# Food Safety, Quality and Consumer Protection

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# Food Safety:

What? Why? How? Where?

Safe, Hazard, and Risk

# What is Food Safety?

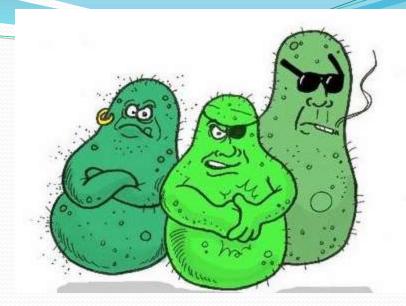
**Food safety:** refers to all those hazards that may make food injurious to consumer health.

**Food safety**: absence of acceptable and safe levels of contaminants, adulterants, naturally occurring toxins or any other substance that may make food injurious to health on an acute or chronic basis.

It is not negotiable

# Why Food Safety?

- **∔**Health.
- **∔**Illnesses.
- **♣**Deaths.



- ➤ To ensure that the food supply is safe.
- ➤ Minimizing food contamination.
- ➤ Safety concerns lead the list for

#### consumers

# **How Food Safety?**

Proper food safety guidelines

**Sanitation Process:** follow a general cleaning and sanitation system

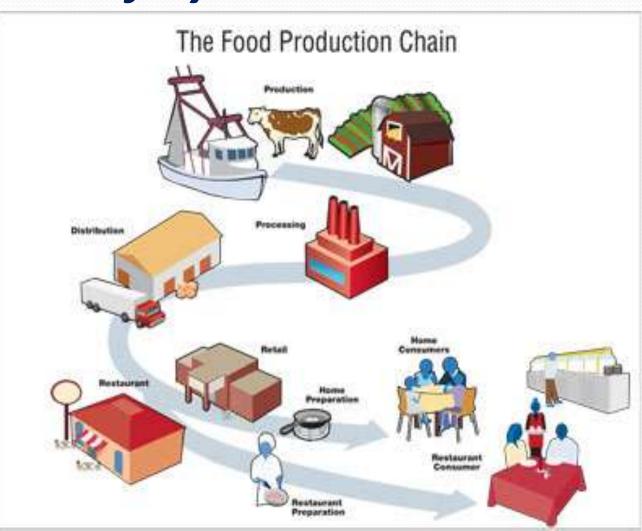
**Pest Control:** Does the facility have pest control system

# Where Food Safety?



Farin





Eat Like a Peasant and Enjoy

# Safe, Hazard, and Risk

Safe: Nothing harmful when consume the food

Hazard: Is the capacity of things to cause harm

Risk: Probability of that harm to occur

#### **GOAL-GOAL**

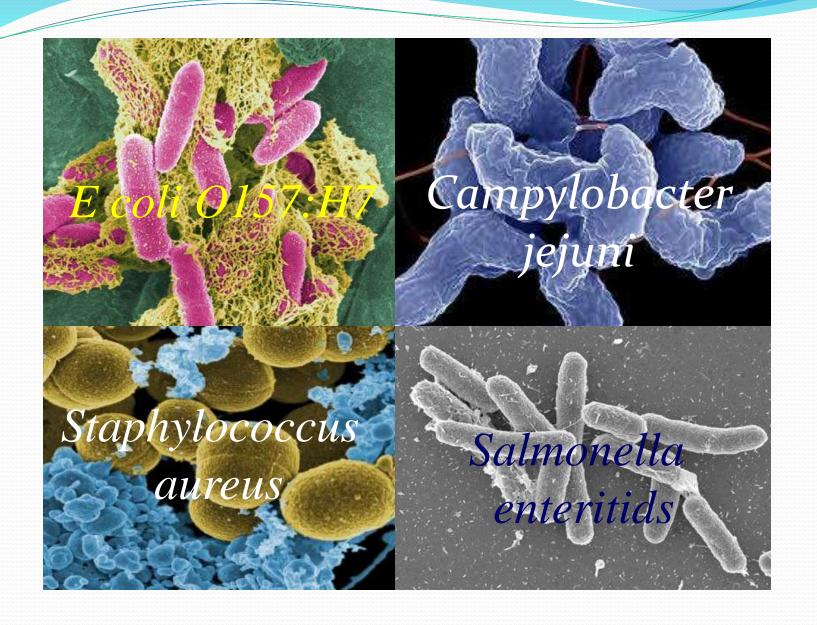
✓ Reduce risk to unacceptable or improved level



### Harmful conditions:

- □Biological .... Salmonella, E. Coli
- ☐ Chemical ....Pesticides, Lead, Mercury.
- ☐ Physical .... Glass, Metal.

>Most important is the biological



# WARNING!!!!!!!!

# Deaths and Illnesses Caused by Food Contamination

Foodborne illness causes an estimated 48 million illnesses and 3,000 deaths each year in the United States by eating contaminated food. (USDA report May 24, 2011)

#### COST OF FOODBORNE ILLNESS IN THE UNITED STATES

Bacterial	Cases	Cost Per Case (\$)	Total Cost (\$ Millions)
Campylobacter spp.	2,112,302	8,901	18,803
Salmonella spp	1,597,947	9,146	14,609
Staphylococcus	254,121	163	163
E. coli O157:H7	66,905	14,838	993
Listeria	5,205	1,695,143	8,823
monocytogenes			
Others (22 different Bacteria, Parasites, and Viruses)			108,235
Total Cost			151,626

Scharff R 2010. From foodborne illness in the united states. Produce Safety Project. March 3, 2010:1-28. <a href="http://www.producesafetyproject.org/admin/assets/files/Health-Related-Foodborne-Illness-Costs-Report.pdf-1.pdf">http://www.producesafetyproject.org/admin/assets/files/Health-Related-Foodborne-Illness-Costs-Report.pdf-1.pdf</a>. Accessed 13 February 2011.

# Good to know:

## Symptoms food contamination:

- ✓flu-like symptoms
- ✓ nausea
- ✓ vomiting
- ✓ diarrhea
- √ fever

Within minutes to weeks

# **Hand Washing**

⊕The first line of defense against disease.

\$\psi\_38\% food contamination from improper hand washing.

Supervisors should practicing appropriate

hand washing.





