miles

Cocoa Powder-  
**Switzerland**

Roasted Espresso Beans-  
**Columbia**

Mascarpone Cheese and Ladyfingers-  
**Italy**

Vanilla Beans-  
**Madagascar**



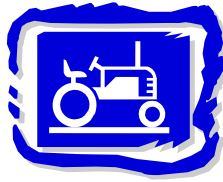
Chocolate-  
**Belgium**

Kahlua-  
**Mexico**

Mint Leaf –  
**United States**

Cream-  
**United States**

# Food System



Farm



Packing or Slaughter



Processing



Distribution



Transportation



Foodservice

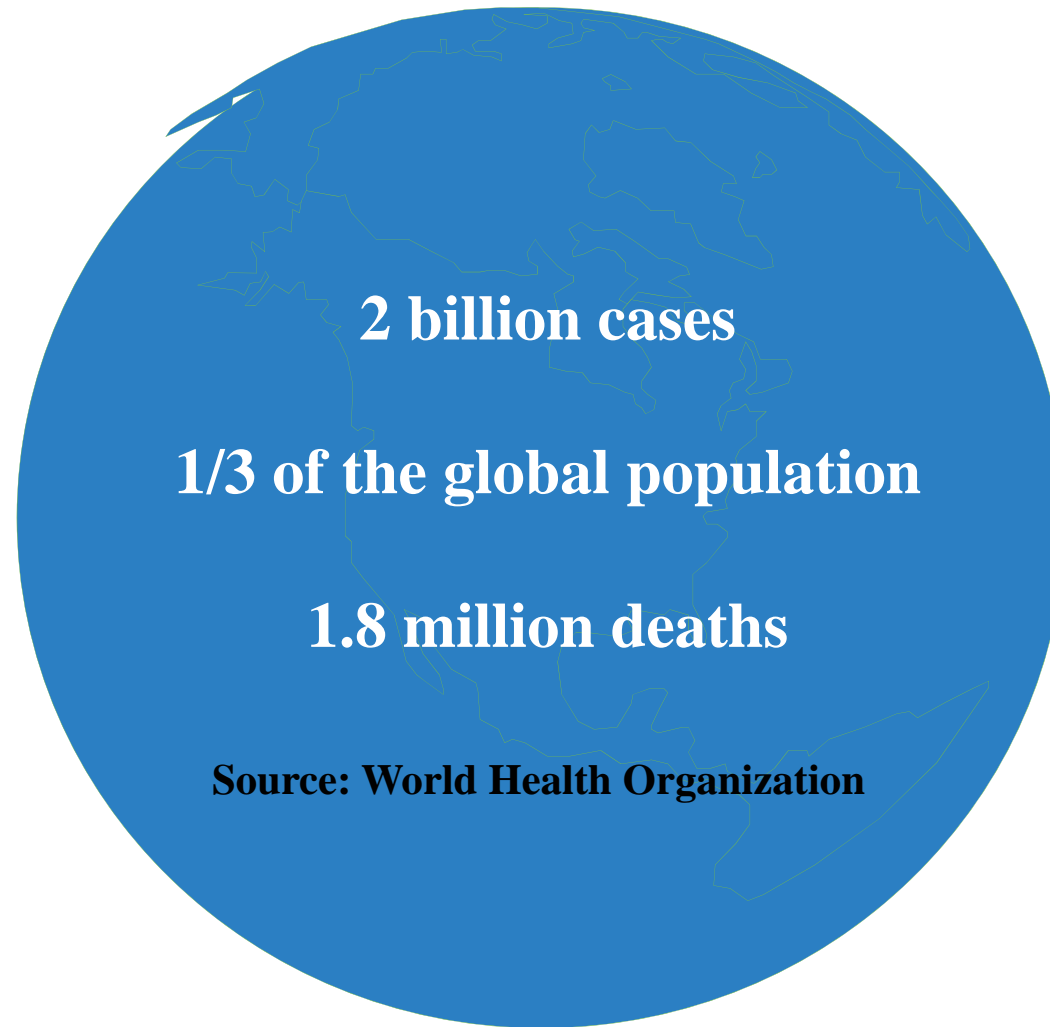


Supermarket

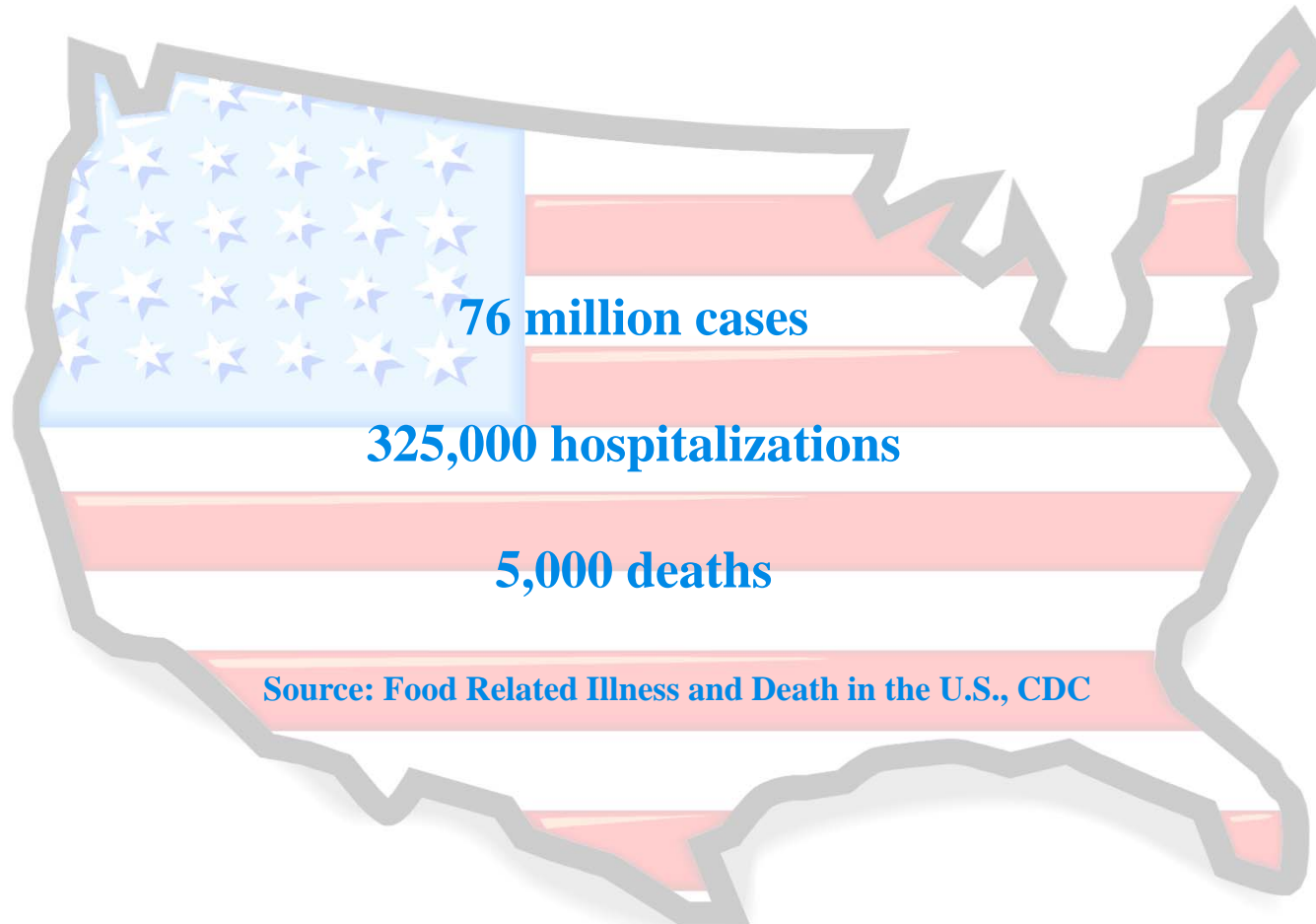


Home

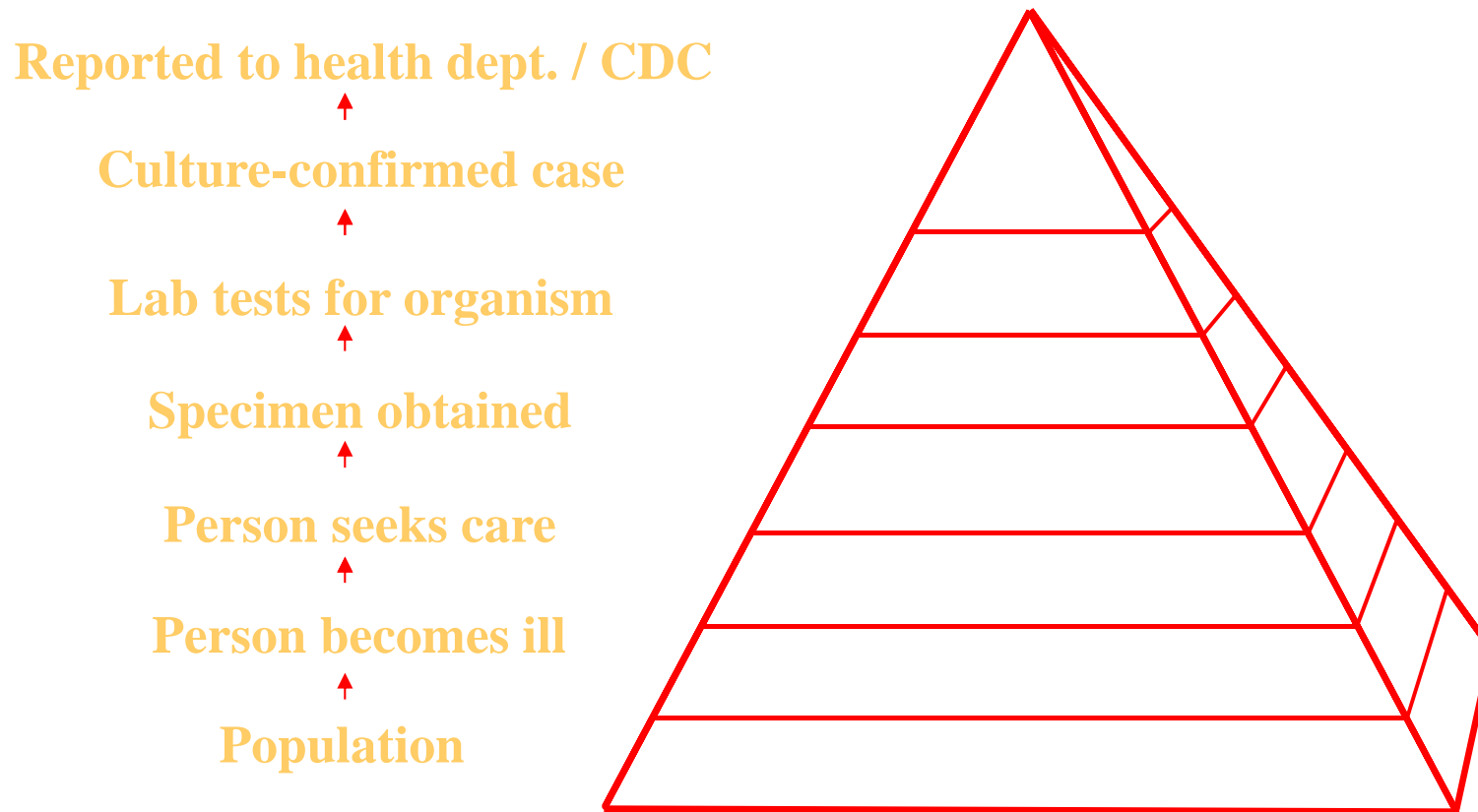
# Estimate of Annual Foodborne Disease Worldwide



# Estimate of Foodborne Disease per Year in the U.S.



# The Surveillance Pyramid



# PFGE, Credit Cards, & Google

**COVER STORY: ANATOMY OF AN OUTBREAK: How salmonella sleuths solved a deadly mystery**

By Moni Basu, Michelle E. Shaw  
The Atlanta Journal-Constitution  
Sunday, March 15, 2009

**Credit cards led investigators to source of E. coli outbreak**

Published Mar 26, 2009



**Online tools may have warned of listeriosis outbreak: study**

Last Updated: Thursday, March 12, 2009 | 5:07 PM ET



# The Race



**Industry Prevention**

**Public Health Detection**



# In Common?



## Illinois governor impeached

Friday, 30 January 2009 22:39



[Press room](#) > [Press releases](#) >

## **Less Than 20% Of Consumers Trust Food They Buy Is Safe and Healthy, IBM Survey Reveals**

**Spotlights Consumer Attitudes on Food Products in Light of Outbreaks and Recalls**

trust





# The Way Forward?



***“We tend to meet any new situation by re-organizing, and a wonderful method it can be for creating the illusion of progress.”***

**- Petronium, 210 BC**

***“HACCP is a step in the right direction, but it is not the final destination.”***

- **Frank Yiannas**  
**2010, Walmart Mexico**  
**GFSI Meeting**

# Current Situation

## Sourcing Companies

Retailer A

Retailer B

Retailer C

Retailer D

Retailer E

Retailer F

Audit

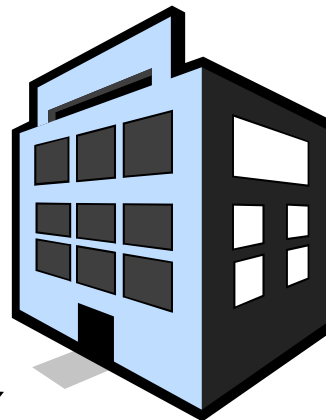
Audit

Audit

Audit

Audit

Audit



Supplier

## Result

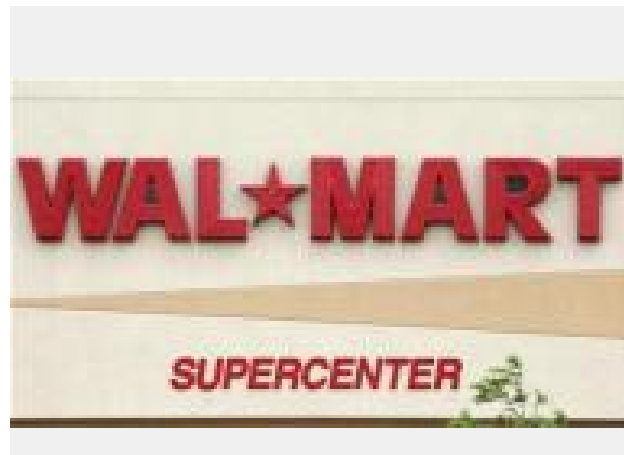
- Redundant Audits
- Confusion
- Inefficiency
- Ineffectiveness
- Verification vs. Validation

# Wal-Mart says food suppliers to meet GFSI standards

Mon Feb 4, 2008 3:11pm EST

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NEW YORK (Reuters) - Wal-Mart Stores Inc (WMT.N) said on Monday that suppliers of its private label and certain other food items, like produce, meat and fish, must comply with Global Food Safety Initiative standards.

Wal-Mart, the world's largest retailer, said GFSI standards provide real-time details

# Breakthrough

The following companies have come to a common acceptance of GFSI benchmarked standards



Source: CIES



# Standards Harmonization

“Once certified, accepted everywhere”

**BRITISH RETAIL CONSORTIUM**



# Benefits of Adopting GFSI Harmonized Standards

## Consumers

- Enhanced protection and confidence in the safety of the global food supply.

## Suppliers

- Reduced risk and reduced cost throughout the entire food system.

## Buyers

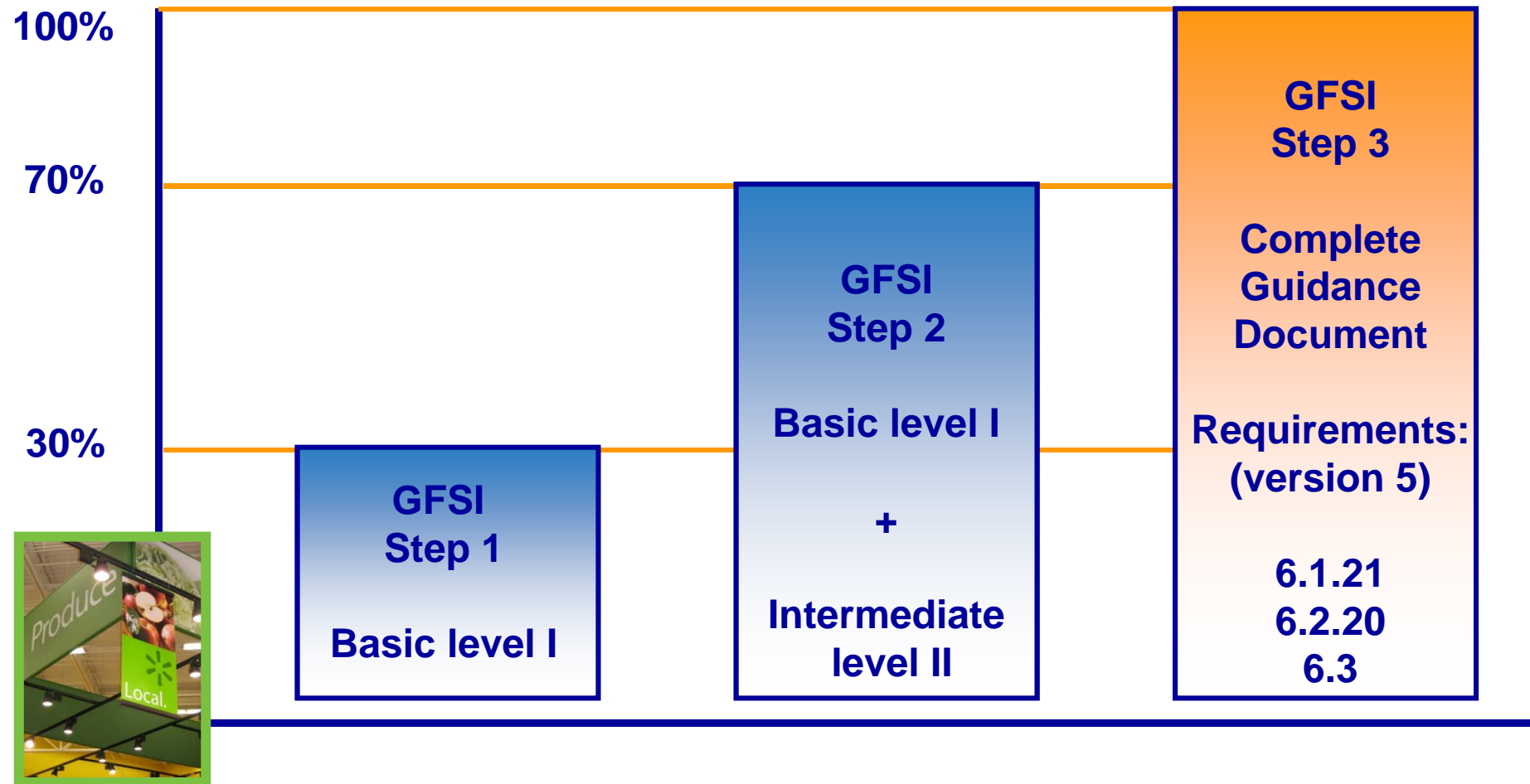
- Protects brand, business, and, most importantly, the consumer.

## Regulatory

- Another hurdle that enhances safety and a potential useful element for risk prioritization.

# Small, Local, & Developing Suppliers

Compliance level





providing safe & affordable food  
so people can live better

